

CAT

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



**John Barratt
Coniston Mine Captain, 1824 – 1866.**

Newsletter No 61: September 2000

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Cover picture - John Barratt, 1794 - 1866.

John Barratt was responsible for the major re-development of the Coniston copper mine, and of Hodbarrow iron ore mine in the nineteenth Century. He was a Cornishman born in Gwenapp, a protégé of John Taylor, and he worked first at Wheal Friendship under his father's management, and later at Grassington Moor.

He became involved with the Coniston mines whilst at Grassington, travelling to Coniston and reporting back to Taylor. He opened Flemings Level in 1824. He became mine captain at Coniston, and eventually became the principal shareholder. He made a great success of re-organising mining and dressing operations, constructing the Triddle and Middle Level inclines, sinking

the Triddle Shaft and the Old and New Engine Shafts, and driving Deep Level. In 1854 he opened out the old iron mine at Hodbarrow, which was to remain productive for over a hundred years. Barratt had a huge impact on the economy and landscape of Furness, for the development of both Barrow-in-Furness and of Coniston was directly related to the success of his mining ventures there.

John Barratt died in 1866 on a visit to Cornwall, and is buried in the churchyard at Mary Tavy. There is an impressive memorial to him in the churchyard at Coniston. At the time of his death the Coniston mine was past it's peak, but the great prosperity from Hodbarrow was still to come. For more information see the article on John Barratt in Journal No 2

Editorial

This is my first attempt at producing the Newsletter, and I hope that the presentation will improve as I get better at it. It has been a bit of a rush to get it out on time, so I have not included any fancy techniques or pictures, which will require some learning on my part. I would welcome constructive comments or advice.

The Newsletter is about the members, so please send me news of your doings, however brief, and however unimportant they may seem to you. They *are* of interest to other members. It is especially important to keep up to date with reports of meets, developments and projects. I *think* that the Furness Adventurers are still active on Friday evenings, and that work still continues at Newlands Furnace, and at Hudgillburn, but I would welcome regular updates. I would also be grateful for press cuttings, articles, and other information.

As we have not published a journal for some time, longer articles have been published in installments in the Newsletter. I feel that this does not do them justice, and would prefer to publish complete articles, even if

this means a larger edition. I hope to publish the current article, 'A year of Discontent', by Dave McAnelly, in full in the December issue.

Such articles reach a small audience when published in our Newsletter, but there is no reason why they should not subsequently be published in our journal, which reaches a much wider readership.

I will accept information in any form, but would prefer it in a format applicable to MS word either on disc or as an email. My new e mail address is ian@rothayholme.freeserve.co.uk
The deadline for the next issue is 9th December, a week after the AGM and our 21st birthday celebrations.

Many thanks to Jon Knowles for his work in producing the Newsletter for the past few years. He now moves over to the post of Meets Secretary, another thankless task!

New Members

We welcome Mark Pickthall, from Barrow. Hope to see you soon at a meet or social evening.

CATMHS's TWENTY FIRST BIRTHDAY

The society has been active for 21 years, from 1979 to 2000. You are invited to celebrate twenty one successful years with a weekend at Rydal Hall, one of Lakeland's finest ancestral houses and former home of the Le Fleming family who still own the Coniston Coppermines and the Crossfell Mines.

The weekend is to be held on the 1st to 3rd December 2000, and will consist of 2 nights full board, starting Friday evening, with a buffet supper at 7pm followed by members slides, the bar will be open till 11pm.

Saturday will take the form of a conference (interspersed with morning coffee, lunch and afternoon tea) with six presentations, as follows:

The German miners at Keswick and the question of bismuth by Dave Bridge.

Records show that a small quantity of bismuth was raised by the Company of Mines Royal at Keswick in the 16th century. To confirm this discovery and trace its source we call on the help of Georgius Agricola and follow the exploits of a miner named Bernard Fechtenbach. Our journey takes us to the Keswick smelthouses where we learn something of the smelters understanding of the local ores.

The Exploration of Silver Gill by Warren Allison.

Warren who was leader of the successful Lucy Level dig at Greenside has now turned his attention to the Elizabethan workings in Silver Gill, in the Caldbeck Fells. Recent discoveries of three levels dating back to the 1560's and 1570's, namely Fortune Emanuel and New Stolen. The last two are each over 500yds long, with connecting shafts. The discovery of new documentary evidence makes this a very exciting project.

Warren will also show a unique set of Greenside slides (dated 1959-61) which came to light at his recent Greenside exhibition.

Haig Pit and other West Cumbria Coal Mines by Ronnie Calvin.

A retired pit deputy who was working at Haig when it closed in 1984. He has been interested in the Cumbrian mines for many years and as a county councillor has fought many a battle to save mining remains.

Mick Krupa archaeologist.

Was in charge of the conservation of the Nenthead Lead Mining Complex, from 1997 to 2000. This North Pennines Heritage Trust's flagship project, was funded by English Heritage, the Heritage Lottery Fund and ERDF. In 1997 a programme of conservation works was undertaken on the core elements of the site including the remains of the former Smelt Mill. A summary of the content of that programme and the results obtained form the basis of this presentation.

Mark Weir Owner of Honister Quarry

Honister Slate Mine 'closed' was like the right arm missing from the valley. Mark was born and brought up in Borrowdale and wanted to create real jobs for local people. The aim is to keep alive the traditional skills that are part of their inheritance.

Making use of the existing generators and machinery that had laid dormant, the mine is once again producing beautiful green slate.

Dr Paul Younger

Is in the forefront of research into mine water pollution and has helped to find solutions to mine water problems all over the world. He is also an enthusiast for old mine sites and has been known to burst into the odd poem or song.

Rydal Hall is within easy walking distance of Ambleside, so if family and friends do not want to attend the talks they can easily amuse themselves.

The AGM will precede a Celebration Dinner on the Saturday night, followed by a cake cutting ceremony and a slide presentation of CAT's past achievements and memories.

On Sunday there will be a choice trips, packed lunches will be included.

We hope the weekend will provide an opportunity for members new and old who live outside Cumbria to support the society and get to know the more local members.

CUMBRIA AMENITY TRUST MINING HISTORY SOCIETY

Minutes of the 20th Annual General Meeting held on Saturday 11th December 1999
at the Yewdale Hotel, Coniston, commencing at 4.30 p.m.

Agenda

- 1 Apologies for absence.
- 2 To approve the minutes of the 19th AGM, held on the 12th of December 1998.
- 3 Matters arising from those minutes.
- 4 Chairman's report.
- 5 Treasurer's report, and approval of Balance Sheet, (to be distributed at the meeting).
- 6 Secretary's report.
- 7 Meet Secretary's report.
- 8 Newsletter Editor's Report.
- 9 Membership Secretary's report.
- 10 Project reports.
- 11 Notices of Motions, one from the committee. To reduce the size of the committee.
- 12 Election of Officers & Committee for 2000.
- 13 Any other relevant business the chairman may allow.

Attendance - 18 members as follows: D.Bridge, S.Barker, M.Simpson, I.Matheson, C.Barrow, E.Bowden, A.Cameron, D.Deane, G.Colling, P.Fleming, C.Hargreaves, J.Helme, M.Mitchell, P.Sandbach, A.S.Simpson, H.Watson, A.Westall and N.Wilks.

1 Apologies for absence

The secretary reported that she had received apologies from A.Barrel, P.Bleazard, D.Borthwick, J.Brown, R.Calvin, I.Cameron, A.Danson, J.W.B. Hext, J.Knowles, M.Scott, A&S.Thomas, P&J.Tindall & A.Wilson.

2 To approve the minutes of the 19th AGM, held on the 12th of December 1998

The minutes of the 19th AGM had been previously circulated to all members.

It was PROPOSED by M. Mitchell and SECONDED by A. Cameron that the minutes be signed by the chairman as a true and correct record of the proceedings. This was carried unanimously.

3 Matters arising from those minutes

3.1 Item 5 C A.D Cameron asked if the society had received payment. Yes, payment had been received.

4 Chairman's report

The society's flagship project at Hudgillburn has continued throughout the year and we are greatly indebted to those who have been pushing the Sun Vein forward through difficult ground with brute force, steel and telegraph poles. The collapsed state of the level as we move into the more productive parts of the mine is however proving expensive in manpower and materials and it may soon be time to reassess the situation. We now have a set of surveying equipment at the mine which is being put to good use.

Renovation of Newland Furness continues, now under the newly formed Newland Trust, and further progress has been made on the Furness Heritage Survey.

At Coniston efforts are being made to initiate an archaeological dig at early sites at Levers Water and below Red Dell, lottery funding is being sought. The Coniston Video project seems to have found a new lease of life and is once again in full swing. An unexpected discovery - after all these years, the top of Hospital Shaft was spotted in the bank of Levers Water Beck and a descent was made to Hospital Level.

The geological survey has cleared up some difficult areas this year, including Brow Stope and computerisation of the data is now being directed towards a CD-ROM. Also work is in hand for 3-D

surface imaging from aerial photographs. Following a request from the John Ruskin Museum for material for their IT display, a CD-ROM has been reproduced for sale to the public covering the exploration and history of the mine.

Publications continue to sell well and we are now seeking a Millennium Festival Award to enable 'Beneath the lakeland fells' to be reproduced in colour. Another new angle on publicity is the recently installed CAT web site. Thanks go to Nils Wilks for setting it up.

Finally thanks must go to all who have supported CAT meets throughout the year, after all this is what we are here for. Also to the committee (at present diminished in numbers). Particular Mark Simpson who valiantly took on the job of treasurer at short notice after the last AGM, and to John Davies for his work as Meets Secretary.

5 Treasurer's report

The treasurer reported the balance brought forward to the 1st November 1999 was £5,005.78. He commented on the main sources of income and greatest expenses on the balance sheet (which had been distributed to the members).

He was pleased to report that funds were up on last year, as usual the greatest expense had been the cost of printing. There had been little difference between income and expenditure throughout the year.

The treasurer wished to thank John Helme for all his help and for auditing the accounts. He also wished to thank all members who had sold our literature throughout the year, it was on these sales that our income depended. Without them we would not have the funds for projects. He appealed to members to write more. Thanks also went to Ian Matheson for all the photocopying.

5.1 A. Cameron wished to thank Mark for taking on the Treasurer's post at short notice, which had not been an easy thing to do. He concurred with the treasurer's request for more publications, as he thought that members had several projects in mind which would need funding. It was the society's aim to carry out exploration and conservation projects, so funds had to be raised for this purpose.

Acceptance of the balance sheet was PROPOSED by I.Matheson and SECONDED by P. Fleming, all were in favour.

6 Secretary's report

We have held our usual six committee meetings throughout the year.

Paul Timewell resigned as treasurer straight after the AGM and Mark Simpson had kindly stepped into the breach as Acting Treasurer.

The CAT archive housed at Sheila and Anton's was insured for £6000 at a cost of 37.44 a year.

We have updated our statement, regarding artefacts found on CAT meets. The new version was printed in last July's minutes.

I've had quite a lot of correspondence with the National Park, on various topics:

1) Fencing needing repair at Simon's Nick. This is now to be done with money from English Nature.

2) I received a copy of the LDNP's new management plan, which could prove very interesting, as there appears to be money available for mine conservation work.

3) At the beginning of Nov. Pete Blezard suggested I should write to the Nat Trust, to try and get permission for CAT to re-open 0 Level at Force Crag Mine. This I did, but have not had a reply to date.

We now have the CAT display panels set up at the Haig Pit engine house, which was opened to the public in the summer.

NAMHO asked us to comment on the "Proposed Strategy for the Conservation and Interpretation of the North Pennine Lead Industry". This is a Draft Document which has just been produced. The list of sites it proposes to work on, is based on those scheduled under EH's Monument Protection Programme.

About 10 CAT members attended the NAMHO Conference in the Forest of Dean, which was very good and enjoyed by all. In 2000 there will be the first International NAMHO conference. It will be hosted by the Carn Brea Mining Soc. & the Camborne School of Mines, and will be held at Truro on the 14th to the 18th July. The NAMHO 2001 field meet will be held in Ireland.

7 Meets Secretary's report

No report. D. Bridge reminded members to book their place on the forthcoming visit to BNFL. M. Mitchell suggested meets should be on the same Sunday each month when ever possible.

