



PRESIDENTS JOTTINGS

How time flies. It does not seem long since the AGM, now we are thinking about the **Autumn meeting!** The booking form for this event is now at the back of this newsletter along with details of when and where. So few of you posted them back to us and preferred to either phone 01282 614615 (before 9pm please) or e-mail mansemins@btpopenworld.com that I decided a printed separate form only added to our Societies running costs. Please let us know by October 13th if you are coming, remembering to inform me of any dietary requirements. Our excellent caterer needs time to buy in and prepare our buffet (free to those who have booked in) hence our cut –off date.

For those who have not been to a meeting at the Festival Hall at Gisburn before, it is quite easy to find, being at NGR SD8248, near to the junction of the A682 Burnley/Long Preston on the Burnley side. There is a free car park by a children's playground from where there will be signs directing you to the Hall.

Our meeting will commence at 11.30am for **book sales** if you are interested in a bargain. New for this meeting will be the facility to bring any of your spare books of mining interest that you might want to sell. All we ask is for a 10% donation to our Society at the end. Please note this does not include our publications as I will have some available. Any member bringing books is respon-

sible for collecting any monies, marking a price in pencil lightly inside and passing on the donation to me before the end of the meeting. It would help me if you let me know if you are bringing any books in advance so we can make sure we have enough table space. Obviously we still hope you might "will" us your NMRS publications and other mining books but this new move will benefit both the seller, buyer and NMRS.

Lunch will be at 12.00 followed by our NMRS business meeting. After that it is up to you, our members, to offer **presentations**. It is always interesting to hear what our members have been up to. Please let me know, in advance, if you are willing to give a presentation and remember to keep it to no more than 15 minutes. A computer and projector will be available for use.

Back in April NMRS took part in the **Yorkshire Geological Society** "Yorkshire Rocks and Mineral day for all the Family" held at the National Coal Mining Museum at Caphouse Colliery, Wakefield, and part of YGS 175th Anniversary Celebration. There we had a display of our publications and our excellent display boards advertising our Society and what we do. A great deal of interest was aroused, quite a few books sold, and a welcome opportunity to meet existing members who came along and a chance to welcome at least one new member. The

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Would you please note that the deadline for inclusion with the November 2013 Newsletter is the 25th October 2013.

Submissions are welcome that would be of interest to members of the NMRS. These can be forwarded to me as text/disc by post or you can email or telephone. If you require anything returning please ask. Photographs, plans and drawings are acceptable as long as they can be reproduced in black and white.

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morning consisted of family activities, short talks, free underground tours of Caphouse Colliery. The afternoon session was called "Geology & Mineral Resources of Yorkshire – revisited" comprising lectures on the main extractive industries in the North of England such as coal, metal mining, potash, aggregates and quarrying. A keynote address was given by one of our members, John Goodchild. More events for this special year can be found at www.yorksgeolsoc.org.uk

At the time of writing this, a joint project by **NMRS & Swaledale & Arkengarthdale Archaeology Group** has been planned starting 24th July. Further details can be found in this Newsletter and on our website.

We are also excited about our **interactive mapping project**. A press release was issued on 16th July and again further details can be found elsewhere in our Newsletter. Thanks, especially to Mike Gill for all his hard work, Malcolm Street for his web input and to those of you have contributed to this ongoing project or intend to offer information in the future. Since the last Newsletter we are pleased to welcome the following **new members** and hope they have a long and enjoyable relationship with us.

Ian Bartram	- Leicester
Andy & Judy Booth	- Grassington
Anthony Felski	- Wakefield
Roger Lynch	- Huddersfield
Hannah Powell	- London
Michael Squirrel	- Ilkley
Mark Walters	- Llanymynech

We regret to announce the **death** of John Harrison and also of Jeremy Wilkinson from Wilmslow. Jeremy, a long time member died on May 31st. He was a solicitor with a special interest in North Wales having researched bibliographical references to over 5200 mines and other site names in the pre 1974 north Wales counties of Angelsey, Caernarvonshire, Denbighshire, Flintshire and Merioneth. Details of these can be found on the website <http://www.davel.f2s.com/hendrecoed/Wilkinson/> Jeremy had kindly passed on to Dave Linton his files of company details abstracted from the Public Record Office and his card files of mines. If you are looking for information not on the website Dave can be contacted on dave.linton@hendrecoed.org.uk

Barbara Sutcliffe

SOCIETY NEWS

Library News

Thank you to Tony Oldham for boxes of journals including "Coal Age" and "Mining Magazine" and thanks also to Peter Claughton for transporting them. Thank you to Derek King for the donation of many "classics" including Norman Emery's "The Coalminers of Durham", Susan Harley's "In the Bewick Vein", Sam Murrphy's "Grey Gold", Willies and Parker's "Peak Distric Mining and Quarrying" and Stephen Woods "Dartmoor Stone" Derek has also given some duplicates which he is happy for Barbara to sell to members. As well as back copies of British Mining, these include Agricola's "De Re Metallica", Hunt's "North Pennines", Robey and

Porter's "Ecotn Hill", Sopwith's "Alston Moor" and some of Raistrick's books. Please contact Barbara Sutcliffe at mansemins@btopenworld.com about books for sale or if you require a list, remembering orders can be taken to the Autumn meeting to save on postage.

Sallie Bassham

From the Editor

Thanks to David Taylor and Roy Meldrum for answering my question 'And Finally' in the last newsletter. Apparently its a Gate End Switchbox from the 1960s, and I'll make sure it's not scrapped. More detail in next newsletter if there's room.

Mining Project for the Society website.

The 2011 Autumn Meeting agreed to the proposal that a section devoted to 'Mining in the British Isles' be added to the Society website. It was expected to take 18 months before the necessary mapping, text and photographs were ready and, more or less on time, the site went live in June. It is a continuing work, however, and if you have suitable photographs or wish to write a thumbnail for your favourite mine or area, please contact Malcolm.

The site is intended to be used by casual enquirers and mining enthusiasts as a guide to what was

mined, where and when. For convenience, mines have been split by type: Non-ferrous, Iron, Coal, Onshore gas and oil, Quarries, Other mines. Each sections begins with an interactive map showing the principal mining areas, from which one can chose an area of interest. This leads to an interactive regional map which shows the principal mines. Clicking on a mine opens a new window with a thumbnail history of that mine, backed up with photographs and details of sources, relevant websites etc. Other maps showing smelt mills etc. will be added for some areas.

The website is a credit to the hard work of our Webmaster, Malcolm Street, while most of the text and mapping is from Mike Gill, with contributions from Simon Chapman and Ron Callender.

To find the 'Mining in the British Isles' section of the main website (<http://www.nmrs.org.uk>) click on 'Information' (penultimate entry on the option bar) and select 'Mines Information'. Or go to - <http://www.nmrs.org.uk/mines/>

If you have visited these web pages before, it is likely that you will not see the changes that have been made as the web browser (IE, Firefox, Chrome etc) will have stored (cached) the old pages to make browsing faster. Your browser should automatically refresh this cache sometime in the future, but you can force this to happen when you are on the web page - simply press the F5 key and the page will reload.

Mine Mapping Project

The Society is pleased to announce this major advance in the research tools available on its website. Mike Gill has prepared extensive databases giving the locations and historical details of coal and metaliferous mines in the British Isles. Starting with coal, these are now being made available on the website by superimposing the data on Google Earth mapping. Some 23,000 mines are covered, and basic information such as the opening and closing dates, the mineral worked, and the ownership history (all where known) is given.

To find the 'Collieries of the British Isles' go to the 'Mining in the British Isles' section of the main website (<http://www.nmrs.org.uk>) click on 'Information' (penultimate entry on the option bar) and select 'Mines Information'. Click on Coal, and at the foot of the map choose the 'Online Mapping' option. Or go to - <http://www.nmrs.org.uk/mines/coal/maps/>

Digitisation of British Mining

The society has before it a proposal that the out-of-print material in its back catalogue should be digitised and made available in e-book form. More recent material would be added as it too sold out.

For twenty years now British Mining has been produced electronically, and for more than ten years what has been produced and sent to the printer is essentially an e-book. Many of the older editions, however, were in A4 format and the plates for them were set up manually. To maintain our high standards, therefore, the original text will be scanned using OCR, with diagrams and plates digitised separately.

