

# Northern Mine Research Society

## Newsletter



Society established 1960

[www.nmrs.org.uk](http://www.nmrs.org.uk)

November 2016

[www.nmrs.org.uk](http://www.nmrs.org.uk)

### Presidents jottings

It was good to see so many of you at our recent **Autumn meeting**, to hear our Officer's Reports and to catch up with friends old and new. Malcolm will be putting the reports on the Members' area of our website for you to read at your leisure so I won't repeat what was said. However if you are without a computer and you would like to read one or some just let me know which and I will post them out to you.

As usual the **short presentations** were varied and interesting. Ron Callender gave a demonstration of gold washing, James Cleland discussed a metallurgy sample from Maidens Cross Colliery, Graham Topping showed photos of Clayton Mitchell, Grime Bridge Collieries, the Early years (1978-1987) and then interviewed Rodney Mitchell, and David Kitching talked about his recent investigations into Norberry Engine House, Hazel Grove.

As mentioned in our August newsletter Malcolm is standing down as Membership Secretary at the 2017 AGM and as I write this we have not had any volunteers to take over this important position. As I was told when I offered my services as Publication's Officer, I could go

about it the way I was happy and comfortable with. It was this fact that resulted in my volunteering. Sallie also feels the need for a new face to take over meets and is willing to work with anyone interested in this role in planning the 2017 meets. Unfortunately, due to increasing ill health, Rob feels he will be unable to continue in his role after the 2017 AGM so another vacancy will occur. With the November newsletter there is usually a **Committee nomination form**. However since none have been returned for many years we have decided to save paper and money by not printing one. If you are interested in any positions, especially those that will become vacant next April all you need to do is to contact the Secretary in writing at least 28 days before the 2017 AGM with the signature of a proposer and seconder and the position you would like to be appointed to. The secretary's address is NMRS Honorary Secretary, 91 Ightenhill Park, Burnley, Lancashire, BB12 0LL. The present officers are listed below.

President	Barbara Sutcliffe
Vice President	Malcolm Street
Secretary	Mick Cooke
Treasurer	Tim Cook

### Editor

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Would you please note that the deadline for inclusion with the February 2017 Newsletter is the 31st January 2017.

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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Publications Editor Richard Smith  
Librarian Sallie Bassham  
Meets Leader\* Sallie Bassham

*If anyone would like to replace Sallie please contact her*

Newsletter Editor\* Rob Needham  
NAMHO Representative Sallie Bassham  
Membership Secretary\* Malcolm Street  
Website Administrator Malcolm Street  
Committee Member Len Morris

**\*Vacant from 2017 AGM**

What is enclosed with this newsletter is the **Membership renewal form for 2017**. It is a great help to Malcolm if these can be returned as soon as possible. Unlike some societies we have no need to increase our membership fees for yet another year. Thank you to those of you who gift aid their membership but remember to inform us if your circumstances change and we are no longer able to claim it. There is a membership form on our website so please inform anyone you know who might be interested in joining us.

I would like to welcome the following new members since our last newsletter

Mick and Lesley Croft -Cleator Moor

Keith Whitaker - Barnsley

There are also five new members for 2017, their names will be in the next newsletter. We were sorry to hear of the death of Archie Paton and an obituary should be found elsewhere in the Newsletter. Condolences were sent to his family.

As we go to press we have heard about the death of Alasdair (Ali) Neill. An obituary will be in the next newsletter

While out and about this year we again visited Geavor Museum down in Cornwall and were reminded by a sign at the front desk that NMRS members are entitled to discounted entrance – you need to show your membership card. This was an initiative by NAMHO many years ago so if you are visiting any sites that are NAMHO members it is worth asking. A list of members is on their website. I would like to close by thanking all our Committee members, all our meet leaders, to all who help to spread the word of NMRS and our Publications, to all those who make donations to us and to every member – all are helping the continuing success of our Society. As usual our year has been interesting with a variety of field trips, two excellent meetings, four newsletters, two publications, a garage book sale, a dedicated NMRS stand at the Leyburn event and the launch of our new website due to the efforts of Malcolm mainly.

On behalf of the Committee members I would like to wish you all Season's Greetings for Christmas and the New Year, thank you all again for your support in 2016 and remind you that the **2017 AGM** will be held on Saturday April 22<sup>nd</sup> at Cliviger Village Hall BB10 4SU

More details will be in the next newsletter.

## **Barbara Sutcliffe**

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## **Publication News**

At our recent Autumn meeting we received copies of our publications from Philip Smith on the Isle of Wight and William Houston, an Honorary Member of ours. I would like to thank David Kitching for collecting the former from Hazel Grove and Mike Gill for bringing the latter. All of these will be available to purchase and amongst the A5 ones are several that are out of print. Those from Mr Houston are pre A4 ones so very early. Please contact me if you are after any. Also David Kitching has recently written a book "British Bricks" and he brought some to the meeting to sell at a discounted rate and also gave us a generous donation for our funds. He soon sold out and hopefully will bring some more to that AGM. We must thank him for his generosity.

## **Barbara Sutcliffe**

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## **Library Report**

Thank you very much to the Health and Safety Executives for donating two boxes of "Institution of

Mining and Metallurgy Abstracts" for 1952-1980, and to Len Morris who suggested us as the recipient. Thank you too for donations from Philip Smith, William Houston, Dave Nicholls, Keith Turner and Rob Needham.

## **Sallie Bassham**

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### **MEETS**

Thank you to everyone who has lead meets this year. We have had very interesting events.

I feel that it is time for me to stand down from organising meets; but would be glad to work with a new volunteer for 2017. Please contact me if you are interested, and I will explain what I have done and how. I will, of course, pass on the contacts I have made over the years; but I hope that someone else with their own contacts and different ideas will want to help with this.

**Sallie Bassham ([sbassham@chipmail.co.uk](mailto:sbassham@chipmail.co.uk) or 015 2424 1851)**

## Leyburn Mineral & Fossil Fair

Back in August Northern Mine Research Society had a stand at the Leyburn Mineral & Fossil Fair held at Tennant's Auction Centre. This event, the first of its kind there, was a success despite the fact many local people had not heard about it. We did our best to promote it via our Facebook page and our newsletter and I was very pleased members introduced themselves, while browsing our publications. I counted 18 members one coming all the way from Aberdeen, but there would have been more I am sure. The Fair was held in conjunction with a mineral and fossil auction which meant everything went very quiet while that event took place. Three new members signed up during the weekend and we sold quite a few of our publications, the most popular one being BM53 "The Arkengarthdale Mines" - not surprising considering the lovely area we were in. The venue has excellent facilities and is lovely and clean so it was a pleasure to spend the weekend there and to meet so many enthusiastic people.



The event, now named "The Yorkshire Mineral & Fossil Fair" is due to take place at the same venue on 27-28th May 2017. Hopefully Northern Mine Research Society will be able to have a stand again.

## Barbara Sutcliffe

### Ingleton Coalfield Exhibition 27/28 August 2016

This year's exhibition was held at the Ingleton Community Centre. With local interest visitor numbers quickly reached 100. After a few weeks of preparation of the display boards, they reached nine, with an increased variety of dated metal artefacts in support on the tables. Photographs from locals show the coal



loading chutes, and horses and carts receiving their loads from the screening plant at Ingleton Goods Yard. In BM76 the photographs on pages 92-3 show the colliery office building which is now revealed as the weighbridge and offices. Staff by the doors with a loaded cart can now be seen to be standing on the metal weighing plate.

To assist with the weekend exhibition, local NMRS member Richard Barker helped with some local history. His grandfather is part of the mining history of Ingleton. In Dolands field several shafts were dug in the period 1854-89 by James Barker, Robert Tomlinson, Joseph Hodgson, John Tomlinson (driver) and Richard Dobson; two of the shafts were named after Barker family members – Richard and Nellie.

To increase their business four brick kilns were built, producing 5000 quality red bricks per week, marked Barker. As early as 1887 mining engineer George Barker strongly suggested that two new shafts be sunk near to Ingleton village, by the Skipton/Kirby Lonsdale (A65) road. With the New Ingleton Colliery opened, which from 1912 to 1934 employed many hundreds of coal miners, the decision was taken to build the New Model village of 102 terraced houses to provide homes for the miners.

## Bernard Bond

### Down Memory Lane - Northern Cavern & Mine Research Society



Roger Nichols, an early member sent me this photo via Facebook of an early meeting of NCMRS members enjoying the sun outside the Miners Arms at Greenhow. From the right Roger Harker, Keith

"Foz" Foster, Bessie Woods, ?,?,?, Caleb Wade (still a member) Perhaps someone will fill in the blanks.

Roger also sent a copy of some early Society Memorabilia -an oil painting which has travelled with him from Hebden to Skipton to Cornwall to Tasmania. He understand it to be a scene from Stump Cross. The dog belonged to George Smith, Stump Cross's owner. The person on the left is Caleb Wade and the centre is Derek Platt. Roger is unsure about the person on the right



## Barbara Sutcliffe

### 11th International Mining History Congress in Linares Spain in September 2016 - Ingots to Linares

This story is a circular one, and the title reminds us of the phrase 'Coals to Newcastle'.