8 Newsletter Editor's report

J. Knowles had been unable to attend the meeting but had sent a written report, which was read out by the chairman.

I would like to thank those who have contributed to the Newsletter over the last year. All contributions are welcome however small since I feel that a variety of articles make an interesting newsletter. Since the last AGM three Newsletters have been produced which is a little less than the normal four, however the plan is to issue another Newsletter soon after Christmas.

Production of the NL descended a shaft without a rope in the late summer when the editorial computers hard drive popped its clogs but normal service has now resumed. Would members please note that I am currently unable to accept contributions by e-mail.

The printers continue to give generally good service at a reasonable cost although the cost of the card covers and stapling continue to rise. Would members please let me know their thoughts on doing away with the card cover and having one staple in the top left hand corner, rather than the two at present. This would reduce the cost and enable production to be fully automated.

Could I please have contributions for the next NL as soon as possible since I would like to put it together over the Christmas break.

Again could I ask for good contributions for the cover, good line drawings are always welcome. On a similar vein maps and drawings always make articles more interesting for the reader and are very welcome.

I mentioned at the last AGM that I would be standing down this year, but I have had my arm twisted into staying on till June. The plan is that Ian Matheson will take over at that time, assuming that this meets with approval at the AGM. Just when you thought it was safe to go out again please note that it is my intention to continue to submit Dr Descender to the new editor.

MM PROPOSED the cover of the NL should stay the same, SECONDED by PF, all were in favour.

DB PROPOSED IM should take over as NL Editor when JK gives up in June SECONDED by MM, all were in favour.

P. Sandbach asked about the poor quality of the photographs in the NL. The committee would address this problem at their next meeting.

9 Membership Secretary's Report

The membership was fairly stable. There were 8 new members last year, and 9 did not renew. It is a mature membership, with a few young members, and a larger proportion of retired people. So far 72 members have renewed their subscription for the forthcoming year, and 2 have resigned. Those 35 members who have not renewed will receive a reminder with their next newsletter.

At the end of 1999 membership stood at 115, 2 less than last year. 15 of these represent joint or family membership, and six are honorary members. These are Lord Egremont, Major Hext, Dr John Marshall, Peter Fleming, Mike Mitchell and Sheila Barker.

The balance sheet shows that income from subscriptions last year was £1217. Administration and insurance cost the Society £539, and printing and distribution of the Newsletter and the Bulletin cost a further £643, so the administration costs of the Society were only just covered by the subscriptions.

As agreed at the last AGM, the subscription rates for the forthcoming year have been increased slightly, to £12 for single membership and £15 for joint membership (including 3rd party insurance). Providing costs remain stable this should improve the situation.

Included on the renewal slip for this year was a request for information regarding members occupation and interest. The response has been patchy, some people have been reticent about their skills and achievements, others giving no information. The membership includes a rich and varied assortment of experiences in many fields, both related and unrelated to mining history, and a complete list would be of considerable interest and value. I hope to publish the results of the survey during the coming year.

10 Project reports

10.1 Hudgillburn Mine 1999-Progress Report

On the 3rd of January we broke through the collapsed ore hopper on the East Waggon Level, which was barring our route to the Sun Veins. The level ahead looked in good condition, driven in the Tuft (we called it the First Sun Crosscut).

A few yards along the level there was miner's tin water bottle complete with cork lying in a niche in the wall. There was a rise on the left which appeared to be a small trial, with a level opening off about 15 ft higher up.

A few yards further on in the crosscut was a second rise, this was more interesting. According to the mine plan it should lead to the Blue String, with a crosscut higher up, on top of the Gt LS, which gave access to the HGB Old vein.

John Brown and Pete Bleazard climbed the rise and found what appeared to be several small old workings (presumably the Blue String) one of these led in a convoluted manner to the opening 15 ft up in the first rise. One wall was coated with Smithsonite, which was coming away with big pieces falling off. They then climbed up higher to look for the crosscut, but only found a very collapsed area, with no sign of the crosscut.

Back down in the First Sun Crosscut a lot of the floor needed digging out to lower the water level, at the first bend we were greeted with what looked like a disaster area. The roof was badly cracked and desperate looking and the level was almost full of a mixture of boulders and shale, but there was water flowing from under the fall and the air seemed OK, so the stalwart team decided to carry on. I think lesser mortals would have given up at this point.

We are now about 30 yards along the level from the corner, with about the same distance to go to the next junction. The walls and roof are being supported with a combination of sections of telegraph poles, sleepers and crash barrier.

This is very heavy work and I would like to thank all the digging team for their dedication.

In February the survey of the mine was started and Nils is going to tell you about it.

N.Wilks reported on the survey. M. Simpson had started the survey off in February, giving instruction to those who wanted it. There had been 6 survey meets during the year. The results were being formulated and a draft plan was on display. They had placed a line in the Cavern to help with calculations and had been left in situ. The artefacts and graffiti were being mapped and would be added to the plan. The survey work would continue throughout next year.

10.2 Coniston Coppermine Geological Survey

D. Bridge reported that they were glad to clear up two difficult areas this year- the long descent from the top of Simon's Nick Crag (difficult because it involved six rope pitches and new ground), and Brow Stope (difficult to survey due to the complex vein structure). We also covered the Shattered Stope area in Top Level Extension. In October 1998 we sent a report to NWW warning them of unstable ground which our survey had revealed at the Levers Water end of Lake Stope. Only this week a substantial collapse occurred at the surface above that place taking away part of the path, and steps are now being taken to fence the area off.

Mark has finalised the sections and plans for Paddy End and it remains to get them into computerised form and add geological information from the bulky file of notes, sketches and photographs. The latest thinking is to put all this data into the form of a CD_ROM which can then be passed to the BGS for their comments.

We have been working on the idea of using Web site software for this type of display for some time, and the opportunity has recently arisen to test this out after a request from the Ruskin Museum to provide material on the Coppermines for their IT display. After a two month slog this has resulted in a CD_ROM of 250 pages containing over 350 coloured photographs together with text, maps and sections aimed at the general public (but with the possibility of extending the scope later). An advanced release is available to CAT members today, cost £5.00 each and the final polished version is planned for April 2000. M. Mitchell added that he had seen it and thought it good value, he urged members to purchase and let Dave have feedback ASAP, so the final version could be completed.

Peter Fleming explained to the meeting that John Hodgson was pursuing the two Coniston archaeological projects, so they were out of our hands at present.

1103 Newlands Furnace

It is now 10 years since our involvement with the restoration work at Newland Furnace began. The inaugural meeting of interested local society's took place on the 4th November 1989. This led to a planned programme of work on a regular basis carried out almost entirely by the FMA group of CATMHS.

The blowing chamber side of the furnace is now almost consolidated and work has progressed to the tap hole side. At our January meeting the next large girder will to be lifted into place and then the first part of the corbelling can take place on that side. The inner skin of firebricks is gradually being reinstated using both original blocks and some made by ourselves. May I, at this point pay tribute to the loyal, hardworking and enthusiastic group from this society who have supported the work during this time. Without this commitment and dedication Newland Furnace would now be a 'heap of rubble'.

In July 98 it was realised that some of the work required would need professional help and funding. It was decided to form a Trust, a company limited by guarantee, to take a lease of the site, seek large scale funding and carry out repairs. This has now been done and we operate two financial accounts, one for the voluntary restoration work and the other for the aims of the Trust. The Trust account now stands at £6000 with a number of promises available for when we have the lease in place.

We have insurance quotes ready which would meet the owners conditions and also cover visitors and the work team. The first AGM of this Trust will be held at the Kings Arms in Ulverston on Tuesday 25th January at 7-30, invitations and the agenda will be sent out shortly.

I have however to end this report with some doubts and concerns. The recent conditions set out in the lease by the present owners and their solicitor are unacceptable and we are advised by our solicitor (our Trust Chairman) that we should not accept. Meetings are being planned to attempt to resolve this problem. I will keep you informed of the situation as it develops.

I conclude by again thanking the volunteers for their tremendous efforts and this society for its support and interest.

10.4 Furness Survey

P. Sandbach reported that the survey of the Furness Iron Industry was going well. Large areas had been cleared of scrub, the sites photographed and any structures drawn. The Roan Head area had been completed this year, the team was now concentrating on the Yarlside and Stank Mines.

This was a very interesting site, with numerous shafts, engine beds and the most complete remains of an engine house in the area. The chairman thanked Peter and the other members of the FMA for their dedicated work on the survey.

11 Notice of Motions _To amend clause 5 of the Constitution

The chairman informed the meeting that over the last few months low attendance at committee meetings had been causing problems. If a quorum could not be maintained, no business could be completed. The geographical spread of the membership had widened over the last few years, from being mostly Furness residents, members now came from all corners of England. This made it difficult to maintain a quorum of eight.

12.1 Motion put forward by the committee. D. Bridge PROPOSED "That clause 5 of the Constitution should be amended to read. That the size of the committee be reduced to four officers and five ordinary members, with a quorum of five, two of which must be officers". SECONDED by A Cameron, all were in favour.

12 Election of Officers & Committee for 2000 All posts were open for election.

All officers were willing to be re-elected. With the exception of John Davies (Meets Secretary)

No nominations for posts were received by the Secretary, those from the floor were as given below:

POST	NOMINATION	PROPOSED	SECONDED
Chairman	D. Bridge	A. Cameron	M. Mitchell
Secretary	S. Barker	D. Bridge	C. Barrow
Treasurer	M. Simpson	D. Bridge	J. Helme
Membership Secretary	I. Matheson	M. Mitchell	A. Westall
Newsletter Editor	J. Knowles	S. Barker	P. Fleming
Meets Secretary	Vacant		
Archivist	A. C-P-Thomas	A. D. Cameron	N. Wilks
Journal Editor	D. Borthwick	S. Barker	D. Bridge
Publicity Officer	A.D. Cameron	P. Fleming	M. Mitchell

All above were elected unanimously.

M. Simpson to become a Trustee, in place of P. Timewell.

Nominations for the 5 committee posts were as follows:

	NOMINATION	PROPOSED	SECONDED
1	A. Wilson		
2	P. Fleming		
3	M. Mitchell	En Bloc	En Bloc
4	M. Scott	J. Helme	D. Bridge
5	A.D. Cameron		

All above were elected unanimously.

14 Any other relevant business the chairman may allow:

14.1 A. Cameron said he would put the new CAT e-mail address in the next newsletter.

14.2 J. Helme wished to thank the committee for last years work, and he reminded the meeting that the same members had carried the responsibilities for many years and it was perhaps time for other members to become involved.

There being no further business the Chairman closed the meeting at 6-00 PM, thanking all members for attending.

Chairman

S.B. 14/11/99

At the conclusion of the dinner following the AGM, the following awards were presented:

Chairman's Award Colin and Andrew Wollard.

Boot of Merit Warren Allison.

Broken Crab Award Not awarded.

CAT's Latest Project

Most CAT members will know by now that the grant, which CAT applied for to help publish their latest book, was awarded in full. News of the award broke in the second half of April. We had applied for £5,000 and we were astonished to hear that CAT had been awarded the full amount. The only drawback was that we had to spend it within 6 months! The tight time-scale meant that the 'book team' was going to have their work severely 'cut out'.

Fortunately quite a bit of work had already been done. All the chapters had been reviewed by the chapter authors and several had been given a complete re-write. It was decided that a completely new set of photographs would be obtained. The emphasis would be as much on the quality of the photograph and its composition as on the historic significance of the scene. About half of the photos would be in colour.

It was also decided to alter the general specification for the book. The size would be slightly less than A4 size. It would have a hard-backed cover and the dust jacket would be printed in full colour with a full-plate photo, as in *Slate from Coniston*. It was also decided to do all the origination ourselves, and provide the printer with everything on one CD-ROM. As far as CAT's previous books go, only *Slate from Honister* (edition 5) had been printed this way so we all had a lot to learn.

Fortunately member Dave Sewart is an expert at do-it-yourself publishing and

readily agreed to take on all the origination himself. A number of other members also have quite sophisticated software and equipment on their home computers including Adobe PhotoShop software and also Nikon slide-scanners, both of which are absolutely essential if one wants to get professional results.

During the summer months final changes were made to the text and the first of four proof-readings was carried out. Mike Mitchell agreed to take on the job of selecting the photos. This was a huge task, although he was helped by Dave Bridge. Work on the cover was carried out by Mark Simpson, Mike Mitchell and Dave Bridge. By the middle of August the second proof read had been done and text was sent down to Dave Sewart in Cambridge. Eventually the cover was also sent down to him.