The volumes will then be set up again, using A5 format which is better suited to tablets and other mobile computers.

No policy has been agreed, but the proposal is that Memoirs articles are made individually available for downloading – free of charge. Monographs, however, would be subject to a charge.

This will:-

Give researchers ready access to the largest body of research into British, as opposed to regional, mining history.

Supplement income from sales of current publications

Attract new members

The text will be fully searchable.

Encourage new research.

Stimulate a broader level of research into ownership networks across mining areas

New editions of British Mining will still be printed for the foreseeable future. As well as its own rights in British Mining, the Society has always protected the copyright of its authors and will make every effort to contact them in order to seek their permission to reproduce their material. Where contact cannot be made, however, it is proposed that we follow the lead set by kindred organisations and put papers on the website, but offer to take them down immediately if the author objects.

If any authors have a fundamental objection to any or all of their material being reissued, please contact Mike Gill (oldgang@tiscali.co.uk or 01535 635388).

VISIT REPORTS

Cononish 25 - 28 April 2013

In appreciation of the Society's grant, Nyree Hill of Leicester University invited NMRS members to join her on a field trip to Cononish gold mine near Tyndrum. Aderyn and I met her in Crianlarich on the Thursday evening and were soon joined by Rod and Chris from Cumbria and later by her students. Nyree then gave a short presentation on the geology of the area and outlined the programme for the next two days.

Friday dawned sunny although with fresh snow on the hills. Rod drove up to the mine whilst Aderyn and I were fortunate to get a lift with Chris Sangster, Scotgold's CEO.



Photo:- Adit portal

At the mine we were shown core samples, various machinery and given time to search the spoil heaps. Rails from the 1980's were being removed from the adit in preparation for mechanisation. Chris then took us down the level following the main vein. He explained how production had been delayed due to lack of funding and that although the operation was small it was hoped to produce a high grade of gold. Some eight people were employed at the mine of which six were local. Before leaving for an afternoon's panning we were shown some genuine Cononish gold and watched peregrines nesting on the crag above.



Photo:- Core cutting machine

On Saturday morning we explored the outcrops on Sron Garbh where cores have indicated the presence of platinum. After much scrambling and hammering we watched a steam train puffing its way along the West Highland Line and noticed purple saxifrage in flower. Following refreshments in Tyndrum we visited the Tyndrum lead mines. These are of ancient origin and have also yielded very small amounts of silver. On the journey home I visited Hillhouse limestone mine near Beecraigs Country Park south of Edinburgh. This is a small mine which can be explored in an hour. Most notable are the huge pillars left standing to support the roof.

Our thanks to Nyree and Scotgold for a most enjoyable and informative three days and to Ron Callender who made the initial arrangements.

Keith Turner

NMRS meet at Moulds Old Level, Arkengarthdale, 11th May 2013

On a cold, drizzling morning our party of nine assembled at the entrance to Moulds Old level. At least we weren't going to waste a day of warmth and sunshine by going underground. Three of the nine (including the writer of these notes) were novices without any previous experience of mine exploration. Although lacking specialised kit, other than Wellington boots, helmets and helmet lights, we were given a friendly welcome and made to feel very much part of the group. Before entering the mine, Paul Dollery explained safety procedures and made it clear that anyone wishing to turn back at any stage would be helped to do so without any sense of embarrassment or defeat. Then we set off with Mike Richards & Chas Roberts acting as 'sheepdogs' in the rear.

Once inside the mine it was necessary to wade shin-deep through water of foot-numbing coldness. After only a short period of adjustment, however, feeling returned to our feet and, comfort restored, there was much to absorb our interest and divert attention from potential dangers and discomforts.

Moulds Old Level was originally driven about 1800 but in the 1920s the mine was re-opened and worked for chert. Evidence of this is apparent in the form of large blocks of chert lying on the floor of a side chamber. Some blocks had evidently been levered from the roof which is now supported (just!) by old and half-rotten timber props and wedges.

In the bare rock walls of the main level, close to the entrance, shot holes, apparently drilled by a power tool rather than a hand drill, may belong to this later phase of mining. Elsewhere the high quality of the arched masonry lining of the level is very striking and evidently the work of highly skilled masons. The shaped sandstone blocks carefully fitted together to form a slightly pointed arch, just high enough for a man to stand upright in the centre if allowance is made for the layer of silt and debris that has accumulated since the mine stopped working.

Paul explained how the masonry lining is restricted to areas close to the entrance where the rock overhead is thin or has been fractured by frost and weathering, and to other areas of 'incompetent' rock (such as shale) which are liable to collapse, although being softer are relatively quick, and therefore cheap to drive through. Where there is limestone, the rock is harder and no lining is needed, and the only reinforcement here is provided by occasional timber props or wedges, or lengths of old iron rail held in place by iron spikes driven into crevices in the rock.

Underfoot, wooden sleepers, now half buried in the floor, supported the iron rails on which tubs loaded with ore or waste rock once ran. As Paul explained, the early rails, being made of cast rather than wrought iron, were brittle and to compensate for the downward pressure exerted by the heavy tubs were of 'fish-belly' design, with a deeper profile in the middle than at the ends.

Beyond the chert workings, debris from a number of collapses partially obstructed progress. In some cases this could be negotiated only by crawling flat on one's belly in a manner first learned as a CCF cadet almost half a century ago. In one section a 'false floor', bridged over with timber and a coating of mud and rubble, has partially collapsed revealing a drop of three or four metres into a cavity below. Advance warning of the danger is provided by red and white plastic tape stretched across the floor at either end. Elsewhere worrying bulges in the masonry lining, or piles of loose rubble spilling out from openings in the roof and walls, similarly serve as reminders that a mine is a potentially dangerous and always dynamic environment, the more so once regular maintenance has ceased. What was accessible even in the recent past may not be so now or in the near future. While it is said that it was once possible to walk underground from the Sir Francis Level in Gunnerside Gill all the way through to Moulds – a distance of not less than 6 kms – it is certainly not possible to do so now.

Two or three hundred metres into the mine the level splits to form two divergent passages, each having several other branches. Here only experience can tell which routes are safe or can be explored for the greatest distance. I was reminded of an excursion into the catacombs in Rome made many years ago where I had the same anxiety about how, in an emergency, one might find one's way out without experienced help.

In the area we explored, evidence of mineralisation and of the working of ore deposits was very limited. Where veins had been stoped out the resulting voids disappear into darkness overhead or underfoot. Even with the benefit of modern helmet lights the character of the different minerals is hard to determine, especially to the untrained eye. All the more reason, therefore, to admire the expertise of the miners who, lacking any formal training in geology and with only the benefit of candlelight, were able to distinguish the different minerals by colour, touch and apparently even taste.

Over the course of two and half hours underground there was much well-informed comment and discussion on mining and related matters. The names of Dunham, Raistrick, Gill and Tyson were frequently invoked, and personal anecdotes and experiences in

other mines freely shared and discussed. By good fortune the party included several members with professional experience in the fields of engineering and chemistry which added further to the interest and enjoyment of the trip.

Mud-covered and wet we emerged into the open air after a uniquely memorable experience. Thanks are due to all involved for their good company and the efforts of the organisers which made it possible.

First timer

Gunnerside Gill, 1st June 2013

Blessed by fine weather, a dozen or so members of the NMRSO (and at least 1 guest – me) gathered in Swaledale for a walk led by Sallie Bassham through the mining remnants of Gunnerside Gill. Paul Dollery had opted for an earlier start and so he, I and Richard Platt headed leisurely up the eastern side of the gill, ahead of the others who we would meet again at Sir Francis Level.



Photo:- Scar Level

Fortunately, Paul's reasonably clued up about the mining history of the area (he may also have had a copy of Sallie's itinerary!), so our first pause was Scar Level. At this point I'd like to point out I'm no mining historian and would therefore like to swipe Sallie's excellent disclaimer: some of the information is from "Swaledale: its Mines and Smelt Mills" by Mike Gill. If any of the details contradict Mike's book, then Mike is correct. According to Mike, the enclosed land in which the level can be found was leased by the Old Gang Company (no date is given) and driven on a productive east/west vein by Pratt and Partners.