The saying is that 'Lead is the soul of Linares' and it is true. The town is located in Jaén Province, in the Autonomous Region of Andalucía, Spain. For over 4000 years the rich mineral deposits have been mined locally by a succession of cultures from the Bronze Age, and later by Iberians, Romans and Carthaginians. Intermittent mining continued until the 1850's when British, French, German and Belgian Mining Companies introduced innovative technologies and lead production escalated, and so did the town's mining reputation.

*La Tortilla lead works with stacks of ingots on the railway platform c1907.*

British mine owners included John Taylor and Sons, and Thomas Sopwith junior, from the northern Pennines. The latter managed the large La Tortilla lead mine and smelt-works on the west side of the town, which by the 1880s was extended with the addition of a shot-tower and a plant for producing lead sheets and piping. Lead ingots were exported back to England but inevitably some ships were lost en route in the rough seas, and valuable cargo was lost.

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ration discovered a shipwreck in the English Channel laden with a cargo of lead ingots bearing the initials, *T. S. and Co. Ltd. Spain.* (See NMRS British Mining No. 95. p.65) They approached the British Museum to try and discover more about the ingots and the BM put out a request for help in identifying the initials. Rob Vernon identified the initials as Thomas Sopwith & Co. Ltd and together with the Colectivo Proyecto Arrayanes, Linares worked with Odyssey to research the haul. It was fortunate, because a few months previously he had seen a miniature ingot (the type given to visitors to the works) bearing the same initials. The resulting paper about the ingots can now be downloaded

from:

<http://www.shipwreck.net/documents/OMEPapers47.pdf>

Two years ago, when preparations were commenced for the 11<sup>th</sup> International Mining History Congress in Linares (September 2016), Rob thought it would be a nice thank you gesture if one of the lead ingots could be donated to Linares. He discussed the proposal with Odyssey Marine Exploration and they agreed to donate two ingots to the town.



*The two ingots arrive at the house.*

Paperwork was completed, including a statement of release from the British Receiver of Wrecks, and Rob and Boo brought the two ingots, weighing about 40 kilogrammes each, back to Linares in their car. (A budget airline would have considered us to be grossly overweight!)

The Inauguration session of the International Mining History Congress on the 6th September 2016 commenced with the formal presentation of the ingots to Linares and much publicity was given to the event by the local press.

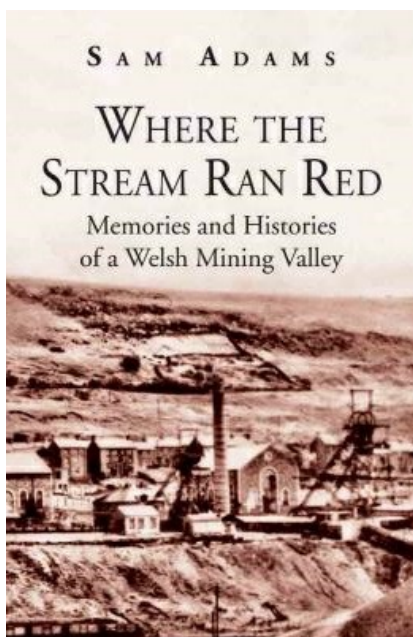


Photographed with the two ingots from left to right are: **Ana Cobo Carmona, Andalusian Government;** **Mabel Selfa, Linares Town Council;** **Juan Fernández Gutiérrez, Mayor of Linares;** Rob Vernon - NMRS member; **Claudio Lozano Guerra-Librero, representing Odyssey Marine Exploration, and marine archaeologist, University of Huelva;** **Eduardo Tamarit, Andalusian Government,** **José (Pepe) Dueñas, President del Colectivo Proyecto Arrayanes - IMHC organisers.**

Who knows what other ingots are on the floor of the ocean? There is a good chance that these, too, may have originated in Linares. Coal to Newcastle, lead ingots to Linares.

### **Rob and Boo Vernon - September 2016**

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## **Reviews**

### **Where the Stream ran Red**

Memories and Histories of a Welsh Mining Valley by Sam[uel] Adam 2016 220 pp, illus, SB £9.99 [or Treorchy Library 150516].

This is the story of one place, one family (and yet, in many ways, hauntingly true of families throughout the south Wales coalfield) whose narrative takes us as far as the West Indies in the time of slavery, the high seas off Singapore, and the pogroms of Tsarist Ukraine.

At the heart of Sam Adams's brilliant and remarkable book is a sense of belonging, a sense of place. The red-tinted bed of a slim stream rising in the moorland overlooking a small, isolated unpopulated valley, a *cil fach*, gave its name to his birthplace. And this is also the story of the entry of Gilfach Goch [small red stream] into history as a mining valley, separate from the anthill of the forked valleys of Rhondda, with its own curious tripartite administration and its own special part to play in the turbulence of the south Wales coalfield.

Out of those years of productivity and optimism and the grinding misery of long, bitter strikes and economic depression, rises a compendium of stories, in which stark and sobering facts jostle with speculative reconstruction of events in past centuries and memories of boyhood in the Valleys.

In common with many in south Wales, the author's family has roots spread wide - from Derbyshire and Somerset to Cardiganshire, Carmarthenshire and Breconshire, and tales of origins (lost glories, even) carefully preserved and passed down from generation to generation.

Although there is not much on mining this is a fascinating glimpse of social history in south Wales

### **Tony Oldham**

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#### **Celebrating the First Twenty Years of The Mining Heritage Trust of Ireland**

various authors 2016 102 pp, colour photos on most pages. SB available from: Dr Matthew A Parkes, Natural History Museum, Merrion Street, Dublin 2, Éire / Ireland Euro 25 + Euro 5 postage.

In 1996 The Mining History Society of Ireland was formed, renamed in 1998 Mining Heritage Society of Ireland, and renamed again by 2001 as the Mining Heritage Trust of Ireland, a name which is still in use today.

Although a small society for a national body, varying from 100 members in its heyday to a current 80 members, it has made up for this by the enthusiasm of a hard core of members who have been responsible over the years for producing 72 newsletters and 15 journals as well as scientific papers in other journals.



Mining and quarrying in Ireland goes back to the Neolithic times when flint was quarried for microliths, axes and hammers. Metal mining goes back to the Bronze age with copper workings in Ross Island, Co Kerry. Silver deposits were exploited in the early AD 1200 by the English Crown. In 1975 Co Wicklow experienced a "Gold Rush", but the fall in metal prices during the 1880's depressed the Irish mineral market. Today the industry is booming with about 6000 people directly working in the mining and quarrying industries.

This book is a potted history of the Trust which is remarkable active recording a one hundred and eighty field trips in twenty years.

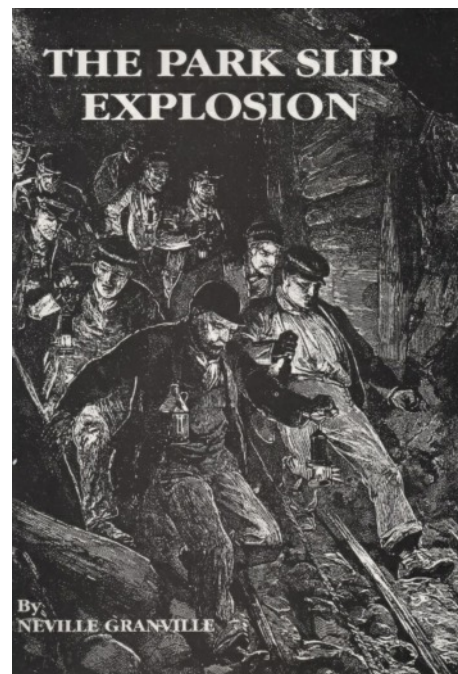
I never cease to be amazed at the way in which the dedication a group of enthusiasts is able to produce work such as that described above. Further proof that without the selfless industry of volunteers, the world would be a far poorer place.

**Tony Oldham**

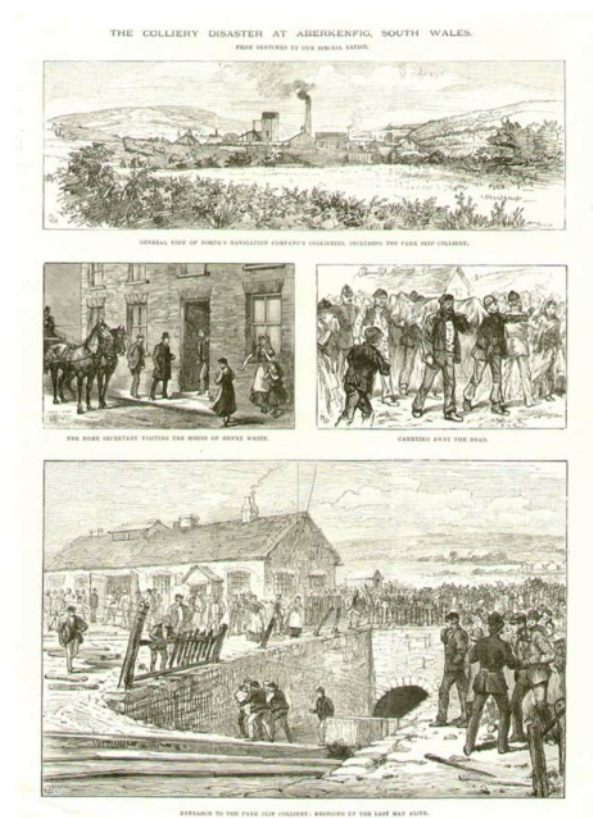
## THE PARK SLIP EXPLOSION

by Neville Granville 1992 48 pp, illus, survey, SB Price £7.00. I bought my copy from the Park Slip Nature Reserve. Parc Slip Visitor Centre, Fountain Road, Tondu CF32 0EH

News of this book has only just arrived at Cwmparc, but I think it is still as relevant today as when it was first published in 1992.