As the end of August approached we realised that the Picos trip was nearly upon us. Work couldn't stop so files were squeezed into rucksacs to continue the work over there. The third proof-read was completed by Cilla Cameron while sun-bathing by the pool, and the layout for the dust cover was also more or less agreed.

At the time of writing (October 2000) there is still quite a bit to do. The final selection of photographs is being completed after which the picture captions will be written. The final piece of text, the foreword from John Hodgson, the National Park archaeologist, is due any day. As soon as this is all complete, activity will move to Dave Sewart's study where we will transfer all text and images onto

CD. This will then be passed to The Black Bear Press in Cambridge for printing.

It is becoming quite clear that the book will be a very professional publication in design, style and content. The modified articles are extremely readable and the photographs stunning. It should be a good reference work for years to come and also an attractive addition to anyone's coffee-table.

Alastair Cameron

Freeminer Tradition in Jeopardy.

One of the oldest and best-known traditions in mining communities in Britain appears to be in danger of being overturned by Government intervention.

For as long as people in the Forest of Dean can remember, a person born within the 'hundreds of St Briavels,' who was over 21 and had worked for a year and a day in a mine, could register as a freeminer and be granted a licence to mine for coal within the Forest. But now Helen Liddel, Minister for State and Energy, has sided with the Coal Authority, which wants to control freeminers activities and to issue licences.

Underground Chamber Discovered at Appletree Worth, near Broughton in Furness.

This story starts in late July when I was notified by John Hodgson, Archaeologist for the National Park Authority, of an incident that had

occurred during timber felling operations in Appletree Worth Forest near Broughton. A Forest Enterprise employee had a narrow escape while he was felling a tree near to the main forest roadway about 80 meters above the derelict Appletree Worth Farm. A hole appeared in the forest floor, right by his feet, into which both he and his chain saw nearly fell. The hole seemed to lead to an underground chamber. Nigel Williams of Forest Enterprise was keen to confirm that the roadway was not in danger of collapsing into the chamber and also interested in finding out about the nature of the chamber.

So on Saturday 29th July I visited the site with Angus Baillie of Coniston. Not knowing what we should find we equipped ourselves with full underground equipment and powerful lights. We noticed that a new fence had been put up round the hole. We belayed abseil ropes to the fence posts and descended into the chamber, a descent of about 6 meters.

It was quite clear that we had descended into an iron mine of some antiquity. We noticed a tunnel running off in the downhill direction. This was obviously the mine level which accessed the chamber. It was now completely blocked. A vein of iron ore was also evident, and this appeared to consist of mixed iron ores including haematite. The most interesting find in the chamber however were deposits of ochre on one wall.

We have given these facts to Forest Enterprises and also reported that the chamber was about 7 meters long and 4 meters wide at the widest point. The

further extremity of the chamber is about 2.5 meters from the edge of the forest roadway and there is obviously no danger to the roadway. However the rim of the hole within the fenced area was definitely not safe. The forest floor around the hole shuddered as one walked on it and could easily collapse and, if the individual was alone, it would be impossible for them to climb back out.

The ore in the chamber had clearly been hand-picked. The ochre would also have been a valuable material. From the size and method of working it appeared to us that the mine had operated during the late 18th century. It is not marked on the first edition Ordnance Survey, suggesting that the workings had become overgrown by then. It is possible that the mine was worked to supply ore for the Duddon Furnace and this may date the start of the workings to about 1765.

Alastair Cameron.

**A Pictorial Tour of the Coniston
Copper Mines
By David Bridge**

Additional photographs by Peter Fleming, Mike Mitchell, Ian Matheson, Jef Wilkinson, Phil Ward.

Published by Cumbria amenity Trust
Mining History Society.

In 300 pages of stunning pictures and clear text, together with plans and sections, this CD-ROM depicts the history of the Coniston Copper mines from the earliest times, and records the discoveries made there by

mine explorers over the last twenty years.

One can tour the surface remains, spanning three centuries, to trace the development of the industry. Viewers can click their way through the vast complex of shafts, levels and stopes to observe the mining techniques, and discover some of the stunning mineral formations.

A section on the ores and minerals which brought the miners to Coniston completes this visual record of an industrial archaeological site of national importance.

The following is an extract from a review by Mike Gill:

'David Bridge's tour of this fascinating mine has been put together on a CD-ROM, using 300 pages of photographs (mostly colour), plus maps plans and sections.

The tour is split into four parts - The early 17th Century, the 18th & 19th Centuries, Exploring the mine, and The Minerals. Annotated panoramic shots have been used to good effect as they give one a good idea of the layout of the mine at surface, and the grandeur of it's setting. Because of the steep hillsides these show much better than a map would things like the complex of leats, which served the waterwheels and dressing floors.

The CD has been laid out in linear fashion, rather like a book, and so there is little use of hyper-links to allow jumps from one topic to another. I found the 17th century section most useful because the captions had some

historical information. Some cross sections of the workings would have made it clear that the hade on at least one vein reverses as it goes deeper - a complexity that many users will not appreciate. The CD certainly has the advantage when it comes to publishing large numbers of photographs.

I enjoyed the tour, and I am looking forward to the next one. I am sure that you will too. The CD is published by the Cumbria Amenity Trust Mining History Society, and is good value at £13.00 including postage and packing, Go ahead and treat yourself!

The CD would make an excellent small present or stocking filler. It is available from the Ruskin Museum in Coniston, or by post from the CATMHS secretary, Sheila Barker, or the author, Dave Bridge, whose addresses are printed on the back of this Newsletter.

Evening meet, June 14th Coniston Geology.

Meet leader Jeff Wilkinson.

This was a new departure for a C.A.T. meet in that the topic was purely to do with the geology of the Coniston area instead of the usual, though always interesting coppermines or slate quarries. Would anyone turn up? Is anyone interested in geology? These were the thoughts that probably stopped me doing a walk on geology for some time, so it was with some trepidation that I made my way to the start point on a beautiful sunny evening.

Seven members had turned up which was very encouraging although the fact that most of them were the most knowledgeable people on all subjects was also rather daunting. I would have to get my facts right tonight! The object of the meet was to show how to view and interpret weathered outcrops as well as to show how interesting geology is. Only time and feedback will tell if I succeeded or not.

The first stop was to look at the lowest member of the Coniston Limestone Formation (formerly called the Longsleddale member). This formed some time after the volcanic period in a developing shelf sea environment, teeming with life. It was deposited at the southern limit of the landmass (it's a very ancient beach!). This is one of only a few locations that have survived 440 million years of change. It consists of rounded pebbles & cobbles of volcanic origin in a sandstone matrix. Many of the pebbles are cryptocrystalline silica (chert). We then made our way round the front of the Scrow to look at the more familiar views of the Coniston Limestone, which exhibit good bedding & cleavage features. With patience many types of fossils and corals can be found in this formation. At Foul Scrow we looked at the last of the B.V.G. rocks that were laid down, The Yewdale Formation, where there are good examples of columnar jointing. We discussed the mechanisms that produce these massive Ignimbrite eruptions, which could travel along the ground at 100mph and cover large distances. So hot were these pyroclastic flows that when they stopped moving the particles welded

together to form a solid rock. A distinct feature of these rocks is the eutaxitic texture that runs through many of the outcrops. This is caused by the flattening and drawing out of the once solid pieces of pumice. The last massive Ignimbrite eruption happened about 75,000 years ago at Toba Indonesia, however, they will happen again at some time in the future and the devastation will be unimaginable! There really is only one word that can get anywhere near to describe them "CATAclysmic".

After tracing a thin section of volcanoclastic sandstone that runs through the Yewdale Formation we had a look at the contact where the Tilberthwaite Formation (slate) meets the Ignimbrite. The transition from steeply dipping bedding features to that of the "massive" Ignimbrite was very clear. We continued to look at various contacts & fault lines observing how they had shifted the rocks out of line.

The next exposure was a section of the slate that had angular fragments embedded in it. The team seemed to perk up at this classic exposure, maybe I was starting to get through! Close examination revealed that these were incredibly fine grained compared to the slate. Such fine grain may have originated from ash dust that settled out, possible in water.

After swimming through new bracken for a while we arrived at The Bell. This crag gets few visitors and it was only last year when a keen amateur geologist and ex-climber took interest in it that it received it's first recorded climb. It goes at E2 5B

which means that when you have given up climbing it's **bloody hard on both mind and body!** The name given to the route was, I feel, suitably topical: "IGNIMBRITE". A rather strange feature on this crag are 2 small metal spikes inserted into the rock. Their purpose is a mystery. The rock is totally unsuitable to the slate industry and it is unlikely that it was to remove stone for walling as the scree below is littered with natural material.

We made our way round the flank and up to the top where we were once again able to pick up our old friend the thin band of volcanoclastic sandstone which in places is very strongly cleaved. By this time the group was starting to suffer from geology overload or possible alcohol and crisp withdrawal so after looking at a super outcrop of water lain silt/sandstone that exhibited classic thixotropic and slump features we made our way back to Coniston.

My sincere thanks to Dave Millward and Brian Young of the B.G.S. for igniting the geology spark in me and for showing such patience when answering all those many many questions!!

Jeff Wilkinson.

Lindal Moor Evening meet,
July 12th

Meet leader Peter Sanbach, with Dave Robson, Paul Timewell, Peter Fleming, John Helme, Peter Blackwood and dog. (Dave Bridge, Angela Wilson, and Ian Matheson arrived late and missed the proceedings!).

This was a fine opportunity to see the sights of Henning Valley without the threat of going underground. We assembled at Lindal Village Green on a threatening July evening. After stopping to ask permission to cross Sam Birch's land we set off past Lindal church, pausing to admire the datestone laid by Mrs Wadham. Opposite Backguards Pit we turned right to Frank Pit. We hope to clear and photograph the engine house and shaft for the relic survey this winter. Having admired the spoil heaps and visited the site of Meadow Pit we sought out the line of the tramway to take us further up the valley. We looked into the Horse Level, HV1, and several entrances to Wood Pit before carrying on through the sidings to B30 and B30 Day Level. Breaking out of the undergrowth we crossed the road and followed a track to Carkettle Pit, where there is much more scrub bashing and photography to be done. By now the cloud was really closing in, so we got off the hill and down to the New Inn, where we met Angela Wilson and Dave Bridge, who had been surprised by our starting on time!

Peter Sandbach.

Gunnerside Ghyll, Swaledale. August
27th

Meet Leader Mike Mitchell, with Sheila Barker, Clive Barrow, Peter Blezzard, Don Borthwick, Dave Bridge, Pete Fleming, Jon Knowles and Angela Wilson.

From Gunnerside village the group followed the footpath up the east side of Gunnerside Ghyll. Mike and Jon explored a level near the village, which went for about 200 meters, ending at a run-in, which had been dug. As it was a dirty crawl they did not go through. Everyone continued on past the dressing floors, where there were some good examples of bouse teams, and stopped for lunch outside Bunton Level, which was driven towards Old Gang Mine. After about 300 meters it turned sharply to the left and after a further 70 meters it branched. In the right hand branch a shaft about 15 meters deep leading down to a level was not descended. The level continued for 10 meters more to a blind heading. Dave Bridge explored the left-hand branch, but knee deep water deterred the others. He came back after reaching a collapse at 170 meters. On the way out several rises in the main adit were inspected but not climbed.

The team continued up the valley, where a low level, which had been stabilized with oil, drums was checked and found to be drafting, but no one went in. At the head of the valley stabilization work is being carried out on several old mill buildings. At this point the group went up a stream to the west of the buildings, where Dave

entered a level in the beck side which was silted up to half its height. It continued for an unknown distance. Further up the beck Mike discovered a capped shaft which was a beautiful example of corbelling. There appeared to be a level about 15 meters down.

The party continued down the west side of the valley, and several mine buildings and levels were inspected. The meet finished back in Gunnerside village at about 5.00 pm, where some members had a bar meal at the local pub. All agreed that further, better-prepared visits to this area would be worthwhile.

Waterfall Level, Coniston.

This level is situated behind the waterfall directly below the Miners Bridge on the track from Coniston to the Dressing Floors. It is nearly two hundred yards long, and over six feet high throughout its length. It follows a string of clay veins, but there is no sign of mineralisation. It was clearly an expensive and long term operation, and there could have been no financial return. There has been much speculation about when it was driven, by whom, and for what purpose.