From Scar Level to Sir Francis, the valley offers few clues to the once thriving industry. Much of the valley immediately above Gunnerside has been "managed" by Yorkshire Dales National Park; the bracken cut back and the rabbit population culled, though you might struggle to believe this. Among others, Beech, Hawthorn, pine and Oak trees provide shelter and shade, and this heavily wooded area of valley is a

haven for voles and shrews (quieter walkers will often find themselves' sharing the path with these busy little creatures).

The mining in Gunnerside Gill dates to at least the 15th century but exactly when it began is unknown. In 1670, Lord Wharton's partners working the Lownathwaite Mines were reluctant to invest in further exploration despite promising signs. The "Old Man" had been there, raising the spectre that for all their expense and effort, they'd simply end up reworking ground for little return.

Lord Wharton's response to this is unrecorded (so far as I'm aware) however he must have made his point because mining continued and new trials began in many areas. By the mid 1800's, the majority of the mines were struggling and plans were made for a trail in the Third and Fourth Limestones in the area where the Fryerfold and Old Rake Veins cross Gunnerside Gill. In June 1864, around four and a half thousand feet south of the crossing, work began on Sir Francis Level; the spot having been selected to allow the miners to drive at minimal cost in the shales between the Limestones.



Photo:- Sir Francis bouse teams

To undertake this considerable venture, the Blakethwaite and Old Gang mining companies combined and the level was driven on the boundary between the two. It was expected to take around 15 years to reach the vein but a year and a half later the Blakethwaite Company gave up. Initial progress had been good with the level advancing a fathom a week but the figure tumbled as harder ground slowed the pace. Reflecting this, the cost of driving rose, reaching £8 5s per fathom by the end of 1866. At some point in between, it's reported to have reached £10.

Sir George Denys championed the use of compressed air drills to speed driving of the level but the Old Gang Company proved reluctant to invest. Sir George bought the new technology in and drove the level himself, paying 1/5th of the cost. The Old Gang Company paid Sir George £8 10s per fathom

and supplied the rest of the equipment needed. Drilling began in January of 1870 but again progress was slow as the level was being driven in hard grit and it wasn't until 1873 that real progress was made when dynamite was introduced. Finally, in 1877, the Fryerfold Vein was cut.

While Paul lazed in the sunshine beside the rebuilt portal of Sir Francis Level, Richard and I poked about the remains, photographing them for the nth time. Incidentally, I'm told it's now possible to reach the hydraulic pumping and winding engines direct from the portal but treat this with caution as I've no firsthand proof. A couple of years ago, when I made a trip with the Craven Pothole Club, it was from the shaft a little further up the valley. Since then, one of the main beams supporting the winding drums and chains has failed and it's only a matter of time before everything comes down.



Photo:- The air receiver at Sir Francis

On the surface, one of the highlights is the air receiver located just above the portal. Perhaps I read too many books as a kid but when I look at its' heavy, riveted construction, I'm reminded of *Jules Verne's 20,000 Leagues Under the Sea*. Somehow it seems suitably fitting.

Led by Captain Bassham, the intrepid explorers of NMRS (doesn't have quite the same ring as Nautilus) appeared on the opposite bank of the river, signalling an end of Paul's dozing and Richard's stalwart photographic endeavours.

Hidden high on the hillside above the trail that climbs from Sir Francis to the Bunten Hush, was the 3rd stop of the official Grand Tour: Barbara Level, not to be confused with Dolly Level on the other side of the gill which was also called Barbara Level, for a spell at least, and which worked the western exposure of the Barbara/Barbary vein. Abandoning the trail, the group set off up the steep valley side at varying rates of ascent, some choosing to huff-puff straight up without stopping, while others elected to admire the scenery from many a fine vantage point.

Barbara Level was driven in a bed of grit beneath the Main Limestone but proved unsuccessful. By 1824 it had been abandoned and stripped of its rails. Sometime around 1857, it was reopened and work began driving from the old crosscut. By November 1862, the forehead had reached a point some 2,400 feet south-east of the level mouth and 30 or so men and boys were reported as working “over the ‘Old Men’s places.’” 120 feet shy of the forehead, a rise connected Barbara Level to Kinning Level, 180 feet above. (Kinning Level, begun around 1840, followed the vein of the same name, north-west in the Main Limestone, until its junction with the Barbara Vein – reached in 1855).



Photo:- Barbara Level from Rutter's Hand Level
Behind Barbara Level, at the head of a short cutting is Rutter's Hand Level, named after Ralph Rutter who began driving in 1890 with two partners, to try the vein in the Main Chert. In early 1891, they cut the vein and followed it for around 50 feet before intercepting the workings of the ‘Old Man.’ In 1894, two men began sinking on the Main Limestone from the level. The trial proved unsuccessful and was abandoned 1896.

Apart from the dressing floor, tips and run down bouse teams, little remains of the old level. The same is true of Rutter's Hand Level, though that didn't preclude a few from venturing to investigate. Those that didn't poked about the tips and dressing floor looking for..., I don't know. When I do this, I end up with something described by others as “crapite.”

Re-gathered, the group headed for the Bunton and Gorton hushes, a brutally impressive place when viewed for the first time, or the second, and maybe the third and fourth. The key to this area is the relative proximity of a number of veins to one another; the Fryerfold, Bunten, Gorton, Old Rake and Watersikes Veins. While, from what I've read, the hushing likely pre-dates any of the levels, the veins were also exploited by the “Old Man” from a number of shafts, some reportedly reaching 390 feet in depth, putting them in the Main Chert and Limestone.

Around the 1800s, levels began to be driven on the veins however their usefulness appears to have been relatively short lived because they were reputedly long abandoned by 1824, by which time Bunting Level (also dating from early 1800) was into rich ore producing ground, having originally followed the Bunting Strings east to their convergence with Old Rake. Two crosscuts were driven within the mine; the north crosscut which worked the Fryerfold Vein, and the south crosscut which worked the Watersikes Vein. Bunting Level also connected to the Old Gang Surrender Mines via Hard Level, giving rise to stories of “dressed ore being taken through the hill to be smelted at Surrender.” Unfortunately, when the connection was made in 1828, Hard Level was found to be 4 fathoms below and hoppers had to be built into the rise.

120 feet below Bunting Level, just above the stream, Sir George Level, begun around 1828, was driven near the base of the 27 Fathom Grit. After 670 feet, it cut the now combined Old Rake/Fryerfold Vein but proved poor.

The remains of Bunting Level are impressive to this day, with its smithy built on the tips before they tumble toward the stream below, the long and often photographed line of bouse teams, and the wheel pit that powered the grinding mill. The level itself appears in invitingly good condition (from the outside) and a few members elected to unpack lamps and head in while the rest found a handy stone or patch of grass to admire the deep valley and its industrial remains. Various rested, fortified and explored out, temporarily at least, the gang headed for the Blakethwaite Smelt Mill, passing Priscilla Level and the rescued mine tub on the other side of the bank. Built in 1820, Blakethwaite mill began working in 1821 and replaced the Lownathwaite mill built at Botshaw Gill in 1769 by Lord Pomfret. The Blakethwaite mill had the advantage of a flue running up the hillside whereas the old mill simply had a chimney over its ore hearth. The flue was extended in 1864 and the mill worked until 1878 when the AD Lead Mining Company closed it (it was inefficient and in bad repair) and moved the smelt operation to Surrender.

Work on Priscilla Level began in 1821, driven on North Vein by the Thomas Hopper & Co, who'd taken the lease on the Lownathwaite mines in 1812. The market slumped in 1829 and production seems to have followed suit. Hopper & Co let the lease slip 1832 and it wasn't until 1836 the mines were leased to the Stands Company who continued working Priscilla, driving west on the North Vein to the Great Break Vein. In 1861, they too gave up and Sir George Denys took over though it wasn't until 1873, under the AD Lead Mining Company Ltd, that work really focused on Priscilla. A year later, the level was believed to have reached “the Coal Shaft and beyond.” By 1876, the level had reached a point 600 feet beyond the

Great Break and miners had turned north, driving on the Blind Gill Vein.



