

NORTHERN MINE RESEARCH SOCIETY



NEWSLETTER

FEBRUARY 1991

FUTURE MEETS

9th March 1991 The Society Annual General Meeting and Annual Dinner. This will again be held at the Ascot House Hotel, 53 Kings Road, Harrogate. N.Yorks HG1 5HJ. Tel.0423 531005.

As in previous years the dinner will be preceded by the Annual General Meeting which is followed by a series of interesting lectures

There is a choice of menu which is shown on the booking form which was included with the November '90 Newsletter.

If you haven't got a form then ring J.H.McNeil on 061 747 8652 to get details.

Accommodation is available at the hotel at a specially reduced tariff of £29.50 single or £24.50 each in a twin or double room for B & B.

If you require accommodation please make your own arrangements with the proprietor, Mr.Stephen Johnson.

Please give this event your support and come along and meet other members and have a good day out.

10th March 1991 SMELTHOUSES Meet at Pateley Bridge car park at 11.00am. N.G.R. SE158656. Meet leader M.Street. Tel.(0422)839749. Surface walkabout.

1991 NAMHO
Conference

As detailed in the November Newsletter the Welsh Mines Society is hosting the 1991 NAMHO Conference which is based in Blaenau Ffestiniog N.Wales on the 3-6th May 1991. Further details can be obtained by writing to Mrs.Margaret Vernon, 78 Oakenshaw Lane, Walton, Wakefield, N.Yorks. WF2 6NH.

***** SUBSCRIPTIONS FOR 1991 *****

This will be the LAST Newsletter that you will receive unless you pay your 1991 subscription without further delay. Subscriptions have been held at last years level, which makes membership even better value than before. So please don't delay and send off 1991 subscription today!

MEET REPORTS

Council for British Archaeology Regional Group 4

Report on the day school held at Armley Mills Industrial Museum on Saturday 6th October 1990.

In Search of an Industrial Landscape

Unfortunately notice of this day school came too late to be circulated to the general membership. As NMRS representative to CBA4 I attended this meeting and a brief report of the day follows:

The advertised programme had to be amended as Stephen Moorhouse of the West Yorkshire Archaeology Service, who was to give a talk on "Medieval Coal Mining and Stone Quarrying", was unable to attend.

The first talk was given by Mike Griffiths who is, or by now was, the North Yorkshire County Archaeologist and Graham Lee who is the Archaeological Officer for the North Yorkshire Moors National Park. They spoke about the planners view of Industrial Archaeology, although they disliked using this title as it tends to refer to the years of the industrial revolution only. They see all archaeology as being important. The main theme of their talk was the need for centralisation of information on "Industrial Archaeology" and the production of a list of monuments for the same which will allow this information to be disseminated to interested bodies. Our recorder, Mike Gill, is I believe doing this by computerising the Society's records to enable them to be included in a nationwide database. Normal Archaeological data is centralised and it can be readily given out. Graham Lee cited a recent case: They had knowledge of a group who were renovating old lime kilns in the North Yorkshire Moors, but they don't know who they are or where they're from. This group they believe has a large database of information and Graham Lee would like to see it, but they cannot find out where it is. This would obviously avoid people doing duplicate research and would enable persons with similar knowledge/interests to get together for the mutual benefit of all. He prompted all persons to get in touch with their local County Archaeologist who would then be able to keep track of work being done and he may be able to offer information of his own.

Alison Armstrong of the Bradford Museums and Galleries gave the next two talks. The first being on the "Geology of Coal Mining and Stone Quarrying" in which she showed with the help of slides, how a study of the topography of the Pennines indicated the location of the gritstone outcrops. She also gave a brief account of the basic geology of West Yorkshire showing the extent of the coal measures. In her second lecture she gave an illustrated talk on the "Techniques of Stone Quarrying" showing the various tools and techniques of extracting stone and dressing it. She obviously knows the quarries of West Yorkshire as I, who have lived in Leeds for 25 years, didn't know that the Hangingstones Quarry above Ilkley had an incline tramway connecting it with the town and that it was still visible today! The inclusion of a passing loop half-way down this incline leads one to believe that it was self-acting.