The most widely held opinion is that it was driven by Charles Roe, of Macclesfield, who worked the mine between about 1750 and 1790, as an attempt to unwater the workings, and coincidentally to search for copper veins. Water was always a problem to the early miners, and removing it was both difficult and expensive as the mine deepened. The Elizabethan miners, working at Coniston between

1600 and 1640, spent nearly half their time bailing water out with buckets and kibbles before they could get to work, and it is believed that they drove the Cobbler Level beside Red Dell Beck, to drain their workings on the Bonsor Vein. This hand picked level, which is still accessible, is about 140 feet below the top of their workings, now known as the Bonsor East Shaft.

A hundred years later Charles Roe took over the mine, and using new technology, deepened it to about 360 feet, using a water wheel to pump it dry. It was not until 1834 that John Barratt drove Deep Level, which still drains the mine 300 feet below the surface. If the theory is correct, the Waterfall Level, had it been completed, would have come in beneath Charles Roe's mine, and drained a further 380 feet below the Cobbler Level.

A passage from a book in Whitehaven Library written by Captain Budworth, published in 1795, and titled 'A fortnights Ramble to the Lakes in Westmorland, Lancashire and Cumberland by a Rambler', might lend credence to this hypothesis:

They had descended from Coniston Old Man via Levers Water, which supplies the copper works with water..... 'Walked 200 yards up a tunnel, half leg deep in water, expecting to see a copper mine, but was disappointed. There was but one man at work, engaged in driving a level to the other side of the brook to draw off obstructing waters from the mine. He showed us some copper mingled with the rock, which is so sparingly mixed as to be not worth the expense

of separating'. He does not locate the above works.

'The mine is at present rather barren; but this mountain has been so productive that they do not doubt meeting with other success, and they already keep some men at work, though not in proportion to the expenses. We descended lower where they pulverise it, and by a different process were preparing it for smelting, which is carried out in a county better supplied with coal and more convenient for navigation.'

This description could relate to Waterfall Level, although it seems to me more likely that there may have been a level above the copper works, which has either been lost or was widened by the Victorian miners

Following a meeting to discuss the forthcoming CATMHS publication, *Lakelands Mining Heritage*, the last five hundred years, Peter Fleming, Dave Bridge and Ian Matheson decided to examine Waterfall Level more carefully:

The track up to Miners Bridge is fairly wide and easy to navigate, yet at least two people have fallen from it into the ravine, and died. On arriving at Miners Bridge we discovered a third incident, this time without serious consequences. Some youths had driven their small car up the track, and were apparently trying to turn round by the bridge. Their car had rolled backwards over the edge just below the bridge, and had landed on a boulder part way down, with its back end hanging over the drop, where it remained, perfectly

level, with its front end nearly touching the rock wall. No one was hurt!

To get to Waterfall level one must scramble down (past the car) cross the stream below the waterfall, and wade nearly waist deep up a cleft behind it before climbing up to the entrance. This is partially blocked with debris, which backs the water up to just above knee deep for about half the length of the level. Once inside, it is a spacious tunnel in which one can easily walk upright and just about touch both sides.

It follows a string of clay veins, and the rock is quite soft. The clay is mostly grey, but there are several sections which are a red haematite colour. In one place the veins separate, and after following the left hand vein for a few feet the miners changed their minds and followed the right hand side. There are lots of shot holes, all of which appear to have been hand driven, and in one we found a two inch stub of tallow candle. Ventilation would have been a problem, and substantial iron hangers driven into the wall at head height seem to have carried some kind of trunking. Timber on the floor provided a runway for a two wheeled barrow.

The level is nearly two hundred yards long and shows little sign of mineralisation. It is nearly a thousand yards from Miners Bridge to the Bonsor East Shaft, so it would have taken many years and a lot more money to connect with Charles Roe's workings!

Ian Matheson

Cumbria Amentity Trust Mining History Society Meet

LANGDALE, 7th May 2000

Leader: Pete Fleming

22 members gathered at the New Dungeon Ghyll car park on what was to turn out to be one of the sunniest days of the new Millennium so far.

After handing out information obtained from Barrow Records Office relating to iron mining in the Langdale valley during the 19th Century, and extracts from a survey of the Neolithic axe making sites on Pike of Stickle completed in 1984 and 1985 and published in the Prehistoric Society Journal 1989, we started the ascent of the path leading to Harrison Coombe. Just before reaching the final steep slope we struck off to the left, short of a ruined dry stone building which was possibly used in Victorian times as a shelter or resting place for the guides and ponies who brought the early tourists on an ascent of the Pikes via this route. We soon reached a small gill and hidden in its steepest part is a mine tunnel driven on a haematite vein which is easily seen in the roof. It is a high grade ore, showing 'kidney' formation, the vein being 4" to 5" wide. The tunnel is only about 8 metres long and was probably driven in 1865 by the proprietor of a mine at Frizington (Memoirs of the Geological Survey). Like most of these small prospects high on the fells it was given up on account of inaccessibility. Above the tunnel, where the vein outcrops on the surface, some good samples of ore are to be seen.

We stopped for lunch nearby, basking in the sun, then the party split into two. The more adventurous group scrambled up South East Gully on Gimmer Crag. The two groups joined once again on the ridge near Loft Crag.

Instead of going up the last few feet of Pike of Stickle we traversed around the summit on ledges above the South Scree Gully. This brought us on to the steep and rocky slopes below the summit overlooking Mickleden. It is in this area where the most interesting and concentrated Neolithic working sites are to be found. There is evidence of quarrying, sometimes using fire setting techniques. There are several small caves. Some of these have been artificially enlarged and were used for shelter in bad weather to continue the production of axes made from the very hard, fine grained Borrowdale Volcanic Ash, or Seathwaite tuff which outcrops in a noticeably light coloured band at this location. It is the nearest equivalent to flint we have in Northern England.

There is ample evidence of the scale of production all around, with extensive 'fans' of debitage, flakes, and chippings strewn down the fellside below the actual working sites. They are in fact man made scree slopes. Forty separate sites have been identified below the summit of Pike of Stickle alone. Radio carbon analysis on a charcoal sample from a nearby site gave a date of 2524 BC. We noted at least three reject rough-outs among the chippings and heather, with no doubt many more awaiting discovery.

After about an hour we traversed across the steep ground to the north on narrow sheep trails to Mart Crag Moor, where there are several more working sites. It was here in 1921 that the first discovery of a chipping site was made but its significance was not realised until further discoveries came to light in 1947, when the whole area came under closer scrutiny.

We crossed the moor to Stake Pass. Near the cairn at the highest point is a large boulder inscribed with an OS. bench mark and the date 14th August 1839. We descended Stake Pass to Mickleden where some members had a dip in the river, then everyone carried on to the Old Dungeon Ghyll for a refreshing tankard or two of ale. Further down the valley some of us stopped to look at some "recently discovered Neolithic rock art" with cup and ring marks and other petroglyphs on some large boulders. But that's another story.

Spanish Affair - The CAT meet to
the Picos de Europa,
September 2000.

Organiser Peter Fleming, accompanied by Dave Bridge, Peter Blezzard, Alistair and Cilla Cameron, Geoff and John Cram, Ann Danson, Ken and Margaret Geddes, Ian Matheson and Mike Mitchell.

Spanish Affair is the name of the holiday company handling the villa where we stayed, but it makes an appropriate title for this report. The villa, called Casa Roccio, is about three kilometers from Potes, the main town on the north side of the Picos area. It features a superb covered barbecue area, and a swimming pool, which was much appreciated.

Most people flew from Stanstead to Bilbao, collecting hire cars there and driving on to Potes. Alistair and Cilla flew from Manchester to Madrid, and Mike and Ian, taking all the lamps and equipment in Mike's Land Rover Discovery, drove all the way from the Lake District. Despite these varied approaches everyone arrived at Casa Roccio within a couple of hours.

Mike and Ian's journey was disrupted by the fuel disputes. On the outward leg, due to a blockade by French fishermen, the ferry to St Malo was cancelled, and we were lucky to get an alternative crossing to Caen a few hours later. French lorry drivers then blocked the motorway, and we were halted for a while, moved on a few miles, and were blocked again at a narrow point. This time we escaped by driving the wrong way down the hard

shoulder, and then crossed France on minor roads. On the return journey the ferry from Santander to Plymouth had been cancelled due to a mechanical failure, so again we drove through France, wondering if we would be able to get enough fuel to complete the journey. We did, but the final disruption was a rolling blockage of the M6 south of Preston, by British lorry drivers!

On the outward journey we stopped in France at Saint Sauvinien, where Mike had been recommended a Chambre d'hotels, Le Moulin de la Quine. It is run by an English couple, and apparently has a mine in the garden! In fact this is part of a very extensive network of underground limestone quarries which reputedly date back to Roman times. We were told that stone for the original French Statue of Liberty in Paris was quarried from here.

The surface limesone is of poor quality due to weathering, so stone was quarried a few meters below the surface in a huge complex of limestone flats. Part of it has been used as a mushroom farm, and during the war it was a refuge from the Nazis. As well as the entrance in the garden there were several entrances just a short walk away. We didn't have much time, and only took one lamp, so we only went a little way in. It is obviously very extensive, and one could see areas where large blocks had been roughed out for quarrying, apparently by hand. There is a museum a few miles away which has been provided by motorway contractors, but unfortunately there was not time to visit it. This is a very nice area, with lots to do and see, and,

with the potential of extensive underground exploration, well worth a visit for its own sake.

On the way back from the Picos Mike and Ian visited the Cuevas del Monte del Castillo, near Puente Viesgo. These contain prehistoric cave paintings which are older than those at the famous caves at Altamira, which date from 12000BC. The caves are quite extensive, and the entrance has been excavated. Inside there are some spectacular cave formations. The cave paintings are quite simple outlines, not very easy to make out, and are mainly of bison and deer, done in red ochre and black. There are also numerous human hand-prints in negative, which were done by blowing red ochre over the hand whilst it was placed flat against the wall. A moon and some symbols are believed to be a calendar. The guide was excellent, and lit things cleverly, using a laser spot to outline the various features. He spoke in Spanish, with a few English and French phrases, but enunciated slowly and distinctly, so that those not fluent in Spanish were able to get the gist of what he was saying!

Once everyone had arrived at the villa we rushed off to the local supermarket to get some basic provisions for the weekend before going out for a meal. A misunderstanding about location led to Mike, Ian, Alistair and Cilla not finding the others. They went to Potes and had a three course meal, including wine, for 1000 pesetas each, less than £4.00! The others went to the Hosteria Pena Sagra, in Ojedo, where they got involved with a very lively

Spanish hen party and some local strong white wine, arriving back at the villa in the early hours of the morning.

Not everyone had the same agenda, and as well as the mining, most had come for the mountaineering and for a holiday. On the Sunday it was decided to have an easy day after the journey and the night out, and to do a short but steep walk up to the village of Tresviso and back down again. I am limited these days by arthritic ankles and knees, and felt that the descent would be too demanding, so I set off on a mountain bike ride up to the village of Colio, meaning to descend off road. A navigation error meant that the track petered out at an altitude of 800 meters. The correct one was steep and unrideable! I returned to the villa for a swim and a snooze by the pool before the others came back, having had a hard but rewarding walk. Some of the group looked into some mines en route, and Dave Bridge came back with a large and very heavy section of stalagmite which he had found.

Day two, Monday, was a proper mining day. After an earlier start we all took the long drive round to Sotres via the Desidera de Hermeda, Panes, Arena de Cabrales, and Puente Poncebos. This first part, whilst spectacular, can be tedious as it is very slow, but the last bit, the drive from Poncebos up to Sotres, a tiny mountain village at an altitude of 1045 meters, was a real treat. Above Sotres is a miner's track leading to the Refugio Andarra and the Minas de la Providencia. From here Geoff and John set off to traverse

the Andarra Cirque, Pete and Ann attempted to drive their hired Citroen Zantia up to the refugio, Alistair and Cilla walked up, and the rest drove up in Mike's Discovery. The walkers easily overtook the Citroen, which eventually had to abandon the attempt as the track became too rough!

The concrete refuge might have been an old mine building. Inside it was wood lined and quite comfortable, with a kitchen, a stove, and a sleeping area accessed by a ladder through a trapdoor in the ceiling. The guardian, who is normally in residence from May until the end of September, was not there that day. Apart from a gantry which consisted of a section of rail with a mine tub on it, and which was probably used for loading wagons, everything else has been removed. The rail led into a tunnel that had once contained a compressor, and was now used as a wood store for the hut. About a hundred meters in it had been bricked up. A steel door was secured by a strong padlock, and a pipe vented a strong current of cold air. There were about seventy brown moths resting on the walls.