Photo:- Priscilla Level

The success of Priscilla Level really began with the arrival of Sir Francis Level in around 1877, and for that, I refer you to Mike Gill's book. It's interesting to note that as Priscilla entered perhaps its most productive time (1877 onwards), the Blakethwaite smelt mill closed (1878). Close to the rebuilt portal of Priscilla, the remains of a cast iron pipe can be seen. This carried water from an old hush dam (which one is disputed; Raistrick and Mike Gill say the Sun Hush dam but Martin Roe says otherwise in Sir Francis Level: Driven by Water, PDMHS Vol 15, Nos 4 & 5, 2004) to the Sir Francis pump some 240 feet below.

Sometime around 1816, Hopper & Co also began driving Woodward's Level west from the Water Sykes and Sun Hushes to their junction with North Vein. The entrance, buried for many years, has since been exposed by storms and provides an opportunity for further exploration.



Photo:- Woodward's Level

The last of the major mines to be visited was Dolly Level, dating from around 1806 and driven from Barbara Hush to prove the Barbara and Spar veins in the Main Limestone. When Hopper & Co leased all the mines on the western side of Gunnerside Gill, they continued the working on the level, now known as Barbara Level. By October 1816, the mine had reached 1,600 feet in length and soon after turned west on the Great Break. When Hopper and Co gave up their lease (1832), the mineral lords

kept the majority of the mines in good repair and parts of Dolly/Barbara Level were kept working. The Strands Company took over in 1836 and presumably worked Dolly Level until they gave up the lease in 1861. From this point, Sir George Denys took over and kept the mines in good order.

In 1873, the AD Lead Mining Company managed by Sir George Denys, leased all the ground west of Gunnerside Gill and began work on a number of levels as new ground was opened up by the arrival of Sir Francis Level. By May 1874, Dolly Level was 600 feet beyond the Great Break, as was Priscilla Level below it, and it might be at this point work concentrated on Priscilla Level as I can find no further reference to Dolly Level.

Turning south, the group followed the old trail along the side of the hill, back towards Gunnerside. Some were perhaps eager to get home, some keen for a sandwich; others may have been looking forward to a cup of tea but personally I was looking forward to a pint. Sadly, the King's Head has closed down.

All in all, a cracking day out and thanks to Sallie Bassham for leading the meet.

All photographs were taken by Richard Platt

Chas Roberts

Rogerley Mine Meet **Saturday 6th July 2013**

For the third year running 11 members assembled in the car park at the Durham Dales Visitor Centre prior to our visit to Rogerley Mine. It was pleasing to see some regulars as well as recently joined members.

The scene as we approached the quarry in convoy was completely different to our visit last year. Then we had passed a large lake due to a very wet spring. Now that had disappeared along with the moorhens and ducks. We were very fortunate to enjoy a warm sunny day.



As usual Cal Graeber, part of the UK Mining Venture team, enthusiastically welcomed us and we were split into groups of four. Each group was given a detailed guided tour of the mine by Cal while the others were free to wander the quarry and collect on the dumps.

Hammers were out and specimens, large and small carried to the parked cars!



I was surprised at how much progress had been made in the mine since our last visit. Much more to explore, more timbering, new rails put in place and even plans for a point system being put into the mine. One area had mostly galena in it,

most of which ends up at Kilhope Mining Museum. We were able to see how high pressure water cleans off some of the mud from the beautiful fluorites, courtesy of a demonstration by Cal. Some of the specimens have 2" of mud on them when in situ. One of our very keen members went into every possible opening he could find! We saw numerous seams of good quality fluorite waiting to be retrieved by the small band of enthusiasts who work here. Penny's Pocket still continues to yield some excellent high quality specimens and elsewhere some clay-like white altered fluorite has been found, new to the site.



Once the tours were complete Cal gave some of us a tour of the orchids in the quarry. A few were near the mine but he took us to a meadow with lots of orchids and other wild flowers – a lovely site to see and difficult to come by nowadays with all the use of pesticides. Cal reliably told us one pond we saw would soon be full of “peepers” (small frogs) emerging which would be all over the quarry floor attracting many cranes.

The day was excellent and very informative and once again we are very grateful to Cal for giving up

his time to educate and inform us. For those of you who are interested in what is happening up at Rogerley you can follow them on their “blog” at www.ukminingventures.com



As to what happened to the famous “Weardale Giant” which we were very fortunate to see last year as it first met the light of day, it was sold while being shipped back to California. Its final destination is still unknown, being in the hands of lawyers, acting on behalf of the buyer but it did appear at the Tucson 2013 show as this had been promised before the sale materialized. So we weren't the only ones to see it!

Barbara Sutcliffe

NMRS BOOZE WOOD VISIT 21ST JULY 2013

We met in Langthwaite car park at around 10am, ready for a prompt start at 10-30am. Our farthest afield member leaving home at 4am that morning and driving up from Lincolnshire.

After being “robbed blind” by the outrageous parking charges levied by Richmondshire Council we all changed into our underground gear and headed for the mine. The explorers totalled 11 in number and comprised of NMRS members, York Caving Club Members, and a couple of other underground explorers.

The weather was hot and sunny so the cool entrance was especially inviting. We initially navigated to the stone workings which provided stone for many of the roofs in Reeth long after the demise of lead mining within Booze Wood. Andy and the members of York Caving Club spent some time trying to get into every “nook and cranny” of the stone mine.

We then all proceeded to the farthest extremities of the mine that was still open, very close to the now fallen air shaft bottom. Paul Dollery used his expert knowledge as an industrial chemist and mining historian to explain the finer points of the lead mine.

After members had finished taking photos we all made our way out for a group photo near the entrance.



A couple of the older members departed back to their cars, whilst the remaining explorers continued up Sleigill to the dressing floor where we had our lunch. Andy and the York Caving Club members spotted a hole that they felt they need to explore and ventured in.



It turned out to be part of the water course back to the river from the water wheel we concluded. Three disappeared in completely and eventually reappeared with a variety of old bottles and earthenware. Paul Dollery went on to explained the finer points of the site over the remainder of lunch. After lunch some members departed whilst the majority carried on up the gill to explore any hole they could find.

After briefly looking in Rodger or Scott level as far as the blockage we carried on to Sun Gutter. After



great excitement five members dived in, I say dived in as it was very full of very cold water. Twenty minutes or so later they all reappeared after going to the mines forehead. All were soaked to the skin and very grateful for the hot relentless sun above us.



After this treat we continued up the gill to a very muddy cave or mine and some of the more enthusiastic members explored this. Continuing from here higher up the gill an entrance was discovered, was it a well or was it a new entrance to a fallen in mine. Again a York Caving Club member tried to get in but as it was flooded to the top did not succeed very far.



Again at the top of the gill near the old water wheel pit we discovered another mine entrance, again very, very low and full of water. We spent about an hour trying to get the water level down to gain entrance but unfortunately were eluded from this further treat.



Proceeding from here towards Tanner Rake High members came across another cave that required exploration, and again some members duly did so. From here onto Tanner Rake High, our final mine of the day into which we all ventured.



Back into glorious sunshine we all made our way back to the car park in Langthwaite, a very enjoyable and successful day. A big thank you to all members that joined us.

Mike & Andy Richards

CONONISH DIARY

By all accounts, we are coming to the end of yet another courageous attempt to mine gold at the Cononish prospect, near Tyndrum in Perthshire.

The proprietors continue to express confidence, blaming the falling gold prices for their reticence in starting production. The viability claims are genuine but Scotgold Resources has decided “not to pursue equity financing until market sentiment improves”. Current market conditions are “considered to be severely challenging,” said the company’s executive chairman in a recent statement. His board is “considering a number of strategic alternatives ... [to] deliver Scotland’s first commercial gold mine”.

In June this year, I stopped in Tyndrum to seek out some local opinion and although the consensus view hoped for the best, the sad conclusion was that



mine will never open. As a recreational gold prospector and a native of Scotland, I am disappointed. I took an interest in the lead deposits of Tyndrum in 1976 and accompanied by my wife, washed samples of gold in the Cononish River. At the time, we did not need convincing that there was gold in the hills, but a realistic view suggests the gold is going to stay in the hills.

