

NORTHERN MINE RESEARCH SOCIETY



NEWSLETTER

AUGUST 1992

FUTURE MEETS

TEESDALE 12th & 13th September 1992.

Leader J.Harrison. Tel. (0833) 27350. Meet each day in the car park in Middleton-in-Teesdale at 10.30am. NGR NY948254. Nothing difficult on either day.

Sat 12th Sept. Underground at Firestone and other levels in the Hudeshope Valley.

Sun 13th Sept. Surface and underground in the Pike Law - Flushie-Mere area.

There is a camping and caravan site at Daleview Caravan Park, Middleton-in-Teesdale. Tel. (0833) 40233. The Leader also has a list of B&B, some of which do evening meals. Please phone for details.

Sat 7th Nov General Meeting. Sicklinghall Village Hall, NGR SE364484, at 2.00pm. to be followed by Presidents "Talk-In" and Pies and Peas, slides etc.

LETTERS

The Miscellaneous Mines and Quarries Bibliography Project

Paul Sowan, in collaboration with Andy Bowan, is compiling a bibliography of published work relating to miscellaneous British mines and quarries. The geographical scope extends to England, Wales, Scotland, the Isle of Man and possibly the Channel Islands. Very little data has so far been found for Ireland. Although the project was initially inspired by the "Bibliography of the History of British Metal Mining" by Roger Burt and Peter Thwaite, University of Exeter/NAMHO 1988, this partially completed work differs from its predecessor in a number of respects.

The work will survey the field from the earliest published works through 1991. Entries are not limited to those "written as history" but include published work produced by and for the industry. It is hoped to include all major articles in The Quarry (1896 onwards) and the Quarry Managers' Journal (1918 onwards) plus Acts of Parliament and relevant publications from geological literature etc.

The scope of minerals being considered is determined by the end-use of the minerals worked. Anything that is used for fuel or is reduced to a metallic state is excluded. Any mineral which is used in any other way is included, eg. Bideford Black (an impure anthracite) is included as it was used for painting ship's bottoms. Assorted hydrated oxides of iron whose end-use was for pigments are also included. It is likely that there will be some "fringe" subjects to be discarded before publication. They have been included in the draft version because they were mined using techniques better known in miscellaneous rather than accepted metalliferous or coal mining practice.

The bibliography currently runs to 171 A4 pages and continues to grow. Any members willing to assist in this project, especially with obscure or locally

published journals, booklets, caving periodicals etc. should contact Paul Sowan, Subterranea Britannica, c/o CNSS Ltd, 96a Brighton Rd, South Croydon, Surrey. CR2 6AD

Notes from Cumbria

At Whitehaven work is in progress on repairing the sea wall at Saltom Pit, built at the foot of the cliffs in 1729 to mine under the sea. There are engine house ruins around the shaft, a horse gin circle and remains of another gin and shaft to lift the coal up to the cliff top.

A scheme is afoot to preserve the Haig Pit colliery head gear, engine house and steam winding engines left since the pit shut in 1986. About half a million pounds is required to set this up and the future must be a bit doubtful unless EEC money and central government funds are forthcoming. However the Cumbria county archaeologist is sponsoring the scheme so we can but hope.

I made a recent trip to Roughten Gill mines and was very saddened by the damage to many of the sites caused by erosion and mineral collecting.

Albyn Austin.

City Centre Gold Mines

January 1992 found me in the Congo, South Africa and Swaziland on a two week business trip. Ten days of non-stop work had come to an end, and we sunned ourselves by the side of the swimming pool on the hotel roof garden.

The Carlton Hotel is in central downtown Johannesburg, right in the middle of a city of one million inhabitants.

Viewing the panorama forty floors below, numerous sandy coloured spoil heaps could be seen in all directions. The nearest one was only five hundred yards away. I told my companion I was going for a walk. "Where to?" he responded. Oh! just down the road to look at that old spoil heap over there. "What for?" he replied. I knew I was not going to get anywhere with that line of conversation, he's a "NON MINER" you see, so I mumbled some sort of thing about stretching my legs. Why try to explain to him that old disused holes in the ground hold a permanent fascination in my very being and I am unable to turn away from a possible opportunity of exploring a new one. You have to be a member of the NMRS to fully appreciate my situation.

Ten minutes later I was "on site". Imagine my complete surprise - half a mile from the city centre - here was a fully fledged working gold mine - cages up, cages down - hooters - dust - assay office - lab - weigh bridge - ore crushers - the lot. Straight to the Mine Manager, very friendly fellow, lots of letters after his name, none of your old "hit and miss" approaches like the old days. "How long has gold been mined in this actual spot?" I asked. "Since 1934" he stated, "The Village Main Reef Gold Mine Company Limited, 16 Sprintz Avenue is the name, we're proud members of the Anglovaal Group". "What about all the other spoil heaps I see all around us, almost in the city centre?". "They are nearly all working" he replied. Jo'burg is just a city built on top of a warren of tunnels. See all the road works everywhere? Subsidence on a grand scale is the name of the game". "What happens to old sites?". "We sell 'em to the City Council. This one next door we sold only a few weeks ago for 9 million bucks!". "Can I go down?" I asked, ever hopeful, but without any great conviction of an affirmative reply. "Sorry I'd really like to, I can see you are not just an old time wasting inquisitive twit like we get so much of right here in town, but it's the insurance you see, it would take two days to get it for you". "Sorry I can't stay that long, we are flying back to the U.K. to-night". "OK then, but call next time you are here and give me two days - You've got a few hours to spare - why don't you go and have a look at Gold Reef City, just two miles from here in Ormonde". "Good idea" I retorted "I'll do just that".