The disaster at Park Slip occurred exactly 124 years ago and was started because of a faulty miner's lamp. A damaged gauze allowed the inflammable gas to ignite with disastrous consequences. The explosion killed 151 men and boys and the rescue effort, which continued until late the next day, saw trapped and injured miners brought to the surface, but only 39 survived. The author's grandfather was among the last of the men to be rescued alive. But 58 women were widowed and 152 children lost their fathers on 26 August 1892. Local Dr Frederick Twist managed to reach the men below ground and, despite the risk of a further collapse, he tended the injured and stayed with them until they were all brought out. He was in his 20s and showed real courage.



Fifteen of the horses that died underground were also brought out - there was only one which was too difficult to reach, this was simply walled up. .

The pit itself eventually closed in 1904 but although the disaster is not the best known it is remembered by the community, which every year holds a memorial service on the 26<sup>th</sup> of August in memory those who died.

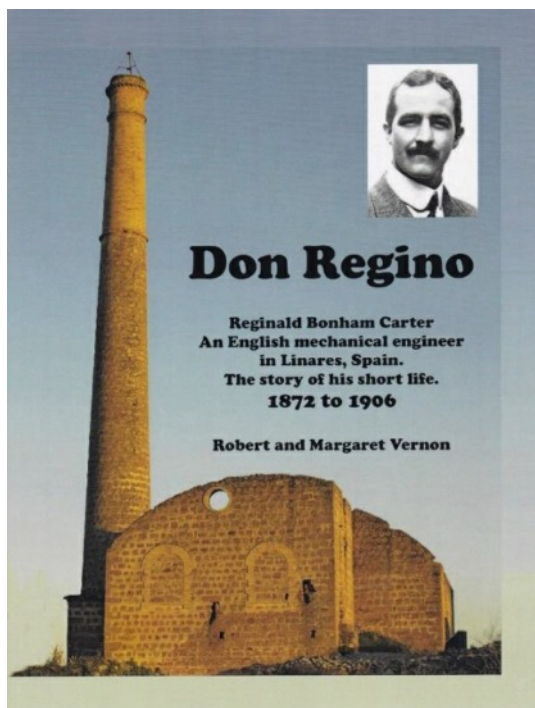
Seeing the beautiful nature reserve today, it is difficult to imagine it was the site of such a tragedy, but the surroundings are a fitting memorial to those who lost their lives and their rescuers.

## Tony Oldham

### **Don Regino: Reginald Bonham Carter.**

An English mechanical engineer in Linares, Spain. The Story of his short life, 1872 to 1906. Published by Robert and Margaret Vernon, available from [www.moorebooks.co.uk](http://www.moorebooks.co.uk) for £16.00 + P&P.

Mining historians rarely find significant amounts of detail about the lives of the people running the mines they are studying. In the case of *Don Regino*, however, Robert and Margaret Vernon struck gold. His descendants had deposited an archive of over 400 personal letters in the Hampshire Record Office. Most were from Reginald to his mother, but there were also a few to his father. The authors have used these letters, supported by their extensive knowledge of mining in southern Spain, to produce a readable account of Reginald's time in Linares.



Trained as a mechanical engineer, Reginald worked for Messrs Sopwith, first as a contractor and then as an engineer. He became a partner in a small lead mine – La Abundancia – in Linares and finally was appointed as Manager of the Constanca Engineering Works there.

Besides mining matters, Reginald's letters cover all aspects of life in Linares, including his opinions of his Cornish colleagues and the local people. The latter usually found favour and not only did they respect him, but also it was they who nicknamed him *Don Regino*. He also describes social functions, the visits of directors, accountants etc, as well as such mundanities as the price of food and tobacco, the slowness of rail travel and the conservatism of local farming techniques.

If you want to read about the social side of metal mining communities, as well as about somewhere different then this is your book. Oh, and in answer to your question – yes, Helena Bonham Carter is a descendant of Reginald's youngest brother, Maurice.

## Mike Gill

### **High performance flashlights**

#### **An equipment review**



Many society members enjoy underground exploration and will already be well equipped with lighting, but the advent of digital photography makes it worth drawing attention to a new lamp, which has much to commend it. The Feit Electric high performance flashlight provides three options for the beam. There is a strobe light, but more importantly it offers 750 lumens as a narrow beam and 150 lumens with the beam adjusted to cover a wide angle.

In the preliminary tests conducted underground, exposures have been in the region of fifteen to twenty seconds at an aperture setting of f11 when the speed is set at ISO 400. The light balance remained at 'Auto'. Preliminary tests confirmed that at the start of exposure, the narrow beam should be directed to the far distance and adjusted to the wide angle setting after about five to eight seconds, by sliding the lamp compartment (at the front of the torch) to the rear, using a movement that is very smooth. Being LED (light emitting diodes), the colour temperature is almost a match to that of daylight and the point-source seems to give a crisp appearance to the final image, but this aspect may be the consequence of the brief exposure times.



The makers claim the flashlight is water resistant and impact resistant, with a beam range of over 300 metres. At a price of £18 from Costco Wholesale UK Ltd, it is worth splitting the cost with a companion ... who may then be coaxed to use his torch and provide some pictorial backlighting into your photograph.

## Ron Callender

### Cononish Diary

**Previously** ... we have reported that Scotgold Resources experienced setbacks in producing gold from the adit already drilled through Beinn Chuirn Mountain in the Scottish Highlands. Resistance from the Loch Lomond National Park forced the mining company to prepare a second application for planning permission. The see-sawing price of gold and a lack of investors did not help, but approval finally arrived.

**However** ... a vow made in May this year to process over three thousand tons of stockpiled ore came to fruition a few days *after* the last Newsletter went to press. Of course, the Scottish papers of 3<sup>rd</sup> August were delighted; the BBC announced "First gold 'poured' from Cononish mine" and Scotgold Resources released its version of the news – 'a

significant milestone' it said, in seeking to attract new investors.

**The 'first pour'** promised to be great occasion. Ore crushed in the pilot plant installed by APT during the summer was loaded onto the shaking table. Workmen and visitors looked on as countless photographs were taken at the table where three strands of particulate emerged from a slurry – gold particles to the right hand side, a gold-rich galena concentrate in the centre, and a border of gold-rich pyritic concentrate.

In a separate operation, intense heat converted the gold particles into a spherical billet of solid gold, which triggered more photographs and comments, as it passed around the assembly. A further eight ounces emerged as doré\* and the next target is to produce 100 ounces for assessment at the Assay Office in Edinburgh.

*\*Google informs that doré is a semi-pure alloy of gold and silver which is usually produced at the mine before being refined for purification*

Pressed for an opinion on the day, Scott Walter, the Assay Master suggested Scottish gold might have a premium of about 15%. On the other hand, Scottish jeweller Sheila Fleet, is already thinking of designing items for Christmas – provided she can acquire some of the gold. Hopes are high that the assay office will agree to introduce a special hallmark for the Cononish gold, and thus establish its Scottish provenance.





Illustrations:- (Left 1, 2, 3, Right 4, 5,6)

No 1 Chris Sangster, the technical consultant, in a study taken in 2010, during a visit to Cononish.

No 2 The result of the exciting first pour – a billet of Scottish gold, which is valued at around £500.

No 3 The mine’s bulk processing trial relied on a pilot plant installation that converted gold ore into precious metal.

No 4 A sample of the doré composed of gold and other materials; re-processing will secure the gold and silver.

No 5 The Orkney jeweller Sheila Fleet, OBE, displays the gold billet, whilst in the company of the Assay Master, Scott Walter.

No 6 The shaking table separates a slurry into gold grains (on right) and gold-rich particulate (which will be reprocessed). Scotgold’s technical man, Chris Sangster, who has borne the brunt of negotiations for the past decade, declared the day was “an amazing achievement” whereas the Chief Executive, Richard Gray claimed, with justification, “The achievement of gold production provides tangible evidence of our progress.”

**And finally** ... Nyree Hill, who received an NMRS grant in 2014 and a doctorate from Leicester University, is now a staff-member at Scotgold’s Cononish mine and has provided some photographs to illustrate today’s diary. For my part, and speaking as a Scotsman, “I am pleased.”