Ron Callender

BOOK REVIEWS

Delving Ever Deeper: The Ecton Mines through Time

This book funded by English Heritage and the Peak District National Park Authority is a very detailed study of the Ecton Mine workings, a look at the reason for their appearance, and how and when they were constructed. Interspersed throughout the 367 pages are many black & white and colour photos, informative maps and plans. Starting with prehistoric monuments and the agricultural landscape of the area the book goes on to the surface mining remains followed by the underground remains and an attempt to explain the archaeological detail of underground findings.

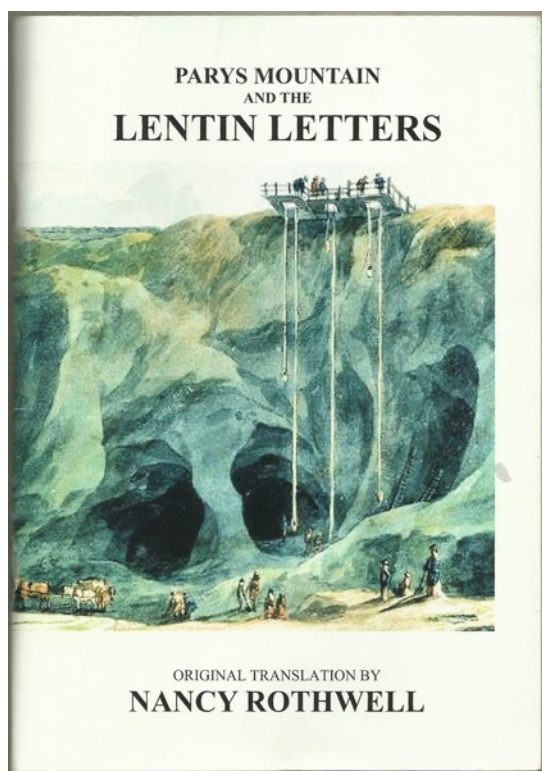
From then on the book is devoted to what has taken place at this important mining site in chronological order ending with the future care and conservation of Ecton due to the nationally important archaeological, geological and ecological resources there. A further section includes some eighteenth and nineteenth century descriptions of the Ecton Mines from some eminent people of the time.

A great deal of effort and planning has gone into this very thick volume. My only disappointment is the flimsy covers though this is probably a result of our expensive postal system! However the binding is very strong and will last.

Further details and an order form can be found on the flyer enclosed with this Newsletter.

Barbara Sutcliffe

Letters on The Island of Anglesey, in particular its Copper Mine and Associated Foundries and Factories by Augustin Gottfried Ludwig Lentin Doctor of Philosophy, Lecturer at Georg Augustus University, Member of the Society of Mining Science, Published Leipzig 1800 by Siegfried Lebrecht Crusius, Original English translation by Nancy Rothwell August 1998 and published in 2007 as Number 1 of a series of publications relating to the industrial and social history of the Isle of Anglesey produced by the Amlwch Industrial Heritage Trust



Dr Augustin Lentin, lecturer at Georg Augustus University in Gottingen, spent 6 years studying the copper industry of north Wales in the late 18th century, the greater part of that time in Anglesey. During his stay, he sent a series of letters to a friend in Germany, relating the history of the island, before going on to describe in some detail, the industrial processes which he claimed, produced copper of a purity then not capable of being produced in his homeland. On his return to Germany, he was persuaded by his friend to have the letters published, and this now extremely rare and important publication, ably translated by Nancy Rothwell, gives us an insight into the workings of what Lentin described as the most productive copper mine existing at that time.

The original copy is in the National Museum of Wales at Cardiff:

Briefe über die Insel Anglesea, vorzüglich über das dasige Kupfer-Bergwerk und die dazu gehörigen Schmelzwerke und Fabriken

TO

Riches of the Earth – Over and under the South Pennine moors.

Stone, coal and clay extraction industries in the South Pennines have left deep scars in the moorland landscape. The Riches of the Earth Project set out to uncover the secrets of these industries through the work of three survey teams based at Baildon, Oxen-

hope and Todmorden. This book introduces you to the work of the survey teams.

Well laid out with colour photos, b/w illustrations, old maps and heritage trail maps there is a wealth of information about the area in this publication edited by Minerva Heritage Ltd and published May 2013. From the geology of the South Pennines and the extraction industries along with the communities that grew up as a result the book goes onto to the individual surveys. Information has been gleaned from actual physical evidence, documentary evidence, oral history from local long time residents, and information from old census records. There is a section on Heritage Trails along with annotated maps as to what to look out for and where. All is easy to read and digest.

Finally there is a list of societies and organisations (including our own) for further information. Produced with support from the Watershed Landscape Project more information about this project can be found at www.watershedlandscape.co.uk.

Priced at £5 and available from the information centre at Hebden Bridge. On request copies can be brought to our Autumn Meeting.

Barbara Sutcliffe

Edwardian Mining in Old Postcards by John Hannavy

Published recently by Halsgrove Publishing this hardback, priced at £9.99 contains 144 pages with many sepia and coloured copies of postcards. A very readable book it deals mainly with coal-mining. Postcards are able to tell the whole story of the mining industry, from the sinking of the shafts through the transport, export and delivery of the coal, up to and including the funerals of those who paid with their lives to produce that coal. Many of the images have never been published before. At the end there are three pages and details of coal-mining museums to visit and another two pages of other mining museums. From a personal point of view I was disappointed that there weren't more non-coal related postcards used, however I did find it very interesting. I have a few copies available and orders can be taken to our October meeting where 10% of the proceeds will go to NMRS

Barbara Sutcliffe

NMRS BALE SITE EXCAVATION

A joint project by NMRS and the Swaledale & Arkengarthdale Archaeology Group will excavate a potential bale site on land at Hagg Farm, Fremington (NGR SE 05939 99137). A geophysics survey will be carried out on 24th July by Rob Vernon of NMRS and excavation is planned for 12-16th Au-

gust. Access for any interested NMRS members will be available on these dates, although it is expected that there will be more to see towards the end of the dig. Finds, if there are any, will be exhibited on Saturday 17th August.

The site is on private land belonging to Hagg Farm, Fremington and the preferred access route is from the Fremington-Marrick road. Car parking is very restricted in this area but there are some areas near the top of the bank from Fremington where cars may be parked. It is hoped that parking will be possible in a field just off the road.

Those interested in visiting the site should contact either Richard Smith or Alan Mills by Wednesday 14th August.

Richard is on 01635-861374 or if out on mobile 07785-508013, alternatively try rsmith6@btinternet.com

Alan is on 01748 884938, mobile 07969 874 339 or email alanfmills@gmail.com

OBITUARY

George William Hall (1924-2013)

George had a lifelong interest in mines and mining. He was a close friend of the late David Bick and together they spent many years exploring remote corners of Wales in pursuit of their mining history interests. He was a well-known figure in the world of British metalliferous mining and mining history, and author of two standard works on the subject *The Metal Mines of Southern Wales* (1971, 2nd ed 1993), and *The Gold Mines of Merioneth* (1975). With his father he formed The Elenith Mining Company in 1946 which was intended to reopen the Esgair Mwyn mine. Unfortunately the plans for the mine never reached fruition. As a consultant, he assisted the financier Mark Weinberg (later Sir Mark) in a project to reopen the Gwynfynnedd Gold Mine in 1981.

George passed away on Sunday 14 July 2013 in Ludlow Community Hospital, following a short illness. He was perhaps the last of the grand old men of British metalliferous mining, particularly in Wales.

Extracted from obituary supplied by Roy Starkey

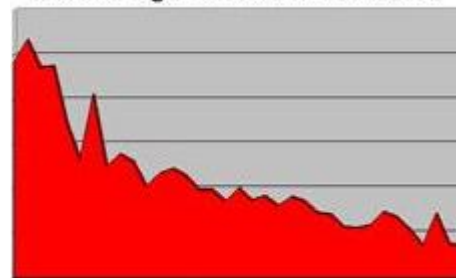
NEWS ITEMS

Lowest Fatality, Injury Rates in US Mining History

The Mine Safety and Health Administration has released the final mining data for 2012, which in-

clude mine inspections, violations, number of mines and miners, and injury and fatality rates. Last year's numbers represent the overall lowest death and injury rates in the history of U.S. mining.