The next lecture was given by George Redmonds on "Early Post-Medieval Coal Mining in West Yorkshire". He talked at length on the early mines and methods of working by the Bord and Pillar methods, but more interestingly on some of the terms found in early documents. Some of these referred to "the working of stones for burning". Could this refer to Coal or maybe to Ironstone which is "burnt" to produce Iron? He introduced terms such as "Clatch", which were the irons attached to the hook

on the end of a shaft haulage rope which was used for manriding circa 1700. A pick shaft was attached to this clutch and used as a busun's chair by one or two persons. He frequently found references to "Watter Tubs" and "Watter Barrels" - could these be used to carry water up the shaft to de-water the mines? He enquired about the miners' term "Sump" - what did it mean? The body of the meeting was able to supply him with this information as a sump in a stratified mine normally means the base of the shaft below the lowest level where water collects to be drawn out. He showed that the early colliers were well supplied with ale. The owners would supply it in the form of a "Sod Pot" after the cutting of the sods, a "Prick Pot" when the coal is reached and a "Bottoming Pot" when the pit is bottomed out.

It was unfortunately discovered in the afternoon that Margaret Faull of the Yorkshire Mining Museum was not able to attend to give her lecture on "Coal Mining in the Southern Pennines", so the day was terminated with a discussion on the proposed formation of the Industrial Archaeology Panel for the North Eastern Region. At a personal talk with Mike Griffiths before this he asked for my support, as representative of NMRS for the panel, which I said the Society would give. As a result I offered the Society's services to the Industrial Archaeology Panel via the Secretary of CBA4 should they be required.

Malcolm Street

LETTERS

Sir Hugh Myddelton Bart

I am delighted that the long needed memoir on the Darren Mines has been published and Simon Hughes is to be congratulated for having written it.

I would like to champion the name of my hero Sir Hugh, whose efforts in so many spheres has been neglected, if not ignored.

In doing so I am offering a critique of Simon's work, for which I hope he will take in good spirit and in the spirit in which it is offered.

Sir Hugh did not drain the fens as stated but Brading Harbour on the Isle of Wight, this failed as a venture soon after.

The fresh water supply to London was from springs at Great Amwell and Chadwell near to Ware, Hertfordshire, not at Ware. He was the first governor of the New River Company. Incidentally, the hydraulics for this scheme had been worked out by Edmund Colthurst, Sir Hugh was the entrepreneur.

His ability as a goldsmith is often ignored, being Prime Warden of the Goldsmiths' Company in 1610 and 1624, his best qualification for his mining exploits, of which more later.

His first job was to search for coal for Denbigh Castle (his father was the governor as was his brother later). This failed, later to be resurrected.

He was the M.P. for Denbigh 1603-28 and its first Capital Burgess until he died.

He was not plain Sir Hugh (a Knight), but Sir Hugh Myddelton Baronet of Ruthin. He had the unique distinction of being given the baronetcy. At the time James 1st was selling them to create revenue.

The charges accompanying the grant of the Baronetcy are interesting, the third being pertinent to mining, and read: "For finding out with fortunate and prosperous skill, exceeding industry and noe small charge, in the County of Cardigan, a royall and rich myne, from whence he hath extracted many Silver Plates which have been coyned in the Tower of London for currant money of England."

His credentials for being given the lease from the Mines Royal Society rested more with his knowledge of metallurgy than with those of a mining and hydraulic engineer, although these were important. He had already acquitted himself with Queen Elizabeth 1st when he settled a dispute about the "coinage" of tin produced from Cornwall, enabling the Queen to take the pre-emption of tin into her own hands.

The reasons for granting him the Mines Royal was to prevent the King of Spain from making a profit from British lead by de-silvering it: "we hold it fit for our honour and necessary for the public good of our realm that the said silver should be seperated from the lead...for the supply of bullion for our own use and not exported into foreign parts under colour of the ordinary merchandise of lead, to the enrichment of strangers with our own native commodities."