**NOTE :** The website ‘Cononish Gold and Silver Project’ features an extraordinary diagram of the mine interior on page 4. Although captioned as “schematic of full mine development plan” it is a good example of applied art.

**Stop Press:** News now filters through that the Cononish owners have set up Scotgold Resources Portugal Ltda, which has received a three-year licence to explore in central Portugal near Castelo Branco. The area of 264 square kilometres has a history of antimony/gold veins. There is a promise of more information “in due course”.

## Ron Callender

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### News

#### Restoration restarts after winter break

Restoration of Coplow Quarry, renowned for its geological features and fossils, has restarted after the wet winter.

The limestone quarry, which is just off Pimlico Road, Clitheroe, is a site of special scientific interest and famous for its limestone exposures known as the Lower Coplow Knoll Series, formed in the lower carboniferous period about 340 million years ago.

Hanson Cement is committed to restoring the site for public use and scientific study.



Quarry Manager Sam Wrathall confirmed that the site had been levelled ready for the installation of a liner, which will be covered with soil and then seeded to encourage calcareous grassland.

Sam said: ‘As part of the restoration, several rock faces will be kept bare as they are of interest to the scientific community.’

## Hanson Cement

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### New Fancy commemorative plaque is in place



The plaque is now attached to the stone marking the site of Shaft No 2 at New Fancy Colliery site, thanks to two hours hard work by Daniel Roberts and Lee Truman of local stone masons, M E Damsells.

The dedication ceremony took place at 11.15am on Sat 10th September.

### Forest of Dean LHS website Sent in by Rob Needham

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### Minco plans more work on 500-job zinc mine

A company behind 500-job zinc mine plans has

moved closer to making the proposals a reality. Minco is in talks to secure further testing agreements at the Northern Pennine Orefield, which straddles the County Durham and Northumberland border.

The company has drilled more than 30 test holes between Allenheads, near Stanhope, and Nenthead, in Cumbria, and previously revealed it had found a Northumberland site, known as White-wood-Barneycraig-Williams, which it believes harbours deep layers of zinc left behind by lead miners of yesteryear.

The firm has now confirmed tests prove the plot has strong potential, adding that they intend to extend exploration licences to carry out further investigations.

A spokesman said: 'The intersections of lead and zinc mineralization two holes on the Whitewood-Barneycraig-Williams fault are very positive and indicate the potential of this large structure.

'We are negotiating extensions or amendments to certain exploration licences and option agreements, and expect to conclude agreements in due course.'

Minco previously said its project could create up to 500 new jobs, with workers earmarked to mine some of the largest amounts of zinc in Europe.

The firm is understood to have spent more than £½m on the development and director Rowan Maule last year told the Northern Echo a mine could be developed in six years.



*History: Workers at the former Coldberry lead mine, in upper Teesdale. Minco has hailed its work, which is testing zinc deposits in the region.*

The North Pennine field was the UK's most important lead producer between 1750 and 1850, employing thousands of men across Teesdale, Weardale, South Tynedale and the Derwent Valley. Minco's development area was first mined by Romans, with zinc and lead production starting in the mid-17<sup>th</sup> century and continuing through to the end of the 19<sup>th</sup> century, before working at reduced levels until 1938.

According to the company, lead was the main metal to harvest profit, with zinc mainly focussed between Coalcleugh, near Hexham, and Nenthead.

### **Finders keepers ?**

*Vincent Thurkettle caused a world-wide stir recently when he announced his find – a gold nugget weighing over three ounces.*

In the 1990s, Vincent and I failed to coax the city fathers of Moffat into hosting the World Goldpanning Championships. On lobbying Lanarkshire County Council, we negotiated a deal to hold the championships in the Lowther Hills, and involve Leadhills and Wanlockhead villages. Vincent and I had a committee-in-waiting and I emerged as the Secretary but Vincent took on the development of the stadium and organising the competitions. In frequent rainstorms, Vincent and his crew raced hard to complete in time. To his credit the participants from around the world voted the championships one of the best ever.



In subsequent years, Vincent and I shared our latest exploits whenever we met at subsequent international championships. He confided that he was keen to secure the gold medal in the category for professional men and when he won the prize, his election as the President of the World Goldpanning Association followed. To my surprise, Vincent then packed in his job with the forestry commission so as to become



*Photo: Geoff Robinson Photography*

e a full-time gold prospector. I thought this was a step too far, but he has succeeded in his new career.

He has searched for gold around the world and yet four years ago, on the seashore of Anglesey near Moelfre, he discovered a lump of gold weighing 97.12g, which was from the cargo of a ship-wreck in 1859. Because of its provenance, it has a value of tens of thousands of pounds. Vincent maintained a silence until he was certain there were no more gold nuggets in the locality and then, punctiliously, he reported his treasure to the Receiver of the Wreck, and technically, Vincent's nugget now belongs to the Crown. His hope is that the nugget will be displayed in public and, with justification, he trusts he will receive a substantial award. He tells me that he now plans to concentrate on ship-wrecks ... and who can blame him ?

## Ron Callender

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### The Friends of Hemingfield Colliery

#### Work day at Barnsley Main and new Friends group 5th August, 2016

Great to see volunteers getting stuck in at the Barnsley Main Colliery site in the Dearne Valley Park at Barnsley on Friday 5th August. Some familiar scenes to the Friends of Hemingfield colliery as the group got to grips with clearing back the old car park to the pit.



Fantastic teamwork from the Barnsley Central Area Team, Twiggs, Barnsley Parks Services, Barnsley Tesco Extra and the Yorkshire Wildlife Trust.

<http://discoverdearne.org.uk/barnsley-main-work-day/>

#### Making new Friends

Also, it's great to see that the DVLP and local partners the Barnsley Central Area Team are proposing to help establish a new Friends Group to protect and maintain the Barnsley Main site.

An inaugural meeting supported by the DVLP and the Barnsley Central Area Team took place on Tuesday 9th August 2016 at Hoyle Mill Inn.

The outline aims of the meeting were:

- Formation of part of the Friends of Barnsley Main committee
- Organising events
- Litter picking
- Raising awareness
- Encouraging regular use of the site for walks with family and friends

For more details and information, see:

<http://discoverdearne.org.uk/events/friends-barnsley-main/>

#### Open Day and Working Party Weekend, 15th October 2016



#### Getting Ready

Grey cloud and autumn mist lingered over the Knoll Beck in the valley to Elsecar as the Friends and volunteers arrived at Hemingfield Colliery for another open day.

Preparation was the name of the game this weekend for the last working party before the Friends hand their 1846 winding engine house over to the care of building contractors who will be re-roofing the whole building, ensuring it will be protected well into the twenty-first century.

#### Energetic conservation



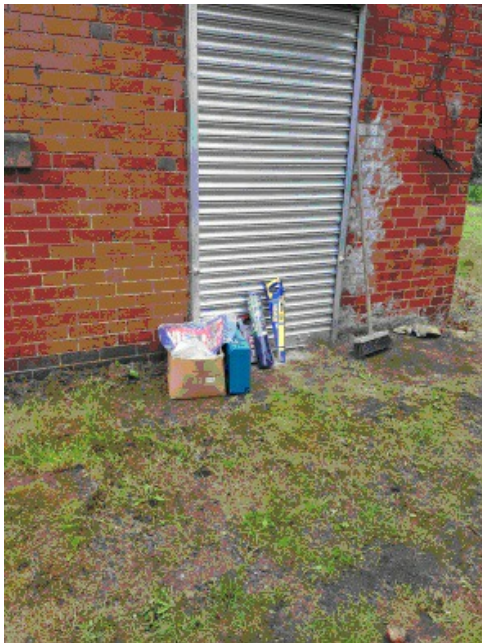
Hemingfield Colliery, October 2016

Friends Director and Site Manager Glen opened the pit gates, joined by Friends Chair Steve, and a whole host of regular volunteers, John, Nigel, Alan, Keith and Chris, all eager to get everything ready for next week when contractors arrive, scaffolding the Victorian winding engine house inside and out in order to begin the significant programme of roof works.

All of this has only been made possible through the generous funding support of Subterranea Britannica, The Association for Industrial Archaeology and the Dearne Valley Landscape Partnership.

### On the right path

Out in the yard, the Friends set to putting down a temporary path for the contractors to carry materials over to the winding engine house. As the path needed to cross part of our site archaeological excavations, it was decided to put down a membrane to protect the remains and pour on a layer of earth to even the levels, ready for the contractors to put down a plywood run to work on.