US Mining Fatalities CY 1978-2012



Of the 36 miners who died on the job in 2012, five were contractors, representing the fewest

number of contractor deaths since MSHA began collecting contractor data in 1983. "While more needs to be done to protect the nation's miners, we are moving mine safety in the right direction," said Joseph Main, the assistant secretary of labor who heads MSHA. "The actions undertaken by MSHA and the mining community were the key to the continuing improvements we saw in 2012." He added, "All miners deserve the safest possible working conditions." See

<http://www.msha.gov/Media/PRESS/2013/NR130710.asp>

Hatfield Colliery

<http://www.therailengineer.com/2013/07/03/upheaval/>

Thanks to Mike Gill for pointing out that in this online magazine there is a long illustrated article on the waste tip slip at Hatfield Colliery and subsequent work to clear the site. Too long to include here, it is worth looking up for the fine aerial view showing the affected area. The railway line was re-opened in July, some two months earlier than forecast.

St Aidan's (Opencast) Reserve (Yorkshire Post, 15/07/2013)

The Royal Society for the Protection of Birds' new visitor centre and car park at this nature reserve, at Swillington near Leeds, has been closed after UK Coal, the site's owner, went into administration on July 9th. Access to the site remains open, however. The land was due to handed over to Leeds City Council and then leased to the RSPB, but the latter now has no legal tenure. The site is also home to a Bucyrus Erie 1150, the largest preserved walking dragline in Europe.

Mike Gill

MINING & MINING HISTORY NEWS

May to July 2013 (to 23/07/2013)

Eckington Drift Mine, Derbyshire (25/03/2013)

Derbyshire County Council has approved an application by Caledonian Coal Company Ltd to mine coal for a further ten years. Detailed information is available on the Councils website: planning application CM4/1112/103.

<http://www.derbyshire.gov.uk/environment/planning/default.asp>

<http://www.dcservices.co.uk/news/1179308/ten-year-extension-allowed-eckington-drift-mine/>

Mines Rescue Competition (22/05/2013)

The 2013 All Ireland and the UK Competition took place at Tara Mine on the 17-18 May. Teams from Kilroot, Lisheen and Tara in Ireland and teams from Boulby and Winsford in England competed with Galistar, a team with members from Galmoy, Lisheen and Tara. The team from Tara won most of the competitions and was declared the Best Overall Mine Rescue Team.

<http://www.imqs.ie/NewsEventsViewer/tabid/93/ArticleId/460/Mine-Rescue-Competition-2013.aspx>

Maltby Colliery, South Yorkshire (22/05/2013)

Hargreaves Services PLC have announced that their Maltby Colliery subsidiary had sold its coal mine methane assets to Alkane Energy PLC for up to £7.5M. The closure and restoration of the colliery site should be completed by the middle of 2014.

<http://www.hargreavesservices.co.uk/rns%20feeds.aspx>

Winsford Salt Mine, Cheshire (11/06/2013)

Salt Union Ltd have awarded a contract to SES Contracting Ltd to drive a new tunnel at Winsford Mine. The South Bostock Conveyor Tunnel will be 10m wide and 6.6m high and will enable the extraction of rock salt from a new area 1150m away from existing workings.

In February the Strategic Planning Committee of Cheshire West and Chester Council voted to extend the life of the mine for an extra 26 years, until 2047.

<http://www.ses-holdings.com/ses-holdings-news-at-ses-contracting-ltd.html>

http://www.winsfordguardian.co.uk/news/9528321.Salt_mine_extends_operational_life/

Caithness Stone Industries Ltd, Caithness (13/06/2013)

Caithness Stone Industries Ltd has been placed in administration. Iain Fraser, one of the Administrators said "Caithness Stone Industries had a high profile as one of the leading suppliers and processors of Caithness Stone. The company invested heavily in new technology in order to improve the efficiency of extraction and processing, and suc-

cessfully diversified into new residential markets." The company had then developed "severe and unsustainable cash flow problems". The company was founded in 1999 and worked two quarries. It supplied stone for the Scottish Parliament building.

<http://www.agg-net.com/news/caithness-stone-industries-placed-in-administration?source=search&highlight=caithness>

Apedale Heritage Centre, Staffordshire (16/06/2013)

On the 2nd June the group of volunteers running the centre received a Queens Award for Voluntary Service. Over the weekend 15-16 June the group held its first Mining Gala. An enthusiastic correspondent to the local newspaper wrote "The combination of the country park, heritage centre, steam railway, mine tours, barbeque, hog roast, fun fair, live music and a local brewery made it a perfect day out for adults and children alike. I was expecting to spend an hour there and ended up staying for five."

<https://www.facebook.com/apedale>

Brimstone Museum, Sulphur, Louisiana, USA (17/06/2013)

The Brimstone Museum is trying to raise \$212 000 for a permanent exhibition about the city of Sulphur, including a history of the local mines, and the Frasch process. They had planned to build an extension, but instead took delivery of a 900 square foot building that probably had once been part of the system for transporting sulphur by rail. Once renovated, the old building will be used for offices, toilets and a gift shop. The main museum building was moved two miles to its present site in 1975.

<http://www.americanpress.com/Brimstone-Museum-to-use-historic-building-to-expand-facility>

Outback at Isa, Mount Isa, Queensland, Australia (17/06/2013)

Miners from Mount Isa Copper Operations have spent eight weeks maintaining and making safe the Hard Times Mine, part of the Outback at Isa tourist centre. The Centre attracts 35 000 visitors per year, with 7 500 touring the Hard Times Mine.

<http://www.northweststar.com.au/story/1578774/tourist-mine-refurbishment-complete/?cs=190>

Barnsley Main Colliery, South Yorkshire (17/06/2013)

The headgear and engine house at Barnsley Main Colliery have been given a Grade II listing, reflecting its rarity, degree of completeness and historic interest. It is hoped that access to the site can be improved, and a management plan established. The mine closed in 1991.

<https://www.barnsley.gov.uk/news-and-events/news/2013/june/listed-building-status-for-barnsley-main>

South Crofty Mine, Cornwall (26/06/2013)

Western United Mines have appointed administrators to protect the mine, while they seek new finance. They had an earn-in agreement with Celeste, but payments stopped. Alan Shoesmith, Chief Executive Officer of Western United Mines, said "Celeste's failure to meet its financial responsibilities has been a major blow for us in terms of being able to continue with the exploration and development work that has been yielding such hugely positive results." A number of staff will be made redundant.

<http://www.westernunitedmines.com/news-and-media/614>

Killhope Lead Mining Museum, Co. Durham (29/06/2013)

The Heritage Lottery Fund has awarded the North of England Lead Mining Museum £428 400 to improve visitor facilities and conservation work. Mike Boase, the Manager, said "The museum is an important resource to the people who live in County Durham and the wider North Pennines and this investment will see new opportunities for community involvement, education and training".

<http://www.bbc.co.uk/news/uk-england-23112271>

Wolf Minerals Ltd, Plymouth, Devon (02/07/2013)

Wolf Minerals has awarded an £85M mining services contract to CA Blackwell (Contracts) Ltd. The contract is in two parts. The first phase is mining pre-strip and mine development, which will last 11 months and is expected to start in March 2014. The production phase will last five years.

The company is seeking a permit from the Environment Agency for a mining waste facility. The Agency has previously issued water impoundment, abstraction and discharge licences, and is inviting comments on the waste proposals until 23/08/2013.

<http://www.wolfminerals.com.au/>

<http://www.environment-agency.gov.uk/homeandleisure/waste/147845.aspx>

Glensanda Quarry, Argyllshire (04/07/2013)

Aggregate Industries have awarded CA Blackwell (Contracts) Limited a four year long load and haul contract at their super quarry on the west coast of Scotland. Blackwell will transport about 7Mt of rock to the processing plant each year, using an excavator, two loading shovels and eight 100t dump trucks.

<http://www.blackwellgroup.co.uk/news/2013/07/04/blackwell-awarded-load-and-haul-contract-at-glensanda-quarry-for-aggregate-industries.html>

<http://www.aggregate.com/Documents/Brochures/Aggregate-Industries-Overseas.pdf>

Scottish Surface Mines

In May Hargreaves Services PLC acquired assets from the Liquidators of ATH / Aardvark for £10.4M. The company will provide mining services at the surface mines at Netherton and Duncanzie-mere, aiming to produce 0.7Mt of coal over the year. They also entered into an agreement with Buccleugh Estates to provide mining and restoration services at the former Glenmuckloch Surface Mine.