The references to the yeild of silver being 100oz/ton lead ore makes the claim of 60oz/ton a possibility and I assume that the statement of 60lb/ton is a printers error. Would it have been so much! Reference to the most important event of this period is ignored in the book, the Van Hack trial.

A challenge was made by a Dutchman, Levin Van Hack, who claimed to James 1st that he could extract more silver from galena than Myddelton. Van Hack failed to produce any silver but what was of great importance, Myddelton produced 77oz/ton out of a sample of ore (which mine or mines it came from is not known) with a further 5¹/₂oz from the litharge making a total of 82¹/₂oz/ton. This trial occurred in 1623, one of the umpires being Sir Francis Godolphin from Cornwall, no doubt a friend of Myddelton. Of interest here is that coal was used for the furnace, which was reputedly at Tal-y-Bont.

Hallysteiner is mentioned as an example of the German influence. There was also a German engineer named Hochstetter, being one of many persons of "ranck and quallitie", appointed by Charles 1st at Myddelton's request to control the mines. This suggests considerable activity at this time.

I am puzzled by the Welsh coinage and the Unite. Coinage was believed to have been minted at Aberystwyth, it was certainly minted in the Tower. The coins showed the three feathers and were in units of the Angel (50p), the Crown (25p), half-Crown, Shilling (5p), sixpence, two pence and penny. The King ordered that the Welsh silver should be seperately coined from 3rd September 1623.

The clear profit of £2,000 per month was a flight of Pettus's fancy. Gough rightly questioned this and he calculated that, based on the Van Hack trial, £1,500 per month was more realistic.

There is much more information about this most important period of the history of mining in the Darren, indeed the work undertaken by Myddelton was the foundation that Pettus worked on and his successors. Unfortunately the works of Myddelton both in Wales and with the New River are much ignored. In view of the importance of his influence and the availability of information I think this period deserves more attention from historians.

I do intend, in the fullness of time to write the biography of Myddelton, so if any reader has any information or where to find information I would be most grateful to them. I am aware of the major record holdings and books on this subject.

I am also in the market for a copy, in good condition, of "Sir Hugh Myddelton, Engineer and Entrepreneur" by Gough. Any offers?

Peter Naylor

BOOK REVIEWS

Gold Fever by Ken Kutz. Published by Gold Fever Publishing, 7 Whaling Road, Darien. CT 06820. U.S.A. \$75 incl.postage.

This book is the result of great dedication. Over 400 pages A4 size, beautifully printed with over 600 full colour illustrations of mining views taken from correspondence, memorabilia, stamps, covers, letter heads and envelopes. The feast of material is backed up by carefully researched details of the early goldmining days in all the major areas of the world.

Postal items cover the gold rushes of the States, Australasia, British Columbia, the Yukon, New Zealand and South Africa and vary from a cover from Brazil dating from the 1840's to envelopes made from old mining share certificates during the American Civil War.

The book also includes many line drawings of classic mining scenes and illustrations taken from contemporary postcards. Chapter 35 for example covers Argentina and includes two postcard views showing gold dredging and recovery at a mill. Other lesser known countries represented include Russia, Korea and Peru. Sadly but not perhaps surprisingly, Britain is not included. Also included are several maps to assist those whose geographic knowledge is limited.

Ken Kutz has spent a lifetime in active mining, beginning, after graduation in 1948, as a surveyors helper for a copper-lead-zinc producer in British Columbia. Rising rapidly he began, in 1969, covering international mining operations, prospects, exploration programmes, feasibility studies and government negotiations for a multinational mining company. During this time he has collected the pieces from every mining country which in this unique book he now shares with all mining historians.

It is a fine book, it looks good, it feels good and it really is good!