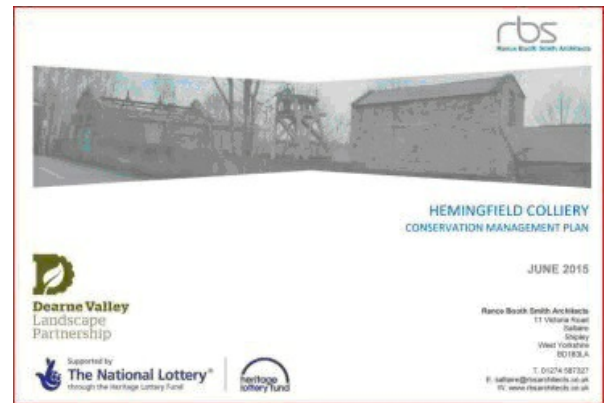
The kit ready for use.



Earth laid on the membrane ready for the contractors

### Owl be back

Part of the careful planning for the conservation work has included the compilation of a management plan and several site surveys.



Hemingfield Colliery Conservation Management Plan, June 2015

The latest work required a review not just of the condition of the building, the roof structure, drainage and materials, but also of the wildlife on site. For several years the upper roof space of the abandoned winding engine house had been used as a one

Laying the membrane



of a number of roosts for a barn owl. Although not currently resident, the Friends have made provision for our strigine friend during the winter works on site with an owl box.

Air BnB? temporary owl box on the ground

Saturday saw the fixing of the box to the headgear.



A new headgear home

### Deep clean

Getting ready for the scaffolders means tidying the winding engine house inside and out, moving obvious obstacles and getting the building and the wider site ready for contractor access and work. The team got straight to work, with buckets, spades, wheelbarrows and tarpaulins to clear the way and protect the remaining machinery during the re-roofing process.



Inside the lower winding engine house



All clear in the upper beam winding engine house

## On the Right Track – Elsecar Heritage Railway Live Project

During the day, the Friends were delighted to be visited by members of the Sheffield School of Architecture (SSoA) team working on the **Elsecar Heritage Railway Live Project**. The group from the University of Sheffield are engaged in a 6 week project working with our friends at the Elsecar Heritage Railway. Their brief includes proposals for stations at Hemingfield and at Cortonwood. This fantastic project will see the team tackling how to connect with the route from Elsecar Heritage Centre, down the Greenway to the Coalfield Memorial Line's end at Cortonwood.



The SSoA Live Project team will be applying their technical know-how and creative talents to tackling the real-world challenges of site and building design, planning considerations, road crossings, visitor experience and sustainability. The student architects are considering how best to highlight points of historical and ecological interest in the valley, following the Knoll Beck from Elsecar to Cortonwood, alongside the Dearne and Dove Canal and the TransPennine Trail. Their work ties in closely with the Friends of Hemingfield Colliery's own hopes and aspirations for the valley, and serves to reconnect the Colliery site with the canal and rail links which were its lifblood from 1846-1920.

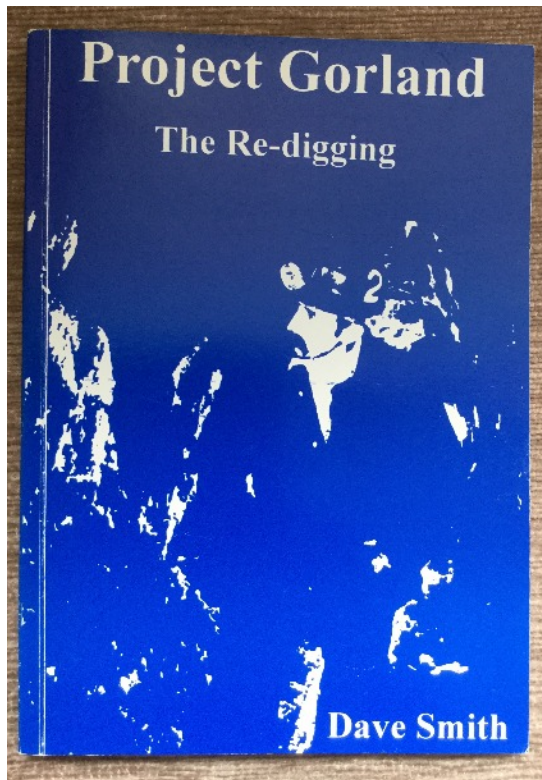
Please follow the EHR Live Project team as they visit, investigate, design, discover and create something great!

The Friends of Hemingfield Colliery were able to share some of their own experience of SSoA Live Project work in 2014, which included this fascinating video presentation:

After visiting Hemingfield the Live Project team were heading straight back to Elsecar for a great evening event at the Elsecar Heritage Railway: **Twilight Steam**. We're already looking forward to see the photographs and footage from this evening steam event and guided tour of the train shed and the railway yard.

After thanking the Live Project students for their visit, it was time to collect up the tools and call it a day for the working party. As the Friends and volunteers departed for home, everyone was pleased to see further progress on site, and eager to watch in the next few weeks as we see a transformation on site – with scaffolding arriving on Tuesday and the process of removing the roof commencing shortly thereafter.

## Project Gorland



"Project Gorland - The Re-digging " by Dave Smith was published in 1997 and is long out of print. Martin Stolworthy and Martin Gale produced it for Dave Smith when he was very ill and it is the story of Dave's digging at this well known site in Cornwall. It is "quite rough around the edges" but we have permissions to share the PDF files with any NMRS members who are interested. Please contact Barbara at [mansemins@btopenworld.com](mailto:mansemins@btopenworld.com) if you are interested. Our Records already have a copy.

**Barbara Sutcliffe**

## GEOLOGICAL PROBLEMS IN COAL MINES

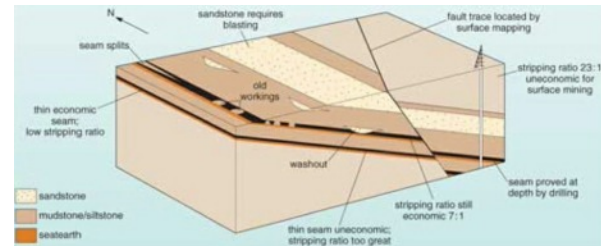
A coal mine is a very complex operation which represents large investments in terms of capital, labour and planning. Modern mining equipment is inflexible as to its applications and thus requires uniform geological conditions.

How many times have you heard that the reason for

a mines closure is “adverse geological problems”. This raises the question what are “adverse geological problems”?

The two principal geological conditions that affect mining operations are:

- 1.The nature of the coal bearing rocks and the lateral variations in rock type.
- 2.The geological structure of the rock, the dip of the strata and the presence of faults.



### The Coal Seam

Variations in thickness, quality and type of coal both within the seam and the strata forming its roof and floor have a huge impact on its viability. Coal seams of 1.2mts and above are ideally suitable for longwall mining operations. Whereas in seams of less than 1mt it is difficult to achieve and maintain a reasonable profitability margin. Also the presence of dirt bands in the coal seam reduces its financial viability. The roof and floor strata is crucial in a mine profitability. As unsuitable strata could mean that coal would have to be left at the top and bottom to make the coal face workable. This would reduce the coal-face output in relation to its advancement thus reducing its profitability margin and significantly affecting its reserves.

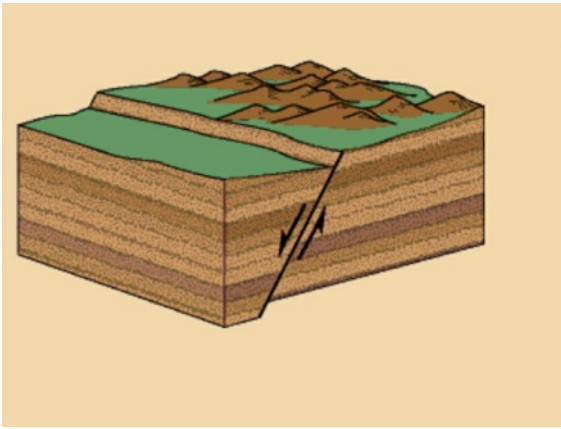
Other factors such as old workings can seriously affect the scope of mining and its reserve assessment. The presence of washout cavities in the roof strata can cause water ingress and roof collapse. In the most serious occurrences of washouts the coal and surrounding strata can be completely eroded away.

### Faults

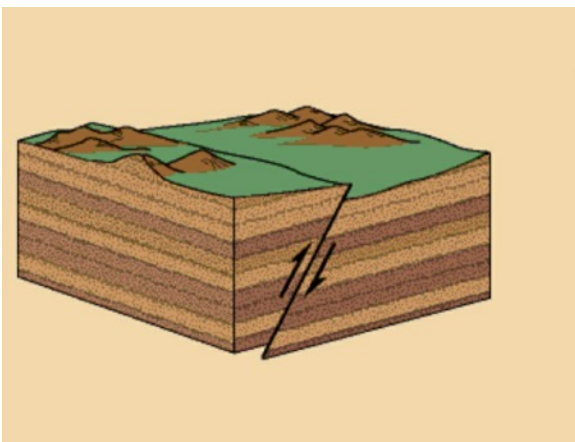
By far the most common “adverse geological problem” encountered in mines are faults. Faults are large cracks in the earth's surface where parts of the crust move in relation to each other. The crack itself does not make it a fault, but rather the movement of the plates on either side. There are different types of faults, see below:

#### Normal dipslip faults

Normal faults occur in areas where rocks are pulling apart (tensile forces). The rock on one side of the fault is moved down relative to the rock on the other side of the fault. Normal faults will not make an overhanging rock ledge. They are normal because they follow the gravitational pull of the fault plane. The Sierra Nevada of California Is a good example of this type of fault.