The rest of the day was spent exploring entrances above numerous spoil heaps in a valley above the refuge at an altitude of nearly two thousand meters. These were all numbered with paint, and some had names. Some were blocked by old snow, some were blind, and some led into deep stopes which were beyond our resources, but the only artefact was a set of rails protruding above a spoil heap. On the other side of the valley however was a veritable city of boulder bothies,

probably about a hundred, each with a number at the entrance. These must have been home for the working miners. Most were well constructed, but it must have been a pretty rough and primitive existence.

Most people returned to Potes the long way round, but Mike took Ian and Ken in his Discovery along a very, very scary short cut to Beges. This was nine miles of adrenalin, and took an hour and a quarter to drive! The track descended some 4500 feet, and was quite rough and only just wide enough, with crumbling edges in places. Solid limestone walls bulged out above, and there was a sheer unprotected drop of many hundreds of feet on the other side. Thank goodness we didn't meet anything coming the other way!

On Tuesday Geoff & John Cram and Alistair & Cilla took the cable car up from Fuente De. The Crams climbed Pena Vieja, and the Camerons walked to the Cabana Veronica. Pete and Ann also took the cable car up from Fuente De, and then walked over to the Minas de Aliva. Mike, Ian, Ken, Dave, and Peter Fleming drove up to the mines, which only closed a few years ago. They are situated in a very spectacular location beneath the huge thousand meter high sheer face of Pena Vieja. On the surface all that remains is a huge heap of white tailings and some mine buildings. In order to withstand the winter snow these have been built half underground like large semi circular pipe sections. The Discovery was parked in one out of the sun. The miner's quarters and washrooms are

still intact, though vandalised, and the kitchen range still had a supply of coal. In one of the semi circular buildings were some tram lines, and a gutter carrying a steady flow of cold water. At the back the main adit had been bricked up, but we found that someone had burrowed underneath it, and quickly followed Peter Fleming through the low crawl. Mike stayed outside to ensure safety.

The main drive was concrete lined until it entered solid rock. The tramlines had been lifted, but the drainage gutter flowed down one side. After some two hundred meters of easy walking we were astonished to find the level filled by a shaft, with the winding cage still in place. The shaft appeared to be about a hundred meters deep, and contained a single wire rope running over a sheave wheel. We assumed that there would be a counter weight at the bottom. To the left a steel stairway followed the curve of the shaft upwards for twenty five feet to the winding room. The modern winding machinery seemed to be in good order apart from the electric motor, which had been removed. Even the engine man's wooden chair was there, and a bottle of water.

Descending to the traming level we continued beyond the shaft to a junction. Choosing to explore the left hand branch first we found that it led into a production area and some blind headings. An electric cable tied to a junction box was used as a hand line in order to descend to a lower level. Two more descents were made in this way to reach a depth of about eighty feet below the adit. There was a lot of

mineralisation to be seen, mainly sphalerite, some calc deep water, and a maze of production levels, which kept bringing us back to the winding shaft. It was some time before we realised that there were actually two shafts! We explored everything except two deep stopes, which would have required SRT techniques, and then returned to the main adit to explore the right hand branch. There were more blind headings, but the main drive curved to the right through some unstable ground, which was at first shuttered with concrete and then with wood. Beyond this was the head of the second shaft.

This time the cage was at the bottom. Climbing round the pipework on the left hand side we were able to pass the shaft, walking over an old winding cable which had been dumped in the passage. This led into another level with some very glutinous grey mud. Concrete steps led up to the winding gear above the shaft. This seemed older than the first, with lots of cogs and wheels, but this time the electric motor and control panel were intact. The winding gear was offset horizontally from the shaft top, the cable running horizontally to the sheaved head wheel. Again there was much excitement and picture taking. In the level nearby we found two Spanish Eimco type loaders, and a slusher blade nearby. There were three iron ore-chutes, all in good condition, but we did not climb up through them.

Peter Fleming found an excellent specimen of sphalerite beside one of the loaders, and some time was spent

trying to lever a block of ore out of the roof. This proved difficult to dislodge, but finally dropped out suddenly, bounced off the loader, and hit Peter on the knee, fortunately without causing injury. The group returned to the entrance, and Peters Fleming and Blezard accompanied Mike in to view the discoveries. When they came out Mike and Ian drove Pete and Ann to the top of the Fuente De cable car before picking the others up after they had walked to a junction on the way down. There were lots of four wheel drive vehicles carrying tourists to the Refuge de Aliva, and further down lots of sheep, goats and horses near the interesting and very strong looking church, the Ermita da la Santuca de Aliva. We all returned to the villa for a clean up before going for a huge meal at a Hostale in Espinama. Three courses and as much wine as we could drink cost 20,000 pesetas for 12 people, about £6.50 each!

Wednesday was rest day for some. We had decided to have a barbecue by the pool that evening, and Pete & Ann stayed to prepare it. Alistair & Cilla and Ian also stayed at the villa, swam in the pool, and did some washing and shopping, whilst Ken and Margaret Geddes went off in their car. Mike Mitchell, Peter Fleming, Dave Bridge and the Crams drove off in the Discovery to visit the south west of the area. After an off road section from Fuente de to Puerto de Pandetrave they dropped the Crams off at Cain to do the Carres Gorge walk. The rest continued, first to Cangas de Onis to see the Romanesque bridge there, then to Covadonga, a

religious shrine, and finally to the Minas de Bufera, a tourist attraction based on some open cast iron workings and two large lakes. They then went to Puente Poncebos to pick up the Crams before returning to Potes via Panes and the Desfiladero de Hermida, thus circumnavigating the entire west and central Picos massifs. They stopped for a meal en route, as they were too late for the barbecue. The others enjoyed barbecued local trout, followed by steak and chicken, with lots of salad, pasta, fruit and Spanish wine.

On Thursday the main team set off to explore a canal, which had been observed whilst walking up to Tresviso on Sunday. It appeared to be part of a hydro electric scheme, and is a considerable feat of engineering and construction. Access is via three hundred feet of iron ladders. The canal was followed to its source, mainly by walking in the dry bed of the canal. Sometimes it was necessary to walk on the outside wall overlooking a sheer drop of nearly a thousand feet, and sometimes the canal went through rock tunnels. In these places the maintenance access either took the outside route on concrete ledges built onto the sheer rock or followed a walkway built above the canal. After four miles the source was found, a resurgence of water from the limestone rock which at the time was diverted from the canal to the valley stream. A path seemed to offer an easier return route down the valley, but after dropping some distance it climbed back up to the canal.

Friday was the last day. Mike decided upon a rest day at the villa, whilst

several of the others took the cable car, and walked to the mines of Vega Liordes, about three kilometers away on the same level. They spent about forty minutes underground, finding some ore tubs, ladder ways, working platforms, and a large chamber. The Crams climbed Horcados Rojos, 2506 m and, after they had explored the mine so did Pete & Ann. Alistair and Cilla very kindly took me and my bike to the pass of Puerto San Gloria. They spent the rest of the day exploring minor roads in the area whilst I mountain biked down to Cosgaya, a steep and rough descent of nearly eleven hundred meters. My bike would have benefited by suspension and ABS! Feeling guilty about an easy day I then climbed seven hundred meters back up to Fuente De, had a beer, and then free wheeled back down to Potes. Everyone except Pete & Anne returned to the villa by mid afternoon to spend the rest of the sunny day by the pool. We all went for a final meal together at the Hosteria Pena Sagra

Ian Matheson.

An Alternative View of the Picos by Cilla Cameron

It was a long way to go for a CAT meet, but the weather and surroundings were certainly worth it. In fact it was hard to believe we were on a CAT meet: it was sunny and warm, the sky was a cloudless blue and we could swim in an open-air pool looking up at the white limestone crags.

Twelve assorted members of CAT had found their way to North Spain by a variety of means and spent the next week eating and drinking very well and

quite cheaply. At times we also went for walks and explored under ground.

I can't describe the mines (I'm sure they'll be covered elsewhere in the newsletter), but the walks provided a variety of terrain. Using the cable car at Fuente Dé meant that we gained height quickly, along with numerous Spanish families with toddlers, babes in arms, bikini-clad females and a few other walkers. After about 200 meters only walkers remained on the stony tracks. The hot sun reflected on the white limestone and the grey dust covered our boots. We visited Cabana Veronica, a strange metal dome where the warden lives all year at a height of 2400m.

Another day it was pleasant to sit in the sun by the entrance to a mine and be cooled by the icy blast from inside. There was the usual CAT lack of decision-making; where shall we go today, whose car should we use, where shall we eat tonight & what time? Most of the group enjoyed the magnificent barbeque produced by Pete and Ann and the week finished with a paella at a local restaurant, washed down with plenty of 'tinto'. A repeat trip would be most welcome and highly recommended. It beats Hudgill Burn hands down!

Cilla Cameron.

Blast from the Past.

In the early days, from before its inception through to the end of the nineteen eighties, CAT did a tremendous amount of pioneering exploration, especially in the Coniston

copper mines; this at a time when electron ladders were normal equipment, and SRT was a bit new. Indeed in those times we had a reputation for pushing the limits, and were considered by some to be a bit wild!

The Meets Secretary kept reports of those times, but they were not published. The reports are however held in the CATMHS archive, and it seems to me appropriate, in this our twenty first year, to let some of the more interesting ones see the light of day. I propose to publish one of these accounts in each forthcoming Newsletter. The following article is an account of the early exploration of the Paddy End Through Trip written by Alen McFadzean, which he gave to me in October 1985.

Editor.

The Bolting Trip, November 1981

The 'Bolting Trip' occurred during the autumn of 1981, probably November. Chris Jones, Mark Wickenden, Colin Horne and myself descended to Arrete Chamber, where Mark and Colin descended the miners ladder-way and discovered Top Level. Actually Eric (Holland) had been here before, for I had seen his surveys. Mark and Colin came back up the ladder, and we resumed the bolting work.

At the foot of the ninety foot pitch I had a dig in the back filled tunnel, where I had previously done some digging on the original descent the autumn before, and soon broke into the Top Level workings which Mark and Colin had just explored. We had a

good look round, noting all the shafts for future visits.

Nothing else occurred on this trip which readily springs to mind, though it is worth mentioning that we carried with us Chris' homemade bolting platform (Betsy) in the hope of climbing up into the double tunnel on Middle Level. There was no time to attempt this, and Betsy was unceremoniously thrown down the pitch. I have a series of slides relating to this trip.

A second trip to explore one of the shafts on Top Level occurred on Saturday 13th December 1981. The same team was present, with the addition of Max Dobie.

On reaching Top Level I set about surveying the workings whilst the others cleared the shaft at the top of Green Ginnel. Originally there was just a small square manhole here, but it was extremely unstable. Stuff cleared, Mark descended on electron ladder (we had no prussicking gear at this period) followed by myself, but we found the shaft foot to be blocked. Some digging quickly revealed, on the southern side, a blind heading about fifteen feet long. More digging revealed the Green Ginnel, then a flawless expanse of malachite mud. I waded through to what we now know as the Windy Stope, followed by Mark.

Mark and I had a dig at the eastern end of the Top Level crosscut, knowing that if we were to win into more workings then this was the place to dig (having consulted Eric's surveys immediately after the Bolting Trip). We shifted tons of material but never

won through, however we could see the dark of a stope through the rocks above our heads. (This dig was completed over a year later, on Boxing Day 1982, when we won into six hundred and thirty three feet of levels).

Chris descended the small stope, the one you clamber over immediately after crawling through the back-filled passage into Top Level, and found it to be blocked about fifty feet down. We then descended to Middle Level and explored those badly crushed workings past the top of the Gin Shaft, climbing up what appeared to be a man-way at the point where the deads above the

main level are held up by a T-piece of heavy timber.

Next we re-bolted the final pitch, for on arrival there we noticed that one of the bolts (one which I had inserted) was quite slack in the hole. Now it was either this trip, or the bolting trip before it, when Mark and I swung off the final pitch half way down and tried to climb up the stone wall (which we successfully may-poled last year, or earlier this year). The trip ended with us chipping through a two-foot column of ice to get out of Hospital Level.