I.J.Brown

GENERAL NEWS ROUND UP

Cumbria

William No.2 Shaft Exposed

Yet another Iron Mine shaft collapsed, this time William No.2 Shaft at Bigrigg, Cumbria. This has provoked further interesting research. The pump section of the shaft opened up on Wednesday 18th October 1990, followed by the covering over the winding section on Friday and Saturday. The shaft is a three compartment shaft, 21ft.6inches by 8ft.6inches. One compartment for the Cornish Hawthorn-Davy beam pump, and two compartments for winding cages. The original pump rods could clearly be seen, as could the pump support beams. The pump must still be in-situ. Behind the pump rods was a 12 inch diameter rising main. The shaft was reputed to be 986ft. to the sump foot, with eyes at 410ft., 614ft., 792ft., 891ft., and a bottom level at 974ft. There were two pump rooms, one at 252ft., and one at 486ft. The lower levels worked the Ironriggs Royalty. The original closure of the shaft would appear to have been by the usual method of sleepers over the top and heaped with soil etc.

The shaft was sunk in 1910-11, and was producing in 1913. The mine was operated initially by The Bigrigg Mining Co., and the agent was Wilkingson. Typical employment figures are shown below:-

1910	15 underground	10 surface
1911	18 -.-	17 -.-
1912	8 -.-	21 -.-
1913	25 -.-	27 -.-

Bigrigg Mining Co. also operated Sir John Walsh Mine from 1904, taking it over from S & J Lindow, it having stood for 2 years. They sank it deeper in 1905.

William No.2 was first abandoned on 31st December 1931 along with Moss Bay, Woodend & Ironriggs Pits. Workington Iron & Steel, part of United Steel, took William No.2 over, and it was used primarily as a pumping station to relieve Sir John Walsh mine. It was eventually abandoned again on 31st December 1939, along with Sir John Walsh & Parkhouse Mines.

The remaining pits at Bigrigg, Wyndham and David Lawn, closed on 1st March 1943. The last pit in the area to close, with the exception of Beckermest, was Crowgarth - Cleator Moor, on 4th October 1948.

The remains of William No.2 pit can be found at Map Ref. NX005131, and the farmer doesn't bother about people wandering over his fields, but the open shaft can no longer be seen. The farmer decided not to take the advice of the County Council; who highlighted the need to cap the shaft correctly, and heaped spoil into the shaft top. When this "temporary" measure drops again we may get another look at those pump rods.

D.Eilbeck.

Durham

The Killhope Wheel Museum is finished and was opened in July '90. Water runs through the complete system of buddles, boxes, hotching tubs and slime pits. An appeal was also launched by the Friends of Killhope with the aim of fully restoring the wheel machinery and crushing rolls. £60,000 has already been authorised by Durham County Council. If any members would like to contribute, please make contributions payable to "Friends of Killhope" and send to Dorothy Chambers, 18 Cheveley Walk, Belmont, Durham. DH1 2AU. Tel.091 386 8491.

Wales

Anglesey Mining announced in its Interim Report that the phase one programme has been successfully completed. 170 tonnes of concentrates have been sold to the Pasminco smelter at Avonmouth.

A feasibility study has been carried out by Kilborn, with the North Wales based Robertson Group providing estimations of the geological reserves. Mining reserves were developed by Kilborn from the Robertson Group report and form the basis of the plan for exploitation. The Kilborn report states that "The study shows that a viable mining operation can be established at Parys Mountain under the criteria used for the base case".

Robertson's reserve study confirms Anglesey's current estimate of insitu geological reserves totalling 6.45 million tonnes grading 2.34% copper, 2.60% lead, 5.35% zinc, 39 grams per tonne silver and 0.32 grams per tonne gold above a cut off

of £20 per tonne net smelter return. The company expects that this reserve will ensure a project life exceeding 18 years. In the shaft development area proven reserves are 2.25 million tonnes grading 1.43% copper, 3.43% lead, 6.72% zinc, 78 grams per tonne silver and 0.66 grams per tonne gold. This area would be mined first and provide for the first seven years of production. The shaft development area is now well understood having been the subject of comprehensive diamond drilling, underground mining and metallurgical testing over the past two years. Kilborn have prepared a detailed 1,000 tonne per day mining plan for the shaft development area. In this area there is the 300 metre shaft, 925 metres of underground tunnelling and 2,000 tonnes of ore have been removed and processed in the on site pilot plant. In addition 108 cored diamond drill holes totalling 10,800 metres have been drilled from underground and 11 boreholes totalling 1,800 metres have been drilled from surface.