In July Hargreaves acquired assets from the Liquidators of Scottish Coal for £8.4M. Again, Hargreaves will provide mining services at five former Scottish Coal sites, hoping to produce about 1Mt from the mines over the year, and expecting to invest £12-15M in equipment. The company estimates that the five surface mines have reserves of over 3Mt of coal, and future development sites hold about 12Mt.

Hargreaves have not purchased the mines from the Liquidators but have options to take ownership of the mines in the future, if "outstanding restoration issues are resolved on commercially acceptable terms".

The cost of restoring the former Scottish Coal sites has been estimated at £73M. The Court of Session in Edinburgh has decided that the Liquidators can abandon (declaim) the sites, which is unprecedented in Scottish law. This could leave the tax-payer to fund the restoration work.

<http://www.hargreavesservices.co.uk/rns%20feeds.aspx>

<http://www.bbc.co.uk/news/uk-scotland-23348222>

Tankardstown Mine, County Waterford (09/07/2013)

Copper Coast Geopark Ltd are inviting tenders for the production of a panoramic film and fly-through of surface buildings and underground workings at Tankardstown Mine. The deadline for tenders is 12/08/2013.

[http://irl.eu-](http://irl.eu-supply.com/app/rfq/publicpurchase.asp?PID=67944)

supply.com/app/rfq/publicpurchase.asp?PID=67944

Abercarn Colliery, Monmouthshire (09/07/2013)

In September 1878 there was an explosion and fire at the mine. Attempts were made to rescue the miners but 268 people died in the disaster. Collier William Walters was awarded the Albert Medal for saving life at the mine. That medal was sold at auction recently, for £6900.

<http://www.bbc.co.uk/news/uk-wales-23238642>

**State Library Archives Museum (SLAM),
Juneau, Alaska, USA (11/07/2013)**

A 1914 Baldwin electric locomotive that worked for the Alaska Gastineau Mining Company until 1920 will be the centrepiece of a display on mining at the new State Museum that is being built. After service in Alaska the locomotive worked for about 60 years for the Santa Cruz Portland Cement Company in California. The locomotive was then privately owned until it was donated to the California State Railroad Museum, before being returned to Alaska in 2008.
<http://www.ksct.tv/?page=news&story=286>

New publications

Sean Carney, 2012. The forgotten irish: the history of a South Yorkshire irish mining community. Black Tree Publishing. 99pp. £12 + £1.50 P&P from Bookworm, 1 Spa Lane, Retford, DN22 6EA, 01777 869224. €13.75 from Kennys Bookshop, Galway. The book is about Maltbys irish community, and it is mixture of local, family and community history. In the 1950s almost 2000 people with irish parents lived in the town.

<http://www.worksopguardian.co.uk/news/local-news/maltby-book-tells-tale-of-irish-miners-in-maltby-1-5750576>

<http://www.limerickpost.ie/2013/07/18/limerick-mining-emigrants-remembered/>

Clarke, Pam, 2013. The coal mines of Westhoughton. Westhoughton Local History Group. 120pp. Colour A4-size copies (£10) or black & white A5 copies (£5) available from Mrs Clarke on 01942 814944, e-mail pamslocalhistory@googlemail.com. Coal was mined in this area of Lancashire from the 13th century until the 1930s, with about 600 men and boys losing their lives in the mines.

http://www.theboltonnews.co.uk/news/local/10444650.Westhoughton_s_mining_past_revealed/

Edmonds, Michael, 2013. War underground: memoirs of a Bevin Boy in the South Wales Coal-field. South Wales Record Society.

<http://www.southwalesrecordsociety.co.uk/26.htm>

Events

August 17-25. Heritage Week in the Republic of Ireland. A variety of exhibitions, demonstrations, talks and walks, including visits to sandstone, soapstone and sulphur and copper mines.
<http://www.heritageweek.ie/>

September 12-15. International Conference about Geological and Mining Heritage, Spain.
<http://www.e-faith.org/home/?q=content/geological-and-mining-heritage-driving-force-local-development>

October 18-19. The forgotten State of Industry? Irish Industrial Landscapes in a Global Context. This conference will bring together speakers from across Europe, and provide an opportunity to learn how historic industrial landscapes are conserved, managed and presented. Glendalough, County Wicklow.
<http://glensoflead.eventbrite.ie/>

October 25-27. European Industrial Heritage Weekend, Switzerland. <http://www.e-faith.org/home/>

2014

July 6-13. International Mining History Congress & Australasian Mining History Association Conference, Queensland.
<http://www.ct2014miningcongress.com/programme.html>

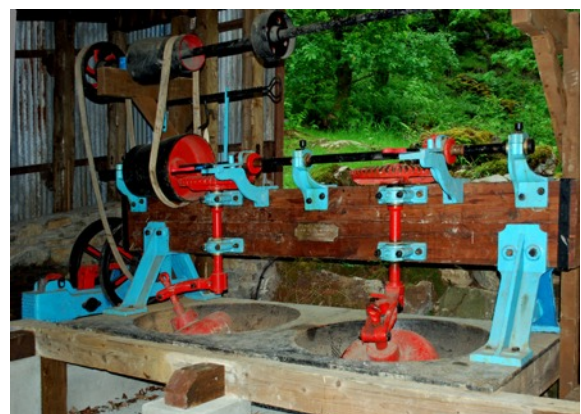
Alastair Lings

THE BRITTEN PANS

For a number of months I have been gently chiding the Rangers at the Forestry Commission's new Coed y Brenin visitor centre about the Britten pans, which once dominated a display on gold in North Wales in the previous centre. On moving to the new centre (about 500 metres northwards in the Coed y Brenin Forest), the pans were put into indefinite storage, and I disapproved.



Nevertheless, the story of the pans is interesting.



On assuming the title of Prince of Wales, Prince Charles toured his Principality and expressed disappointment on seeing remnants of 19th century mining lying abandoned by the Bedd y Coedwr gold mine near the River Mawdach. These were the Britten pans and the apprentices at the Shotton Steelworks accepted a challenge to restore them to working condition. This enterprise was successful and they provided the highlight of any visit to the Forestry Commission's original visitor centre. Then they disappeared for many years !



On my recent visit to the new centre, the duty Ranger took great pleasure in explaining the pans were again on view, in a wooden structure, which had been built just fifty metres away. It did not take long to make my way to this structure and renew my acquaintance with what had become an old friend. The Forestry Commission has triumphed and achieved a successful outcome.



A weather-proofed poster now explains their background and the purpose; that is, “the rock was crushed in the two cast iron mortar and pestles to create a fine

dust which was then mixed with mercury to separate the gold ...” It was a joy to take a new sequence of photographs and this time I also documented two plates incorporated in the machine. The first acknowledged the Moss Foundry of James Mills Ltd in Heywood, Lancashire but the second was more interesting and established that “Blake’s stonebreaker” had been made by H R Marsden of Leeds, who was the patentee.



Now that everyone has the opportunity to view the Britten pans, their purpose and operation is self-evident and any reader passing along the A470 from Dolgellau to Trawsfynydd ought to pause for an examination of this relic of mining history, which had first emerged in April 1854, thanks to the ingenuity of the Reverend Bashley Britten.

Ron Callender

ASSAULT ON CEFN COCH



Photo: The approach to the principal adit at the Cefn Coch mine in North Wales, which is now sealed secured by the Bat Conservation Trust to protect the bats roosting inside

The so-called ‘assault’ started as a joke but it had a ring of truth when we arrived at the parking area in Ganllwyd, near Dolgellau, in a drizzle of rain, with a mass of equipment. The plan I had outlined to my

colleagues, Paul and Ivor, had been a simple one. We would use the various paths and tracks to access the highest gold mine in Wales, avoid the principal adit (which is barred to protect the bats roosting inside) but follow the vein and secure stunning photographs of 19th century mining at Cefn Coch. The need for a change of plan was obvious and relying on an aerial photograph that appeared to show traces of a small gauge railway track connecting a former processing plant and a mine, we diverted to Berthlwydd. The tracks petered out at a gate and Ivor volunteered to guard our cumbersome rucksacks while Paul and I searched searched for adits or shafts.