PS. The Bolting Trip was the first ever abseiling trip through the Paddy End through trip.

Alen McFadzean, Oct 1985

Cumbria Amenity Trust Mining History
Society

is awarded a grant of

£5,000

under the Millennium Festival
Awards for All programme

19 April 2000



Millenium Festival Award

This grant was awarded to assist in the publication of our forthcoming book 'Lakeland's Mining Heritage, the last 500 years'. The cheque was presented by the Minister of State Chris Smith to Peter Fleming, on the occasion of the official opening of the Ruskin museum. Peter is to be congratulated on achieving this award on behalf of our Society, for not only did he conceive the idea, but he has put in a considerable amount of time and effort to bring it to fruition. Editor.

NAMHO

National Association
of Mining History
Organisations



NEWSLETTER

SPRING 2000

Issue No 38

NAMHO inter NATIONAL CONFERENCE - TRURO, CORNWALL, JULY 2000

The Conference will be based at Truro School which has a large sports hall, lots of ground with plenty of parking and a swimming pool that will be available to delegates. There will be bedrooms, camping and caravan pitches available on site, together with a range of meals. There is alternative accommodation in the city for those who do not wish to stay on site.

The lecture programme will include speakers from France, Eire, USA, Argentina, Holland and Wales. We are waiting to firm up with Portugal, Spain and possibly South Africa. Of course there will be speakers from Cornwall and other parts of England.

In addition there will be social events, legitimate underground and surface excursions. There will also be the opportunity to visit behind the scenes at Camborne School of Mines.

The big difference from previous NAMHO conferences will be its length. The opening address is at 14.00 on Friday 14th July followed by two speakers. In the evening there will be a free buffet/reception hosted by Cornwall County Council at County Hall where the Cornwall County Records Office will be putting on a display. During the evening there will be another lecture at County Hall. On Saturday evening there will be a river trip to Falmouth. On Sunday evening there will be the Conference Dinner followed by a concert given by the Holman Climax Choir. Monday has a full day programme with the formal closing of the Conference at about 17.30. In the evening there will be

meals available for those who are staying for further excursions on Tuesday.

We have arranged a number of deals with local tourist attractions and some conference specials. We hope that potential delegates will contact us quickly as we are sure that they will want to take part in this unique international event and there is a strong possibility that we will have to limit numbers.

We look forward to meeting you in Cornwall in July.

Full details and booking forms are now available from:-
Lawrence Holmes, Rivergarth, Malpas, Truro, Cornwall, TR1 1SS.
Tel: 01872 278234.
E Mail: NAMHO@csm.ex.ac.uk

DAMAGE TO SCHEDULED ANCIENT MONUMENT

The Environmental Agency faces prosecution after its staff bulldozed and buried the remains of the 300 year old Rookhope Old Smeltnill in Weardale, Co Durham. The site, one of the best preserved examples of 18th Century lead mining in Britain, had been "Scheduled" by English Heritage in 1997.

The Environmental Agency admits that it failed to get permission, as required by the Ancient Monuments and Archaeological Areas Act 1979, before the site was extensively damaged.

Paul Sowan

BOOK REVIEWS

1. "Peak District Mining and Quarrying" by Lynn Willies and Harry Parker. Published by Tempus

Publishing Ltd, 1999. Cost £9.99.

This is one of a new series of books in the well established "Images of England" Series that this publisher has produced in association with NAMHO. It has hard covers, 70mm x 240mm and there are 128 pages and about 200 photographs and drawings, all of which are of historic interest.

As can be expected from the authors, this is a well researched and authoritative work and the result of many years enthusiastic collecting. The contents cover not only most aspects of lead mining (early history, law, the mines and the miners, the deposits and the method of working, mechanical power used, dressing and of the last big mine, Mill Close) but also other types of mineral working in the Peak, often forgotten. This includes the working of fluorspar, calcite, chert and "black marble" and the quarrying of sandstone and limestone.

The book is, however, intended to record an area's mining heritage in "images", each image having a descriptive caption but with the occasional page of text. It brings together a large number of historic pictures normally only found in scattered papers, a few are well known but a surprising number have not been seen in print before. Some of the images are over 100 years old but they are well balanced with photos taken by modern professionals like Harry Parker, Richard Bird and Paul Deakin, in the last 50 years.

This is a well produced book and a "must" for anyone with a serious interest in the Peak District.

I J Brown

2. "Mining in Cornwall: Volume One, The Central District and Volume Two, The County Explored." By J H Trounson and L J Bullen. Tempus, Stroud, Glos. 128pp and 128pp. £9.99 per volume.

AND

The East Shropshire Coalfields. By Ivor J Brown. Tempus, Stroud, Glos. 128pp. £9.99.

Together with a volume on *Peak District Mining and Quarrying* by the writer and Harry Parker (modesty forbids further comment), these are the first offerings in a series of collected regional mining photographs to which NAMHO has given its blessing.

Each is done to a similar formula, with a comparatively substantial amount of text as introduction and for each photograph, with about 200 photographs in each volume. The overall impression, with allowance for the fact that £9.99 is not enough to produce coffee-table standards of reproduction, is very good indeed, much better than the average book of this type.

Many photographs in the Cornwall volumes were published some years ago by Trounson, but don't let that put you off, there are many previously unpublished photographs here. Obviously the Cornish engine has a major part, but the selection is wide and probably no other source gives quite as good an impression of what mining in Cornwall was really like from the mid 19th century onwards. Together with Ken Brown and Bob Acton's recent series, Cornish mining is being well served indeed, never better than since Barton was active.

The East Shropshire volume, which of course includes Coalbrookdale, has a somewhat different approach by Ivor Brown, reflecting both the availability of sources and his own particular contribution to mining history with more emphasis on the social and also attempting to put the historical clock back further with a few illustrations of an earlier date than possible with photographs. Good to see a couple of Peak District photographs present representing the products made at Coalbrookdale! If anyone still thinks

that the multi-volume NCB coal mining history series has said it all, this volume will give a few leads to further research.

Lynn Willies

3. "Derbyshire Blue John" by Dr Trevor Ford. Pub 1999 by Ashbourne Editions. ISBN 1 873775 19 9, Cost £5.95.

Britain cannot claim to be home to many of the world's most precious minerals. It does, however, have a unique form of the common mineral Fluorite in the form of Blue John. This colourful mineral has been fashioned into objects of great beauty by a small band of skilled craftsmen working in and around Castleton in Derbyshire.

The story of Blue John had never been told in a single comprehensive volume until Trevor Ford put pen to paper and produced this superb book. Trevor is an authority this subject.

The book covers the geology of the mineral, the history of its use for ornamental purposes, the mining of the mineral and the method of working the mineral into fine works of art. There are superb colour photographs of some of the exquisite Blue John works of art which litter our great houses, including Buckingham Palace and Chatsworth. It is truly amazing the range of pieces that have been fashioned from this "difficult to work" mineral. The book is a tribute to the skilled craftsmen who, down the ages, have made it all possible.

Give your self a treat - go out and buy it now!

Down to Earth

4. "South Crofty Old Workings" by J A Buckley & K T Riekstins with pictures by P R Deakin. Penhellick Publications. Size 5³/₁₆in x 8¹/₈in. Cost £3.99.

The Cornish mine workings you've always wanted to see, but have never had the opportunity to visit, cover some two square miles and span working periods from before gunpowder up to the 1930's. They embrace many ancient mine setts including such evocative names as Dolcoath, Cam Brea, Tincroft and East Pool - all of which are connected

underground.

Now at last you can see them thanks to this new picture book, the fourth in the "Cornish Mining Photographs" series. It will have greatest appeal to mining historians as it shows the epic work of the Cornish "Old Man". All the pictures bar one are in colour and were taken by Paul Deakin FRPS.

Many of the old workings were entered with great difficulty to enable the photographs to be taken. The outcome is a collection of some of the most fascinating pictures of vast stopes that I have ever seen. The title page illustration shows an enormous stope on the Great Lode at the 255 fathom level of Wheal Agar which is 50 feet wide and 100 feet high which had been driven by hand and black powder some 90 years ago.

Also shown are massive, and fractured, hanging walls towering over the levels along which the photographic party had to travel. These hanging walls were supported by rotting tree-trunk size props (Stulls) and extensive 45 degree angle stopes that looked like a sponge cake with the jam removed and held apart by only a few rock pillars and more rotting stulls. If Mother Nature had decided to have a shiver while the party were underneath, a hard hat would have been little help.

The overall result is a gem, don't dare to miss it.

H M Parker

5. "Slates from Abergynolwyn" by Alan Holmes. Published by Gwynedd Archives Service. 121 pp, 28pp illus. Maps and line drawings in text. Cost £7.99.

This, the story of the Bryneglwyn Slate Quarry has been reissued. The original was sold out soon after publishing in 1986. This book, written by Tallylyn Railway Preservation Society member Alan Holmes, is a comprehensive history of the quarry operations and its association with the railway. Today, much of the quarry is hidden under forestry work and vegetation and the buildings were 'lost' some years back. The book is a fitting tribute to the quarry and the quarrymen.

This revised edition contains

additional information and is excellent value.

John A Knight

6. "SWALEDALE - Portrait of North Yorkshire Mining Community" by John Hardy. 1998. ISBN 0-948511-16-8. 39 plates, 14 maps & figs, 139pp. Cost £15.95 from Frank Peters (Printers), Kendal.

This is an improvement on his last book, but that was so dire that this is no great achievement. Once again, the book, with its large format and high quality paper, has been beautifully produced by Frank Peters. It would be peevish not to admit that the book reads much better than the *Hidden Side of Swaledale*, but basic errors abound. For example, Hardy refers to characters without introduction and regularly changes their names. He remains convinced that the London Lead Company was active in the dale. He clings to an early, incorrect date for the building of the Octagonal smelt mill and is unaware that the cluster of buildings at the Old Gang Mill is actually two smelt mills. All these errors show a lack of knowledge of easily accessible secondary sources.

He muses at length about the course and purpose of Hard Level and concludes that it was driven after a fatal accident at Old Rake Whim in May 1778. If so, then it was truly prescient as the level was begun a year before the accident! He does not give a source for the claim that the accident was at Old Rake Whim and the Grinton Parish Registers only tell us that, on the same day, two men were "*killed in the lead mines at Old Gang*". He refers to a map drawn in 1821 by Francis Gill. Not bad, even for a Gill, as the man died in 1801!

He returns to his pet piece of conspiracy theory - the cover up (by the bosses of course) surrounding the supposed events at Water Blast Shaft. In *Hidden Side* we were told that 24 miners were killed here after blasting into water. We are now told, depending on what page you read, that this involved "*a handful of miners*", "*the loss of many lives*" or "*a gigantic human tragedy*". Hardy's "*considered judgement*" is that the accident took place, according to his "*strong*

suspicion", in the early 18th century. This date appears to be favoured because of "*the viciousness of these times*". We are even treated to nine verses of doggerel on the subject of 'Water Blast Vein' from the author's pen! In these times when the crime of Holocaust denial features strongly in historical debate, perhaps there should be a new one of Water Blast denial - for which I want to head the list of offenders!

You've probably guessed that I do not recommend this book, but if you insist on wasting your money, it is available from Frank Peters for £15.95. *Mike Gill*

7. "Hell under Haydock - The Lyme Pit Explosion, Haydock, Lancashire, 26 February 1930" by Ian Winstanley. Pub 2000 by Landy Publishing. 53pp, 9 illus, 4 plans. Cost £6.00.

This book was written in 1990 but publication was delayed until 2000 as a mark of respect to survivors and dependants. Unfortunately the author refers to "the events of 60 years ago" when writing in 1999, a fact which adds to the confusion.

There is a "Glossary of Mining Terms" at the start of the book which is intended to help the non technical readers understand terms used in the text. Unfortunately, there are a number of gross errors in the definitions which makes one wonder about the technical ability of the author. For example a "Conveyor face" is not a roadway equipped with a conveyor which "takes coal from the coal face" but a coal face which is equipped with a conveyor to take the coal off the face. Similarly, men are not necessarily conveyed down the pit via a Downcast Shaft. There are other gross errors. More attention should have been given to the definitions of words which are an important part of the publication.

The surface plan of Lyme Pit is not dated and it has to be assumed that it is contemporary to the disaster. There is no indication of where Lyme Pit was in the Haydock area.