The mine will produce separate concentrates of zinc, copper and lead. A dense media separation pre-concentrator will be included in the processing plant to improve efficiency and possibly to expand through-put at a later date by the inclusion of lower grade ore not currently included in the reserves. The new mining plan envisages the attainment of full scale production in 12 months from completion of funding - a shorter construction period than anticipated.

The full scale mining operation will cost about £20 million, including new capital equipment. The company expects to receive some grant aid and to raise cash from forward sales of concentrates as well as from the Banks. It is hoped that finance can be in place by February 1991 and from then it would take about one year for production to start.

University of Leeds

The Department of External Studies at Leeds University offers a wide range of evening classes and day schools covering the entire range of academic disciplines. The full-time science lecturer in the Department is a professional Minerals Engineer, and thus for the first time, the department is in a position to offer a number of courses which involve practical sessions addressing topics related to minerals and mineral processing. Of interest to members are the following:

Gold Prospecting Weekend 15th & 16th June 1991.

The Minerals of Britain, a 12 week course commencing in September 1991.

If anyone is interested in the above courses please contact Dr. Rob Chapman at the Department of External Studies, The University, Leeds. LS2 9JT. or Tel. 0532 333190.

Cornwall

The new management team at Geevor has taken the first steps to developing the company into an international mining organisation by agreeing to buy the assets of Pinnacle Creek, a US coal recovery and processing business, for £1.43 million. Mr. Mark Wellesley-Wood, who was appointed chairman and chief executive in April 1990 said that the deal would give the company a "significant cash generator". He went on to say that further rationalisation of Geevor would probably mean the sale as a going concern of its tin mine and operations at Pendeen, Cornwall, where mining stopped in February 1990 because of low prices.

Wheal Jane

Carnon Consolidated made outline planning application in November 1990 to change the 280-acre site into a leisure centre which would permit pumping to continue in at least part of Wheal Jane, one of the world's wettest mines, to keep it clear of

water and maintain the option of mining again in the distant future if the tin price ever moved high enough. Pumping costs are more than £100,000 per month to remove water at the rate of 6,000 gallons a minute.

The leisure project envisages underground mine tours, an international standard 18 hole golf course, and a seven year phased development of 230 golf and holiday lodges. Also proposed is the use of some of the mine water, which reaches temperatures of 35 degrees centigrade to heat buildings and a commercial glasshouse operation growing tomatoes, peppers and exotic indoor plants. There would also be a 100 bedroom health hydro offering a full range of treatments plus health and sports activities and a small business park.

Future Structure of the National Association of Mining History Organisations (NAMHO)

NAMHO is to hold an open meeting for all UK mining historians at 10am. on Saturday 9th March 1991 at the Peak District Mining Museum, Matlock Bath. The purpose of the meeting is to discuss NAMHO's future structure and in particular the need for an individual membership category.

WANTED/FOR SALE

Mr. William Lack a past member of the Society is selling his collection of mining books, geological books and maps. There are approximately 50 titles of world wide mining and geology, 60 titles of United Kingdom mining and geology. Maps have a similar coverage and number.

If you send a stamped addressed envelope to Mr. Lack he will send you a full list. His address is: The Radleth, Plealey, Pontesbury, Shrewsbury. SY5 0XF.
Tel. 0743 790343.

EDITORS COMMENTS

Thanks. Thanks to all the contributors to this newsletter both those named after certain articles and the following who have also sent in information which has been used. Eric Gray-Thomas

The next Newsletter will be published in May 1991. Please send any material for inclusion to the Newsletter Editor, at the address below before 31st March 1991.
Damian J. McCurdy, "Denefield", 111 Barn Lane, Golborne, Warrington. WA3 3PR.
Tel:- 0942 718192.

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