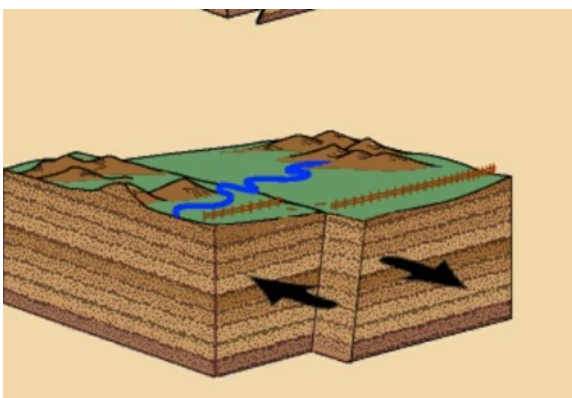


### Reverse dipslip faults



Reverse faults occur in areas where the rocks are pushed together, (compression forces). The rock on one side of the fault is pushed up relative to the rock on the other side. In a reverse fault the exposed area of the fault is often an overhang. The Rocky Mountains are a good example of this type of fault.

### Transform (strikeslip) Faults



The movement along a strike slip fault is horizontal. Both sides of the rock move in opposite direction with this type of fault. The famous San Andreas fault is of this type. In a coal mine the presence of either of the first two faults are often terminal to the mining operation. They

can be bridged by driving cross drifts either up or down but anything more than 100 mts would probably make the operation financially unviable. The horizontal fault is workable but the roof strata would be difficult to manage and a constant threat to the mine's viability.

### Conclusion

As can be seen deep coal mining operations are very difficult to plan and maintain their profitability. All of the above factors influence their viability financially. By nature they are both an extractive and thus an exhaustive industry. The extent of its reserves can be severely affected by "adverse geological problems" and thus the mine's financial value is reduced to the point where it's more cost effective to close it.

### G Topping

#### Calver Hill bales meet Saturday 17 September 2016

Eight members met at the Foregill Gate Watersplash for a visit to the lead bale sites on Calver Hill. The walk was organised by Sallie Bassham and led by Richard Smith and was based on the paper: Smith R. and Murphy S., 2003, 'Bale smelting sites at Calver Hill, Swaledale, Yorkshire', *British Mining*, 73, pp. 46-71. The various sites were characterised by the presence of lead smelting debris such as slag, lead prills, partially smelted galena, glazed stones and to a lesser extent reddened stone. The technology used has been assumed to be bale smelting and pre-17<sup>th</sup> century but more work is needed on this aspect.



The first sites we visited were barren patches of stone with occasional splashes of cream/yellow lead silicate slag. One site (NZ 00306 00388) was cut through by a later limestone quarry with the remains of a collapsed kiln and traces of coal which no doubt came from this later operation. Lead silicate melts at around 760 °C and the evidence was indicative of a low-temperature smelt with well-dressed ore as there were few signs of

smelted gangue. These sites were fairly close to shallow excavations and it was conjectured that smelting had probably been carried out by the miners. Progressing further up Calver Hill we encountered much larger sites (NZ 00905 00344) with fairly copious amounts of grey slag, which when cracked open was grey in colour. Typically this type of slag is mainly barium sulphate (barytes) held together by a glass of calcium, barium silicates with other metals such as iron and aluminium. The glass is difficult to see with the naked eye. If lead is found in these slags it is generally present as lead metal prills or partially smelted lead sulphide matte. This type of site is thought to indicate a more intensive style of operation than the first one.



On reaching the summit plateau of Calver Hill we saw fairly extensive shallow opencut mineworkings with many shallow shafts. It is likely that the output from these mines was smelted at the sites we visited on our way up the hill. Lunch was taken on the summit in beautiful warm sunny weather. Afterwards we made our way down, visiting a trial where an attempt had been made to cut into the vein where it outcropped on the SW edge of the summit.



Taking a SE route downwards we came to one of the large site with slags spread over a very large area

(Grouse butts site at SE 01400 99846). At the north, uphill, end of this site is a large wet area which in wetter weather becomes a pond. On the southern edge of this pond is a small hillock where rabbits had exposed quite substantial charcoal deposits. These suggested the remains of a charcoal dump rather than the remnants of a fire. Charcoal from this source was radiocarbon dated to AD 1420 by Richard Smith in 2006. Slags were encountered nearby and were spread extensively for about 200m below. On breaking the slags, they were seen to be either shiny black glassy material or were dull black. The dullness arises from crystalline species (mainly di-calcium silicate) in the mixed calcium, barium silicate glass. The crystals impart toughness to the slags.



Moving W from here we came to a second large site (SE 00949 99984) where similar black slags and a large charcoal dump were examined. In 1978, Lawrence Barker obtained a radiocarbon date of AD 1439-69 for this site. Both of these last two sites showed that smelting had taken place on a large scale and that probably ores from further afield than Calver had been brought here. The two sites are some way above the tree line and just above pasture land. It is also possible that slags from other bales sites were brought here for reworking by specialist smelters. Both are situated by the side of watercourses.

On returning to our starting point we passed a fine limekiln with a large bale site above it at NZ 0038 00595 having grey slags similar to those found on the flanks of Calver. This site was just above a series of shafts and opencuts which ran along the lower edge of the ridge to the south.

We returned to the watersplash well-sunned and thirsty after what must have been one of the best days for walking during the year.

## Richard Smith

### The Swaledale Big Dig

I have been interested in local history for many years; indeed this is what underpins my interest in lead



mining in my now home area of Swaledale. Back in March 2013, following a presentation by Carenza Lewis, then of Cambridge University, on the results of her test-pitting programme in East Anglia (<http://www.access.arch.cam.ac.uk/>), my wife Judith and I decided to work with other members of the Swaledale & Arkengarthdale Archaeology Group (SWAAG) to put together a proposal for funding from the Heritage Lottery Fund for a similar community archaeology programme here in Swaledale. We bid for £76,000 under the 'Our Heritage' scheme to enable us to carry out a range of activities in the community, in addition to archaeology, and also to acquire SWAAG's own geophysical surveying equipment. Having been responsible for overseeing bids for public-sector funding in my previous incarnation I was rather surprised to learn in October 2013 that we were successful!



*Photo: Local schoolchildren digging enthusiastically*



*Photo: Will Barney be able to get out?!*

We called our project the Swaledale Big Dig. We had two principal objectives. One, the community archaeology project to discover the hidden history of Fremington, Grinton and Reeth in the medieval period and two, to leave a lasting legacy of skills and increased knowledge in the community.

More than 160 people were involved over two years in digging 50 test pits. Each pit was a metre square hole into the past. We shifted and sieved over 70 cubic metres of soil weighing around 90 tonnes. We found glass, clay pipes, animal bones and more than 4000 pieces of pottery weighing over 12kg. We also found a large amount of metal work including horseshoes, clog irons, tools, a medieval key and an early medieval lock.

We carried out documentary research, studied aerial photography and lidar images and carried out topographical and geophysical surveys. These helped us gain a deeper understanding of the development of the area.



*Photo: Bowl Cup handle 17thC*

We worked closely with the local schools. Over 90 children took part in digging test pits, surveying and other activities enabling them to learn more about their local heritage.

We ran 24 free courses on a wide range of history and archaeology related topics and led 11 free guided walks. More than 500 people participated in one way or another.



*Photo: Carenza Lewis, Alan Mills and local children*

The pottery finds enabled us to learn a great deal about how the area developed from Roman times on. We did not find any real evidence of Roman or Romano-British occupation in the villages apart from a couple of sherds suggesting cultivation in the area; neither did we find any evidence of Anglo-Saxon settlement but then we didn't really expect to, given their use of wooden utensils.

We found a previously unrecorded medieval settlement in Fremington, now abandoned in the fields, and confirmed the existence of another extensive medieval settlement, again abandoned, in fields to the East of the Grinton - Leyburn Rd.



*Photo: Women at work - sieving*

Our finds show that Swaledale suffered heavily in the 14th - 15th centuries as a result of the Great Famine in the early 14th century, the Scots raids following their victory at Bannockburn and later, the Black Death. Interestingly, medieval tax returns suggest that Reeth and Upper Swaledale suffered less than nearby Marrick, Marske & Richmond.



*Photo: Our very own Pied Piper demonstrating geophysics*

Earlier this year, towards the end of the project, we obtained scheduled monument consent to investigate the enigmatic Grinton-Fremington Dykes. Radio-carbon dating suggests to me at least that in their final incarnation these formed an integrated defensive system against raids from the east and south-east in the mid-10<sup>th</sup> to early 11<sup>th</sup> C. The results will be published in due course.



*Photo: Judith surveying with our 'magic mushroom'*

Overall, we made a big contribution to our understanding of the heritage of Swaledale and left a lasting legacy of skills and increased knowledge in the community.