Photo: Companions Paul (left) and Ivor display their choice of clothing and accoutrements for a wet day of photography in Britain's midsummer

Ten minutes later, we had transported our baggage to an adit, intending to do justice to the photography. We had prepared for a water-logged entrance but in addition, we found our footing was treacherous in view of the deep accumulation of mud. Improvising an "island" of rocks, we discussed the requirements to meet the photographic challenge. Rapidly, Ivor fired off a sequence of pictures by electronic flash. Paul and I, however, eschewed the convenience of hand-held flash but mounted our expensive digital cameras on tripods that tended to sink slowly into the mud. Once they were stable, we found the auto-focus on the lenses was inert; it was necessary to focus manually for a selected point of the dark interior. This is not an easy task and we cursed the modern practice of omitting the scale of distances on the lens housing.



Photo: The adit at the Berthlwydd gold mine, which took some finding but was adjacent to a fenced-off shaft on the lower slopes of the mountain

As our eyes adapted to the gloom, we used hand-held torches to establish the length of the adit and determine the ideal depth of field. Our aim was to focus on a point about two thirds of the distance from the camera. Soon the benefits of electronic imaging emerged.



Photo: The initial interior photograph is taken with electronic flash to serve as a record but it has little appeal in view of the lack of modelling

We increased the sensitivity to 1600 ISO, we allowed the camera to determine the white balance automatically, and we selected a reliable exposure time of thirty seconds. We also incorporated a ten-second delay before illuminating the far walls with beams of light from torches that were kept on the move; doing so softened the edges of any hard shadows. By concentrating the light on the far distance, we reasoned the foreground would receive an adequate amount of spill light and this soon proved correct. However, the photographic conditions entailed waiting longer than usual for a result to be displayed and it was a relief to see the first image emerge, which now became the basis of a few adjustments.

Photo: By directing the beam and painting the light



from hand torches during a long time-exposure, an attractive pictorial result is the outcome. An odd colour results from the mixed lighting (some daylight, quartz-iodide and tungsten) but, if necessary this effect can be adjusted by printing the image in a chocolate-sepia tone

Soon we had a workable protocol for exposing and we improved the viewpoints ever so slightly and varied the angle of view. In doing so, we probed the far

recess of the adit for pictures which would stand comparison with the earlier wide-angle views.



Photo: The digital camera delivers a great benefit as Paul assesses a trial exposure and deliberates on what to do next by way of improvements

By this stage, the cameras were dripping with rain water, in spite of efforts to keep them free of moisture and it is to Nikon's credit they continued to function. The mud had soiled our clothing and water soaked our feet, socks and boots. Prudence would have called it a day, but having studied and photographed the remains of the processing plant of the Berthlwyd complex earlier in the day, we continued to our primary objective of Cefn Coch. It was late June, and the grass was drenched with the persistent rain that blocked any chance of studying the landscape. Out of the gloom emerged the remains of the huge smelter, we enjoyed following the rails of a line along a man-made embankment, and which connected the smelter with the principal adit and its spoil heap. From a vantage point 270 metres above sea level, we had to imagine the vein of gold which stretched from the Princess Marina Mine three miles away and passed through the now-abandoned Gwynfynedd mine, to Berthlwd and Cefn Coch, and which finally emerged in the derelict Clogau gold mine on the other side of the mountain.



Photo: The remains of the 19th century processing plant for the Berthlwydd mine are obscured by ferns and long grass; with diligence, it is possible to locate the pit of a water-wheel which drove the adjacent arastra and stamp-mill. There are other man-made features nearby

When Ivor declared he would buy a pot of tea, we called it a day and returned to a distant car by striding down a walkway, which was smooth and free of bumps, and was deliberately built up to raise it from the natural ground. Some people say it was a facility for moving buckets up and down the hill slope when Cefn Coch shared the facilities at Berthlwyd, but we acknowledged it provided a speedy descent for Ivor's pot of tea, which was waiting one hour away in a cafeteria at the railway station of Betws-y-Coed.

Author's Note:- The Cefn Coch and Berthlwyd mines were opened by the Welsh Gold Mining Company in December 1862, and at one time, they were known as the New California Mine. Both are on the eastwards-facing slope of Garn mountain and are best accessed by parking in the spaces opposite Ganllywd village hall and then following the woodland path alongside the waterfalls of the Afon Gamlan. Crossing a footbridge presents the opportunity to turn southwards until a small sign implies "mining" is to be found by turning west (that is, a right-hand turn) and climbing upwards. By this stage, the river Nant Las is on the left-hand side and the processing plant of Berthlwyd is hidden by a wall. On crossing a footbridge, it is best to stash all rucksacks and enjoy an exploration of a waterwheel pit, stamp mill, the arastra and other features. The Berthlwyd adits are across a field hidden in a clump of trees to the south west, but the remains of a rail line indicate the general direction.

Back at the bridge and with the Nant Glas still on the left, the path leads upwards to another footbridge which (i) offers the chance of a breather and (ii) the first views of the massive Cefn Coch smelter and the short embankment which links it to the principal adit by a narrow gauge line. It goes without saying, the landscape is spectacular from here. The adit's spoil heap more or less points to the raised incline that was built to move ore to a lower level before the smelter was constructed, and this is a good way to return to a parked car.

Dr R M Callender, FRPS

FROM NAMHO JUNE, 2013 NEWSLETTER

Cornwall

In February the Cornish Mining World Heritage Site announced that it had secured £270,000 to safeguard engine houses, once part of 'the richest square mile on earth'. The money, from Natural England, would be used to consolidate buildings at the Taylor's and Davy's sites at Wheal Maid Valley, Croftandy. The buildings include some of the oldest engine houses anywhere in the WHS designated area.

A fascinating but poignant Cornish mining memorial has found a new home at King Edward Mine. The plaque commemorates Captain Thomas Jenkin, killed

by a fall of ground at the Basset Mines in 1906. Captain Jenkin, along with young surveyor Cecil Thomas, had descended Marriott's Shaft to 230 fathoms and then climbed to the 200 level. Here they met Captain William James Jr., son of the mines' general manager. All three died instantly when part of the roof collapsed. Cecil Thomas, aged 20, was on his first underground assignment. The Jenkin plaque came from Mithian Church, now closed, and was presented to KEM by the family. They felt KEM, from which Basset Mines may be seen, to be a fitting location.

King Edward Mine Limited, the operating company at KEM, has now become a registered charity and has signed a 30 year lease for the site with Cornwall Council. This includes not only the buildings and land leased by the Camborne School of Mines but also land around Fortescue's Shaft, Wheal Grenville to the south. The additional land contains two engine houses for pumping and winding and other significant archaeology.

At the time of writing, work was about to begin on refurbishing mining structures at South Crofty. The headframe at New Cook's Kitchen Shaft, due to be retained in lonesome splendour when that part of the site is cleared, was to be scaffolded, grit blasted and repainted, with replacement of some steelwork. The project, led by Cornwall Council, will also see the conservation of two listed engine houses at Chapple's Shaft on the original Cook's Kitchen Mine.

Robert Carr, Industrial Archaeology News 165

And Finally - I think we should all congratulate and thank Rob for this bumper issue. Thanks to all our members who send in contributions. Please continue to do so. We all have a great deal of pleasure from our regular NMRS Newsletter.

Barbara

Booking form for NMRS Autumn Meeting

Please e-mail booking replies to mansemins@btopenworld.com or phone 01282 614615

Saturday 26th October, Gisburn Festival Hall 2013

5 Burnley Rd., Gisburn, Lancs, BB7 4ET, NGR SD 828 487

11.30 Book Sales

12.00 Buffet Lunch **pre-booking essential** (please state if a vegetarian option is required)

12.45 (approx) Meeting followed by Presentations

Please e-mail or phone Presentation Offers at the time of Booking.

All bookings to be made by October 13th to help with catering.

Although e-mail replies are the most convenient way of confirming your attendance at this popular event if this is difficult postal replies can be sent to

Barbara Sutcliffe, The Old Manse, 93 Halifax Rd., Nelson, Lancs, BB9 0EQ

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