It is difficult to get good photographs of underground disasters. The photographs in the book are within the context of the subject except for an illustration of shaft sinking and the

power house of the colliery. These last two illustrations are completely out of context with the subject.

The description of the explosion and the recovery of the victims and the mine are quite moving. Whilst the author has obviously done a lot of research to obtain the detail discussed, he quotes a lot of verbatim accounts that were recorded at the time of the disaster and, particularly, the transcript of the interview with 85 year old Pat Creham which was conducted in March 1990.

The book describes the events leading up to the explosion, the effect of the "stone dusting" work which minimised the spread of the explosion, the recovery of the victims and the mine, the inquest and the official inquiry. Details of the victims are also included. It is easy to read and succeeds in getting the message across; coal mining in the 1930's was hard, dangerous, and, if anything went wrong, there was little financial relief for the dependants of the victims.

A number of books have recently been published describing coal mining disasters in the UK. Whilst some people find them morbid, they all vividly describe the arduous and dangerous conditions in which coal miners worked in the past. They are all a tribute to the hard working families who mined the coal that was the backbone of the Industrial Revolution in the UK. This book falls within this category and, with all its faults, is a fitting tribute to the victims of this 1930 disaster at Lyme Pit, Haydock. *Wes Taylor*

WEB-SITE REVIEW

"Lead Smelters in the Yorkshire Dales"

<http://www.ayresnet.swinternet.co.uk/m smelter.htm>

There are a growing number of web-sites devoted to mining related topics and, as with publications, there is a widely varying level of quality. One unfortunate effect of the relative ease with which material can be published on the web is that basic grammar, spelling and sentence structure have gone to pot. Even more frustratingly, material is often

presented on a 'take it or leave it' basis, with a total absence of reference to sources.

To this end, they have taken on the challenge of trying to cater for all levels of interest, from the casual visitor or walkers to the industrial archaeologist. Pages of text are devoted to describing "From outcrops to mine", "From baille [sic] hills to smelters" and the "Leading families". Regrettably, in their attempt to present a simple description, the message has become corrupt. For example, we are told that "lead ore occurs in long seams, known as veins" and, whilst talking of outcropping veins, "these veins were called rakes, presumably because the ore could be exposed by raking off the surface soil". There are also a number of references to "bell pits", which is a term borrowed from coal mining and misapplied to shallow shafts on lead veins.

Unfortunately, the site's authors have given no means of contacting them to draw new material to their attention. This is an especial problem as their core data is almost totally lifted, without acknowledgement, from Arthur Raistrick's book "The Lead Industry of Wensleydale and Swaledale: Volume 2 - The Smelting Mills". When published, in 1975, this was the first attempt to identify and list a chronology to the area's smelt mills. Raistrick's model was followed assiduously until it became clear to some that it had some serious flaws. In order to expose these flaws I wrote a paper, in 1992, on "Yorkshire Smelting Mills: Part 1 - The Northern Dales" which was published in British Mining. This changed many of the spatial and chronological elements of Raistrick's model and showed that his Applegarth smelt mill never existed. Since then, others have refined my model and also published their work in British Mining. For example, Les Tyson discounted one of Raistrick's four mills at Clints and greatly improved our understanding of their chronology and ownership. He also showed that the Cupola Mill, at Marrick, was not built in 1854 but in 1701 - making it a very important site (now a Scheduled Ancient Monument). Subsequent work, by Dennison, Lamb

and Vernon, is likely to revise our knowledge of early smelt mills even further.

Strangely, the notes on the condition of the mills fail to mention the consolidation work done by the Yorkshire Dales National Park Authority (Old Gang, Surrender, Blakethwaite and Grinton) or by English Heritage at Marrick. Not all the mills are described, but the authors propose to add more as they visit them. It is to be hoped that they do not use their own map for this task as they will have some long and fruitless searches! For some reason, Keld Side Mill has been moved from near the head of the dale to Gunnenside Gill - being put almost where the Blakethwaite Mill is, while the latter has been moved about a mile up the gill. Cupola Mill now stands on the Arkle, between Grinton and Reeth and Scott's Mill has moved to near Grinton Youth Hostel. Moulds Low Mill has changed liberties and stands alongside Surrender Mill. None of the four smaller, 17th and 18th century mills on Barney Beck are shown.

I would be the last to discourage people from putting information on the web, but I hope that it will not become the home of vanity publishers whose work would not pass the mildest of peer reviews. The Archbold-Ayres site is well worth visiting, if only to get some ideas on what should and shouldn't be done, but the content should come with a health warning. It's like digital Hardy - John not Thomas.

Mike Gill

FOUNDRY PLAN GETS SUPPORT

Plans to restore the sole surviving foundry complex in Cornwall have gained support from a direct descendant of the creators of the company. The Perran Foundry at Perranarworthal, Penrhyn, was founded in 1791 by the Fox family of Falmouth. Perran Foundry was owned and controlled by the Foxes until 1858 and it ceased production in 1880 after being sold to the Williams family of Gwenap and Scorrier. Now Charles Fox (head of Falmouth based shipping and travel agents G C Fox & Co), the great great

grandson of Alfred Fox who was party to the sale of the foundry in 1858, has backed the restoration.

The foundry complex, which is located beside the A39 at Perranarworthal, has lain derelict for more than a decade. The £8 million restoration and development scheme will be progressed in conjunction with the Trevithick Trust. The visitor centre will tell the story of the effect of Perran Foundry, and Cornwall, on the Industrial Revolution.
Western Counties News

CLAYTON EQUIPMENT PRODUCTS

Clayton Equipment, part of Rolls-Royce Plc, has won an order to provide 21 trolley locomotives and 250 mine cars, together with the associated electrical and trolley wire system, for the Maddhapara "hard rock" mine in Bangladesh. It is believed that this mine is the first of its kind in the world.

The company is also exploiting the demand for refurbished locomotives for use in mines. It has recently completed an order for refurbished locomotives for a mining company in Peru.

The problem in satisfying the demand for refurbished locos is the availability of used locos. As most of the production is exported it is unusual for the used equipment to be returned to the UK. This problem has, in the short term, been resolved by the company buying back the fleet of Clayton locos from Cornwall's South Crofty tin mine.
Roger Gosling

LLECHWEDD/MAENOFFEREN SLATE QUARRIES

The main productive part of Llechwedd Quarry has been closed due to the enforcement of an Inspectorate Prohibition Order relating to the safety of the working face after a rockfall. The areas now being worked are in Floor 2 1/2 in Maenofferen (this is near the old mill which was razed to the ground a couple of years back) and in Votty (a location which is unknown to me). A total of 39 men have been laid off and the situation (in December 1999) is looking bleak.

John A Knight

GUIDANCE NOTE

A draft DETR Minerals Planning Guidance Note has been circulated which covers the subjects "On-shore Oil, Gas and Coalbed Methane Development". All of these may take place in areas of interest to members although the draft does not make it clear that "there is also a growing interest in related activities of extracting methane from disused mines which vent gas naturally and in in-seam degasification". It adds that "these activities are not, however, covered" in this particular guidance note.

Copies are obtainable from the Department of the Environment and the Regions.

I J Brown

THE UPS AND DOWNS OF SELLING A COLLIERY

RJB Mining, the owner of Ellington Colliery, the last deep mine in Northumberland, which is due to close in Spring 2000, has agreed to sell the colliery to Giovanni Di Stefano, an Italian business man and politician.

Unfortunately for RJB Mining, Giovanni Di Stefano has been arrested in Rome. He is in custody pending extradition proceedings on a warrant for his arrest that had been issued by the Suffolk Police Fraud Squad in 1994.

Financial Times (29/11/99)

PRESCOTT PACT STARTS COAL CRISIS

Coal industry insiders are saying that the new power station emissions limits, agreed by the Government, could lead to the closure of all of Britain's 14 remaining collieries, which employ 12,00 people, by 2004.

Sunday Times

125 YEARS OF MINING EDUCATION AT LEEDS

October 1999 marks 125 years of mining education at the University of Leeds. The first student to enrol at the Yorkshire College of Science when it opened its doors on 26 October 1874 was Shadrach Stephenson, a local mining student. Forty eight hours later a second student enrolled. The first Professor was A H Green who was

appointed Professor of Geology and Mining in 1874. Arnold Lupton was appointed as "Instructor in Mining" and in 1885 he became the first Professor of Mining without any responsibilities for geology. Professor P Doud is the present (and 15th) holder of the title. In 1904 the college became, by Royal Charter, the University of Leeds. The Department of Mining and Mineral Engineering still flourishes with an intake of 50-60 undergraduates each year on 3 and 4 year courses, plus post graduates etc.

A series of events to commemorate the 125th Anniversary were held during November 1999. These included an Open Day, a special dinner, special lectures and an historical exhibition (mainly documents). A special edition of the Leeds University Mining Association (LUMA) Journal is to be published. This Journal has been published almost annually since the 1920's when it was called the Leeds University Mining Society Journal. Both the University and the National Coal Mining Museum would be interested to hear of anyone who has a back issue of this Journal as neither organisation have a complete set of the publication.

Ivor Brown

RJB TO GO PRIVATE!

If Richard Budge, Chief Executive of RJB Mining, can persuade financial backers that the company is a worthwhile investment, Britain's largest coal producer is set to go private during this year.

MAN SURVIVES FIVE HOURS IN WELL

A 49 year old man who was following his hawk through woodland near Trowbridge fell through a thin layer of branches that covered an open well shaft. He was stuck up to his neck in cold water for five hours before being rescued by firemen.

Daily Telegraph

TICCIH2000

The TICCIH2000 will be held from 30 August to 7 September 2000. The Congress will be based in London and will include the choice of a Tour to either Cornwall, Wales or Scotland.

Further details from TICCIH2000 Congress Administrator, 42 Devonshire Rd, CAMBRIDGE, CB1 2BL. Tel: 01223 323437.

PROPOSED NEW STONE MINE

The September 1999 edition of "Mineral Planning" gave details of a proposal by Albion Stone Quarries Ltd to try underground mining of Portland Stone for dimension stone purposes. If planning permission is granted, the underground working would start from an adit in their Bowers Quarry and would reach a depth of 20 metres.

I J Brown

SOUTH AFRICAN SHAFT TO BE 3000M DEEP

The December 1999 edition of the Mining Magazine reports that two 9m diameter shafts are being sunk to a depth in excess of 2700m at the Western Areas Ltd South Deep Gold Mine Project. When completed, the shafts will be equipped with the deepest single lift winding system in the world.

To ensure that the 3000m of winding rope is not crushed on the drum, only four layers of rope can be coiled at any given time. To make provision for the entire length of rope, the drum diameter is increased and the length of the drum can be increased to accommodate the entire 3000m.

I J Brown

RESCUE OF SOUTH AFRICAN GOLD MINERS

Fifteen gold miners were trapped after an earth tremor caused a rock fall at the African Rainbow Minerals mine about 100 miles south of Johannesburg.

Rescue teams reached the trapped miners after two days and found nine survivors. They had been entombed in a cavity about 18in high with the temperature at about 40°C and had managed to drink water and semi-liquid food that had been poured down a compressed air main.

Evelyn Dixon

COAL AUTHORITY MEETING

Footnote to the article in the last edition of the Newsletter: No member of the public attended the "open" AGM of the Coal Authority in

Leeds last September. Perhaps the possibility of being charged £7.95 for admission plus £3.00 for car parking had put them off attending - or perhaps it was due to the fact that the meeting was held on the 13 September, not the 14 September as had been stated in the notice in "Newscene".

The meeting that was held on 14 September was for representatives of public bodies, local authorities and contractors.

Ivor Brown

BEWARE WHEN OPENING OLD WORKINGS

When miners at the Sextet Mining Co's mine in Madisonville, Kentucky, broke through into old mine workings in July 1999 the large volume of water released flooded the mine and the 150 miners had to be laid off. But this was not the end of the problem as the sudden release of the water from the old workings created a vacuum and instant subsidence damage occurred in the town above due to cave-ins and sink holes caused by this vacuum.

Ivor Brown

LATEST BLOW LEAVES COAL INDUSTRY FACING EXTINCTION

British Energy, the electricity generator, stated that it would review its coal suppliers when it took over Eggborough power station from National Power at the end of February. It appears certain that the company will switch to imported coal that is up to 80% cheaper and has a lower sulphur content.

Financial Times

SURPAC2000

Surpac2000 is a computer package for the simulation of mine resource, development and production planning. Details from Surpac Software International (UK), Whitwick Business Park, Stenson Rd, Coalville, LE67 4JP. Tel: 01530 835554.