Although the Big Dig is now over, its work investigating the history of Swaledale will continue through the Swaledale & Arkengarthdale Archaeology Group ([www.swaag.org](http://www.swaag.org)) and the associated Local History Group (<https://swaledalelocalhistoryblog.wordpress.com/blog/>). More information about the Big Dig including reports may be found on these websites.

## **Alan Mills**

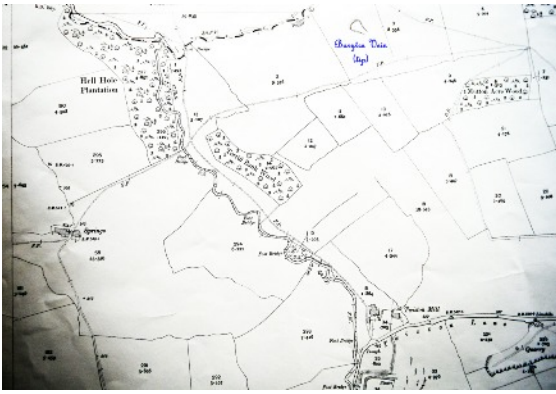
### **Skeleron Mines etc**

I flagged a number of loose ends thrown up by the NMRS walk around Skeleron Mines and my subsequent walk from Twiston Mill to the area, the following weekend.

I think I now have an idea about some of the problems.



*Photo: Adit approach and spoil Barytes Vein*



*Map: 1912 25in OS Map2*

1. The significant tip and blocked adit entrance at about SD 808 450 is the “Barytes Vein” shown on several maps and diagrams. I am still not totally clear on the history of this as the 1851 census shows only four miners in the area, all mining Barytes. Was it here? In 1880 the York and Lancaster Company increased production dramatically for five years until the vein pinched out. This appears to be their mine as an OS map of 1892 shows the activity south of the “early mines” at Skelern. This vein was said to be re-accessed by Whalley and Stanworth in 1920 via a shaft, which confusingly is shown on or very close to Pudsey’s lead vein on the map in the NMRS 1968 Memoirs, within the article by J M Dickenson. Perhaps they did not find any lead and switched their search to Barytes. However, their activity was short lived.

2. There is a trace of another shaft above the York and Lancaster Barytes workings, which are a long way from Pudsey’s “bell pits”. The barytes seam was apparently tried by others in 1933 so it is uncertain whose workings these are. Strangely, despite the scale of the York & Lancaster workings, there is no track leading to this area.



*Photo: York & Lancaster Shaft*

3. I queried whether the “Old Lead Mines” label on the 1912 25” OS map situated over the nearby quarry to Pudsey’s and later workings, has any significance. I now believe it was just ineptly positioned. However the quarry has interest of its own, not realised on the NMRS meet. (See 7. below).



*Photo: Hush, Skelern*

4. No real opinion was given in the Lancaster University report on the hush, just below the Old Mines shafts. Lancaster just say “... the hush or rake is defined as ... partly excavated by ... water to reveal or exploit a vein ...” If it was for working, it was very shallow indicating a short working life as does not appeared filled in. However it is directly above the open adit and could be associated with that, locating the vein.

5. J M Dickenson (NMRS Memoirs , 1968) on his map labels the biggest and best preserved shaft top at Skelern “Pudsey’s or Ashworth’s” (shaft). “One Guy from Barlick” mentions Keith Ashworth, of Barrowford , relates how he had dug many tons of spoil at Rimington mines. This took place in the early 1950’s when he was a chemistry student. The main purpose of this was to obtain barites ...” I understand that the “schoolboy’s mine” was elsewhere and it is uncertain if the “Ashworth” quoted by Dickenson is the same. As an indication of the confusion, “One Guy from Barlick” also mentions that an account book covering 1826-1829 describes Skelern or Rimington mine as “Skelhorn Lead and Calamine Mine” . I have never encountered this elsewhere.



*Photo: Pudsey's Shaft*

6. The very small diameter shaft with beautifully made ginging by the footpath was debated at length. My view was that it was too small to carry men or ore, despite the remains of a winch above it and must be for ventilation. The 1912 OS map

actually labels it “Air Shaft”. It is situated on the Vein ‘B’ as defined by a map in the NMRS 1968 Memoirs by J M Dickenson.



*Map: 1912 25in OS Map1*



*Photo: Air shaft*

7. The quarry close to the old lead mines (SD 8155 451) is actually very interesting . The Lancaster University report describes it as “medieval” and to have three “Clamp Kilns” for burning lime, one centrally and two more at the SE and SW ends. The remains of the SE kiln are clear. The other two are covered in stinging nettles and will have to wait for winter for re-examination. The definitions of early kilns is very confused and contradictory. They date from Roman times and the earliest type of lime kiln was essentially a batch process. The Skeleron kilns seem to be “Clamp Kilns”, the first continuous production. I conclude that they were associated with Medieval strip farming, traces of which are visible around. The quarry and its kilns is likely to predate the mining activities, possibly by several hundred years. It may have eventually have been replaced by the more recent design of kiln at SD 817 449 with its quarry behind which exhibits the

same fragmented limestone strata as the older quarry.

In conclusion, the history of these mines is colourful and challenging. A comprehensive and full account of the history of this beautiful and intriguing area may never be written.

## **Ken Geddes**

### **Obituary - Archie Paton 1957-2016**



*Photo: Archie Paton*

Archie died on 11th September, after a short battle with inoperable cancer. He was born in 1957, the son of a former "Bevin Boy". Archie's father enjoyed coal mining so much that he remained in the industry after the War and transferred from his native Scotland, to Water Haigh Colliery in West Yorkshire.

Archie was educated at Rothwell Grammar School and Whitwood Technical College, before becoming an apprentice electrician at Newmarket Colliery. In 1982, he joined an NCB scheme which saw him become a Deputy at Wistow Mine before the 1984/85 Miners' Strike. He went on to become Safety Officer at Whitmoor Mine before retiring in 1992 due to ill-health, following a road accident.

After retirement, he was a local Councillor in Selby and firmly believed in social justice for everyone. Archie, who was divorced, loved photography and travelling, visiting Australia, New Zealand, Thailand, Cambodia, Uganda and Rwanda, where he walked with gorillas. Earlier this year he served as a volunteer on a survey ship in the Antarctic.

Archie's greatest passions were the preservation of mining heritage and the ongoing efforts to rectify

the shortfall in the Mineworkers' Pension Scheme. Above all, he was proud to be "a mining lad".

## Eddie Downes

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To finish, here are a few items of news from the internet, sent in by Graham Topping

### North York Moors potash mine gets £1.7bn go-ahead

The project received a major boost on Tuesday when Sirius Minerals, the company behind the Yorkshire mine, announced a US\$300m (£245m) deal with Rinehart's Australian agricultural firm Hancock Prospecting.

The mine, which sits on protected moorland overlooking Whitby and Robin Hood's Bay, aims to produce up to 20m tonnes a year of a potassium-rich mineral called polyhalite, a type of potash fertiliser described by Sirius as a "fertiliser of the future".

Under the deal Rinehart will purchase \$50m of Sirius shares and pay \$250m for a 5% royalty stream on the first 13m tonnes of fertiliser produced by the mine annually, and the right to purchase up to 20,000 tonnes of product each year for use on her expanding Australian agricultural holdings.

Rinehart said: "This project delivers a new and natural product that is relevant to Hancock's focus on agriculture, and after years of field tests and across many crop types, demonstrated improved yields.

"Sirius has a large, high-quality mineral resource and is located in a stable jurisdiction with a competitive tax rate. The project has the potential to become one of the world's leading producers of multi-nutrient fertiliser and could have a life of 100 years – this fits with my approach of investing in strategic areas for the long term."

The mile-deep mine shaft was narrowly approved in June 2015, by eight votes to seven, after a protracted four-year planning wrangle that drew opposition from conservationists.

The project was supported by 93% of local people who wrote to the council, 81% of whom live in the national park.

But it was opposed by groups including the National Trust, Natural England, the Campaign for National Parks, the North Yorkshire Moors Association, the Royal Society for the Protection of Birds, the Campaign to Protect Rural England and the Yorkshire Wildlife Trust.

Sirius estimates that the mine will increase North Yorkshire's economy by 10%, with £48m injected directly into the stagnant local area, which has never fully recovered from the loss of coalmining and fishing industries.

All mined polyhalite will be transported underground on a 23-mile conveyor belt running underneath the North York Moors national park to a handling facility in Teesside.

Chris Fraser, the managing director and chief executive of Sirius, said: "We are delighted to have signed this agreement with such an experienced party in the mining industry, as well as one that has very successful and strong leadership, and a long-term and growing agricultural interest."

## Guardian News & Media Limited 25 Oct 2016

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### Carrickfergus salt mine bounces back as profits treble

A CARRICKFERGUS salt mine bounced back last year after falling profits due to mild winters.

But more traditional winter weather last year meant turnover at Irish Salt Mining and Exploration almost doubled to £19.2 million in the 12 months to November 2015.

It had been £11.9m the previous year while operating profit jumped more than three times to £5.8m from £1.6m.



*The then transport minister Michelle McIlveen visited the salt mines in Kilroot in February*

The mine at Kilroot is Ireland's only source of rock salt and has the capacity to turn out around half-a-million tonnes of salt per year.

It provides salt to authorities for spreading on roads during cold and icy conditions.

The company employs 55 people and saw its wage bill increase slightly last year to £2.8m.

The business had suffered after a series of mild winters meant there was less demand for its produce. And while the Met Office described the winter of 2014/15 as "relatively benign", Northern Ireland was the coldest part of the UK over the period.

The firm's directors are Shelagh and Kathleen Mahoney who are based in the United States and are daughters of the company's late founder Leo Mahoney.

The business was started in 1965.

It has a deep water berth on the north shore of Belfast Lough, complete with a loading conveyor

running directly from storage facilities at the mine site, to help with the export of material.

Although the business is concentrated mainly on Britain and Ireland, the company said it also has the capacity to sell into the east coast of the United States.

**The Irish News 23 August 2016**

### **Green light for barite mine in Scotland**

Proposals to develop a world class barite resource at Duntanlich, north of Aberfeldy, have been approved by Perth & Kinross Council councillors today (14<sup>th</sup> September) subject to conditions. The mine, proposed by oilfield services company, M-I SWACO, is a replacement for the company's mine



at Foss, which has operated since 1985, but with a much smaller surface footprint.

The Duntanlich orebody is unique in the UK. It is the only known significant barite deposit that is economic to work and will enable the UK to become self-sufficient in a mineral vital to the North Sea oil and gas industry, ensuring security of supply. The planning process saw extensive community consultation to inform the proposal, with events held in Ballinluig, Pitlochry and Aberfeldy and meetings with key stakeholders. Support was received from individuals and organisations including Perthshire and Aberdeen and Grampian Chambers of Scotland and CBI Scotland and SCDI (Scottish Council for Development and Industry).

Barite is largely used as a weighting agent for drilling fluids in oil and gas exploration and there is no substitute with all the essential properties of this mineral. It also used as a value added product in the automobile and medical industries and as a weighting agent in civil engineering.

The Foss barite deposit has a complex geological structure which has made it increasingly difficult to mine. In comparison, a mine at Duntanlich, which has a simple geological structure, will supply the

whole of the UK's requirements for 50 years at planned production rates.

The Duntanlich development will provide skilled employment for around 30 people, drawn from the local area, where employment is largely reliant on tourism and forestry. The development will also provide indirect employment opportunities for local suppliers and contractors.

### **New proposal integrates results of three years of environmental studies**

A previous planning application to develop the Duntanlich resource was turned down in 1996. Three years of environmental studies have informed the current proposals and careful design has now ensured that previous concerns, such as visual impact and impact on the road network, have been addressed.

The development proposals ensure that there is no visibility from the highly sensitive Queen's View and minimal visibility from the surrounding area.

The site access, taken from the A827 close to the A9 Ballinluig junction, will remove existing Foss mine traffic from the settlements in the Tay valley. Production of up to 120,000 tonnes per annum is proposed.

Ian Hughes, Project Manager for M-I SWACO said: "We are clearly pleased that the committee has minded to grant our planning application subject to conditions and would like to thank those who supported us throughout this process.

"The new mine will ensure that the UK is self-sufficient in barite and will not only have a significant positive local economic impact, diversifying the economy of this rural area where employment is largely reliant on tourism and forestry, but will also have national significance in terms of providing vital continuity of supply for the North Sea oil and gas industry.

"We learnt a lot from the previous application and were able to make significant improvements to our proposals."

**Orbit Communications 14 September 2016**

### **Formal plan submitted to save iconic mining structure in Weardale**

MINING enthusiasts campaigning to save iconic headgear in the Durham Dales have submitted a plan outlining how they will preserve it.

It was feared the visible remains of Groverake Mine near Rookhope in Weardale would be cleared when the mine owner's lease came to an end last month. However, the company said it would be happy to handover the headgear, winding house and engine to a preservation group, and the landowner invited campaigners to submit a business plan detailing how they would maintain it.



*HERITAGE: The iconic headgear at Groverake Mine in Weardale*

Campaign group The Friends of Groverake joined forces with The Friends of Killhope, a registered charity, to draw up the plan, which covers issues such as public liability insurance and maintenance costs.

Campaigner Peter Jackson said: "The aim is to preserve the headgear structure in its current position as a unique monument to fluorspar mining in particular but also mining generally in the North Pennines. We now await a response."

## **Northen Echo 8 October 2016**

### **Countdown begins to £120m gold rush in rural Tyrone**

#### **Business confident of mining precious metal in three years**

By John Mulgrew



Dalradian Resources believes it can mine gold deposits from its site in the Tyrone countryside within three years

More than £120m of gold could be mined annually from the Co Tyrone countryside within just three years, it has been claimed. And the construction of the gold mine at Curraghinalt near Gortin could create around 500 jobs for the duration of the build. It will also be one of the largest mines in Europe, according to the firm behind it, Dalradian Resources. In an exclusive interview with the Belfast Telegraph, Northern Ireland board members Jim Rutherford and Patrick Downey say they are confident

gold could be taken from the ground in around three years.

The Canadian-owned company has already injected almost £60m into the project over the last seven years. But now, it's ready to submit a full planning application by the end of the year.

If that gets the go-ahead work could be under way in the space of a year.

Mr Rutherford said: "You would start with 150,000 ounces at the most, but that's dependant on what's the equilibrium mining rate from the deposit."

The Belfast man has 25 years of experience in investment banking and investment management, and is also a director of Anglo American plc.

According to Dalradian, surveys have shown there are more than four million ounces of gold in the ground.

It could produce 120,000 ounces of gold each year, and the mine could yield gold for decades.

It now has around 44 staff working on site, the majority employed from the Co Tyrone area. A further 22 are also employed through contractors.

Mr Rutherford said the peak workforce at the construction stage could reach 500 employees.

The pair are keen to reinforce that workers will be employed from the local area where possible.

However, there remains a lack of staff here trained in the mining sector. It's something they are trying to work with colleges and universities to correct.

"The goal is to have all the jobs locally sourced,"

Mr Downey said.

"This isn't a project that is going to take five years to construct. The actual processing side of it is fairly straightforward," Mr Rutherford said.

And while the major planning decision has to be taken by Stormont, work could begin on the mine as early as 12 months' time, with gold following around 18 months later.

Speaking about any potential benefits to the community, Mr Downey explained: "It goes back in, all the money people spend locally; there will be engineering firms benefiting, equipment suppliers ... there's quite a multiplier from this."

As for the environmental impact and other concerns, he said: "The thing you want to do is design everything to exacting, world-class standards. The second thing is, an underground mine has a lot less of an environmental footprint than an open pit.

"The other thing is, if say we take out a tonne of rock, 60% is going back as fills. You mine a section, you are putting it back in."

The business has already purchased what's known as surface rights for the land, including additional areas earlier this year.

But it would not say who owned the bulk of land it plans to mine.

According to Mr Downey, it could be a working mine for 40 years.

As far as the response from the local community is concerned, there seems to be a bit of a mixed reaction.

A door-to-door survey commissioned by Dalradian in the Gortin/Greencastle area had suggested that while 93% were either in favour of, or neutral about, the development, there have been objections to the prospect of mining.

Former Environment Minister Mark H Durkan gave planning approval to extend an underground exploration project for gold back in 2013, but there has been opposition from groups including Save our Sperrins.

And just last week, a group of protesters disrupted a meeting of Dalradian workers at the site.

Mr Rutherford, however, said of the project: "I've been 5,000 metres down mines in South Africa and 4,500 metres up in the Andes. This is one of the most exciting things I've come across in that time."

And Mr Downey said: "It's a world-class deposit which we are going to do to the highest standard. We are going to ensure that the communities are totally engaged and involved in it."

Dalradian has set up a 'community fund' in the area, with around £220,000 being allocated towards education and sports projects.

**Belfast Telegraph 9 August 2016**

### **And, finally, a few words from the editor**

I hope that you have enjoyed reading the newsletter as much as I've enjoyed putting each issue together. But I've recently decided that now it is time for me

to retire from the position. After five years, it's time for someone younger to take over. So after two more issues, hopefully a new editor will be willing and eager to take the reins.

Meanwhile I hope to be able to find out a bit more about Eimco rockershovels. My current interest is to find out more on the Royal Engineer Tunnelling Companies, which were apparently mainly composed of ex-miners, who worked inside the Rock of Gibraltar during WW2. They dug approximately 18 miles of tunnels, producing thousands of tons of rock each day, which was used to extend the airfield runway some 800 yards into the sea. The tunnels were able to accommodate the garrison of 16,000 underground. And the tunnellers were early users of Eimco rockershovels.



As shown on this still from a film produced earlier this year to celebrate 300 years of the Royal Engineers.

**Rob**

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