WELSH SLATE QUARRY NOTES

Pen-yr-Orsedd Quarry - This quarry was closed by McAlpines shortly after purchase and there has been much vandalism to the old building remains. Two of the Blondin

towers have "fallen" over leaving only one intact.

Maenofferen Quarry -

Underground working has ceased at present - I have heard that it has possibly been abandoned totally with the workforce moving over to the Llechwedd operation. The Office on Maenofferen "Office Level" has been razed to the ground. It was thought that historical papers were kept/dumped in the loft of this building but if they were there we have no idea if they were saved.

Gloddfa Ganol This site closed last year as a tourist attraction and work has commenced on "open topping" the old Hollands Level Fawr, this was the site of the underground tourist route. McAlpines bought the site and are engaged on robbing the pillars for good quality slate. There has also been a major find in the area as substantial remains of a weighbridge mechanism, thought to be dated from the 1840/1850's has been uncovered. Believed to have been tipped over early on, it is made from a number of wooden parts instead of iron.

Glanrafon Quarry - The ravages of the Welsh climate are not dealing kindly to the two-storey barracks. On a recent visit more of the structure had fallen. The somewhat unique end on bay window is still surviving.

Aberllefenni Quarry - The water balance table on the face of the Foel Grochan incline sited between levels 7 and 8 has been taken down being considered unsafe.

Talysam Quarry - On a recent Archaeological Survey of the quarry, a boiler was unearthed amidst slate waste. On further inspection it was found to be off a locomotive and carried the name "Margaret".

Rhosydd Quarry - Subsequent to a major fall in August/September '98 it appears that a further, albeit smaller fall, has taken place. The area around is heavily cracked and very obviously dangerous with further falls expected. The falls are close to Floor 2 adit.

Vivian Quarry - The V2 incline is now in operation and is part of the attractions offered at Gilfach Ddu, the Welsh Slate Museum. The old quarrymen's cottages of Fron Haul

dismantled from Tan y Grisau and re-erected in the back yard are now open to the public. Three of the cottages have been furnished from a different era, the fourth is being maintained as a "hands on" living history house for educational use. They have made a welcome addition to the site.

Cook & Ddol Quarry - The two storey building on the lower level to the mill (thought to be a barracks) has seen a partial collapse. There also appears (and not noted on my previous visits) to be a waliau built within the southern room.

Dorothea Quarry - The diving centre at the quarry pit workings has closed after a short time in operation. It also appears that work on the first phase of restoration of the beam engine at the site is close to fruition. The first operation will be to remove asbestos from the cylinders.

Alexandra Quarry - The stone circle that was sited on the infilled No 1 pit and built for a film scene appears to have been removed.

Glynrhonwy Upper Quarry - Whilst visiting recently (6.9.1999) it was noticed that a quite substantial fall of rock had taken place from the north face. The fall into the pit working is close to the old wooden bridge for those who know the site.

John Knight

Hon Secretary & Editor

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CUMBRIA AMENITY TRUST MINING HISTORY SOCIETY

Committee Meeting held on the Monday 10th July 2000 at the BMSC Hut, Coniston.

Agenda.

- | | | | |
|----|-----------------------------|----|--|
| 1 | Apologies for absence | 2 | Minutes of the last meeting |
| 3 | Matters arising | 4 | Secretary's Report |
| 5 | Treasurer's Report | 6 | Membership Secretary's Report |
| 7 | Meets Secretary's Report | 8 | Hudgillburn Mine |
| 9 | Coniston Coppermines Site | 10 | Video Film Project |
| 11 | 'Lakelands Mining Heritage' | 12 | Publications |
| 13 | CAT's 21st Birthday | 14 | Date and venue of next committee meeting |
| 15 | Any other business | | |

Present S. Barker (SB), I. Matheson (IM), M. Simpson (MS), P. Fleming (PF), M. Mitchell (MM), M. Scott (MSc) & A. Wilson (AW).
7 members in total.

The meeting commenced at 7.30 p.m. In the absence of D. Bridge, P. Fleming took the Chair.

1 Apologies for absence

Apologies were received from D. Bridge (DB).

2 Minutes of the last meeting

The minutes of the committee meeting held on Monday 17th May had been previously circulated to members. Amendments to item 10 had been requested by DB: a) Culture Secretary to replace Secretary of State. b) The words 'this year only' to be added after the word Coniston (on the 4th row).

After the amendments were completed it was PROPOSED by PF and SECONDED by MM that the minutes be signed by the chairman as a true and correct record of the proceedings. This was carried unanimously.

3 Matters arising -none

4 Secretary's Report

The secretary had received:

- 1) NAMHO newsletter.
- 2) Speleoscene.
- 3) MPP Step 3 Report on the 'The Iron Mine Industry' this was to be passed to P. Sandbach for comment. Peter's and Anton Thomas's efforts had been acknowledged by Eric Instone, the reports author.
- 4) The Charity Commission's News. Their financial year, from next year will commence on the 1st January. All Charities with an income of over £10,000 year have to fill in an annual return.
- 5) Details of a world-wide mining and geology congress to be held in Linares, Spain on the 20/22 October, this year.

5 Treasurer's Report

MS presented a balance sheet for the period to the 10th July, which was circulated to the committee. The current bank balance stood at £7954.89 (this incl. grant money). The re-printing of the new and improved 'Slate from Honister' had cost £2393.39 for 1,000 copies, the retail price of this book would be £7.95 (trade price £5.40).

6 Membership Secretary's Report

IM reported that there the membership stood at 105. He would try and produce a new membership list to go out with the next newsletter.

7 Meets Secretary's Report

The next meets list had been sent out with the last newsletter. The Wednesday night meets to be advertised in every newsletter.

The post of Meets Secretary would now be taken over by Jon Knowles.

8 Hudgillburn Mine

SB reported the 11th July meet had been well attended, most of the work done was on the surface. The rest of the track had been taken up, which should improve the drainage at the portal. An exploratory trench was dug in the mineshop to a depth of 82cm but no floor was found, so we thought that a flag floor had probably been removed.

Jon Knowles and John Brown explored a sump on the East Waggon Level, a level was found 8ft from the bottom, it went approx. 45 yds to a small collapsed working. The completion of the work was celebrated with a barbeque and very good it tasted (a pleasant change from soggy sandwiches). Many thanks to all who attended and helped with the barbecue

9 Coniston Coppermines

PF & DB had attend the official re-opening of the John Ruskin Museum (JRM), it was opened by the Culture Secretary Chris Smith, he also presented them with the £5000 cheque awarded to the Society to publish 'Lakelands Mining Heritage'. There was still work to be done on the Paddy End Survey, help was needed to carry the gear.

PF thought we should survey from Middle Level down to Grey Crag Level, this would complete the survey and also tell us the extent of the collapse on the Paddy End through trip. It was hoped that we would be able to clear the blockage.

MSc had noted the increasing depth of the surface collapse near Levers Water, it was suggested we should survey the area and observe for further changes. The LDNPA are to fence the area. The work of draining Levers Water Mine entrance had been started.

PF had contacted J. Hodgson regarding the fund raising for the Coniston archaeological investigations, the application was 75% done and would be completed within the next 2 years.

10 Video film project

The next stage will be for each member involved to go out with Jim Roskell to do the filming required for their section.

11 Lakelands Mining Heritage (LMH)

ADC had contact IM regarding the progress of LMH, the corrections to the text were nearly all done and he had contacted R. Calvin over the 'Coal' chapter. He had some slight specification changes to suggest but thought they would be best discussed at the next book meeting. This was arranged for the next Saturday at Lanehead.

The book cover was discussed and MS asked members to bring any good photographs of the Coppermines Valley to the Meeting.

MM had now collected most of the photographs for the book, he was waiting for A. Cameron to confirm the exact number of pages required.

12 Publications

ADC had distributed copies of the new 'Slate from Honister' to members to sell.

A 2nd print run (50 copies) of the Coniston CD had been done by Digital Data Ltd, to supply outside mining museums and societies.

- Cost of production = £3.64 per CD (incl. VAT+ delivery charge)
- Trade price £8.00
- Retail price £12.00 (£13 with P&P)

It would prove cheaper if a further print run was for 300, and more so for a 1000 copies.

SB had sent out 100 flier to NAMHO groups and orders had started to come in.

IM would take over publishing the CATMHS newsletter, he would experiment doing the printing himself and would need material from members ASAP.

13 CAT's 21st Birthday Celebration

SB had received only 23 applications for places on the Rydal Hall weekend. It was now essential that members sent their deposits, if not the society would loose the £450.00 deposit.

The timing of the programme was discussed, it was decided the AGM should be held on the Saturday.

It was decided, if members would not commit themselves, places would have to be offered to other NAMHO groups.

14 Date and venue of next Committee Meeting

This would be held on the 18th September 2000 at the BMSC Hut at Coniston.

15 Any other business

16.1 PF reported he had been contacted by member G. Cram who was working with the Northampton General Hospital on a project to assess radon levels in disused mines and to consider the radiation risks to visitors to the mines. Dr Tony Denman (one of the project leaders) has asked our help in siting the detectors in the mines and recording their position etc.

6/7 mines have been suggest in the Lakeditrict and North Pennines. All agreed we should take part. Action DB.

There being no further business the meeting closed at 10.15pm.

SB 19/07/00

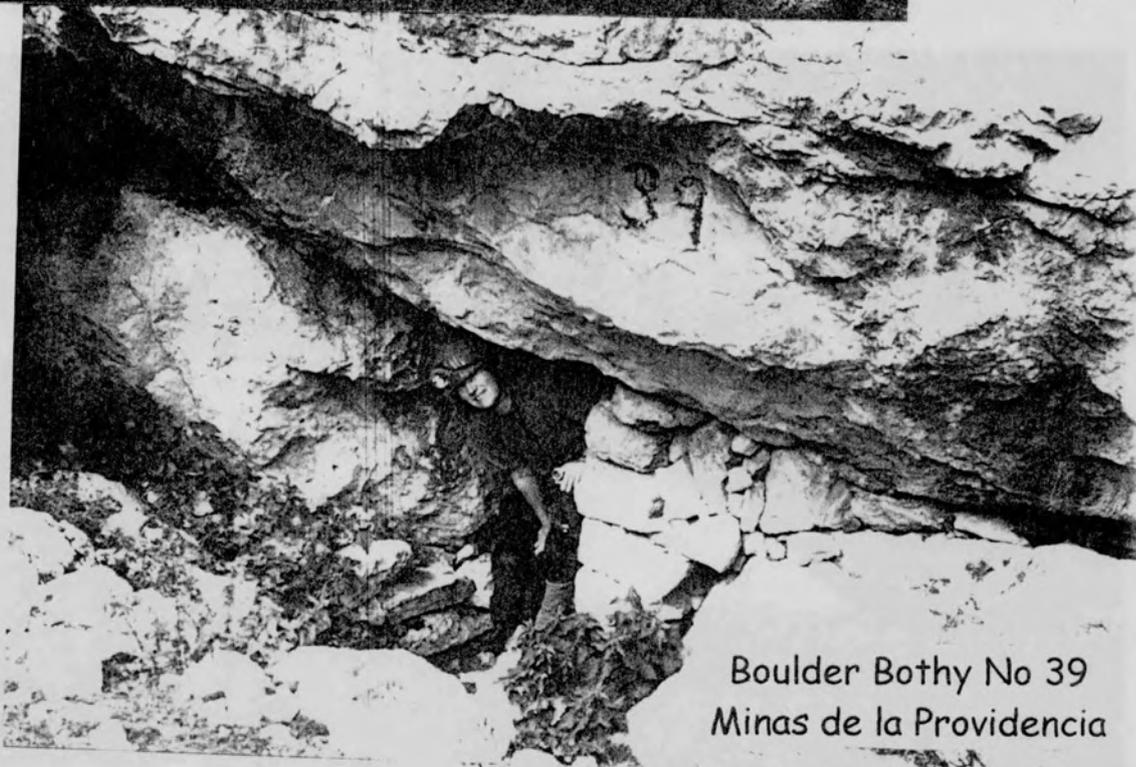
Chairman



The Refugio Andarra, at the Minas de la Providencia,
Picos de Europa



Casa Roccio, Frama.



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Mark Simpson	Angela Wilson	

Honorary Members: Sheila Barker, Peter Fleming,
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