Reef City is a Theme park, complete with five star hotel, built around an old gold mine site, with 106 things to do, you can buy gold jewellery, have a meal, see gold coins being struck, take a train ride or just relax in the sun. The best? Well of course, the trip down Shaft 14, helmets and lamps provided, to level 4, just 700 feet below, deep enough to get the feeling without putting off the customers! Stopes, ore shafts, powder rooms, arched masonry, old drill holes, muck, just like being at home. The next best? Well, the smelting mill of course. Liquid gold poured before your eyes into moulds, turned upside down onto steel topped tables. A row or two of gold ingots always looks good. Each one at that day's price in January 1992 was worth £67,400 sterling.

I only hope that they retain some of the worked-out spoil heaps and mine workings in the centre of Johannesburg for posterity, but the general consensus is that they will flatten the lot for development of one kind or another. What a darned shame that would be for our world mining heritage.

F.David Heaton.

BOOK REVIEWS

Arap Geotechnics has published the results of its survey of mine workings in Britain. A major objective of the work was to produce a document that would facilitate dealing with land instability at the planning stage.

The study covered all counties in England, Wales and Scotland (with the exception of the Western Isles) and covered all known mines. The cost of the package is £5,000 and the major customers are expected to be the planning departments of local authorities and consulting engineers.

Combe Martin Mines. Booklet by Peter F.Claughton. Published by the Combe Martin Local History Group.

This booklet of 32 pages gives an account of the history of the silver-lead mines at Combe Martin in Devon from the first documentary evidence in 1292 up to the last working in the late 1870's. The account is not concerned with the technical aspects of ore extraction but covers the development of the various mines and some insight into their working and where possible this is linked to evidence on the ground. An interesting story which has been well put together in a compact and readable form.

The booklet is available from Peter Claughton at Blaenpant Morfil, Rosebush, Clynderwen, Dyfed. SA66 7RE. Cost £1.95 + 36p postage.

D.J.McCurdy.

GENERAL NEWS ROUND UP

Cheshire

A new mining gallery has been opened at the Salt Museum at Northwich, Cheshire. This gallery tells the fascinating story of rock salt mining in Central Cheshire since the discovery of the rock salt beds at Marbury in 1670.

The gallery was officially opened on 5th December 1991 by Mr. Alan Styles, Chairman of the Salt Manufacturers Association. The Association had made a sizeable financial contribution to the new display.

The centre-piece of the new display is a wood and iron horse-drawn truck on which large tubs of rock salt were hauled to the foot of the 19th Century mine shafts. This old truck was found last year in old workings at Winsford and has been restored by the Cheshire County Museums Conservation Department.

The differences in the working conditions and mining technology of the Victorian era to today's massive mining operations at Britain's only working rock salt mine at Winsford are demonstrated. The operators of the Winsford mine, ICI plc., assisted with the development of this new gallery at the museum, including, providing most of the contemporary equipment and some of the early tools that are on display.

The Salt Museum has now completed Phase 3 of a four year development programme which will provide the installation of a new visitor centre and completely re-arranged galleries by the end of 1992.

S.Penny (NAMHO N/L)

Chatterley Whitfield Mining Museum

Joseph, the former colliery steam locomotive was returned to the Museum during December 1991 after being restored to working order at the Crewe Heritage Centre. Joseph was built by the Hunslet Engine Co. at Leeds in 1944 and it worked on the Bicester Military Railway until 1949. It was the last steam locomotive to be purchased by the National Coal Board and it worked at Gresford Colliery from 1970 to 1974.

In 1974 the locomotive, then named Alison, was transferred to Bold Colliery. It was overhauled at the NCB Walkden Workshops and as the re-commissioning of the locomotive coincided with the retirement of Joe Cunliffe, the Walkden Workshop Engineer, the loco was renamed "Joseph" in his honour.

Joseph worked at Bold Colliery until 1985 and in 1986 the NCB retired the loco, together with a similar one named "Robert", to the Chatterley Whitfield Mining Museum. An agreement between the Museum and the Crewe Heritage Centre resulted in the Crewe Heritage Centre overhauling Joseph in exchange for Robert being retained at the Heritage Centre. (I hope you're following all this!! DJM)

Joe Cunliffe was amongst the guests at the ceremony to mark the return of Joseph to the Museum. The loco was put to use at the Museum from the 2nd of December 1991 and will be used for future steam railway activities.

NAMHO N/L

Grinton Lead Smelting Mill

Consolidation work is in progress at the Peat Store at the Grinton Lead Smelting Mill complex in Swaledale. The work has involved inserting 4 hidden reinforcement concrete buttresses in the south wall, a hidden concrete ring-beam at eaves level and the addition of raking trusses to supplement the existing failed trusses and repointing.

Prior to work starting, the building was recorded by the Cranstone Consultancy. The same organisation also excavated the holes for the base pads of the buttresses. The works have been organised and financed by the Yorkshire Dales National Park with grant aid from English Heritage.

Further consolidation work is also planned for 1992 at Old Gang and Grinton Lead Smelting Mills in Swaledale and on Grassington Moor.

The data from the Yorkshire Dales Project, assembled by Mike Gill in the last Newsletter, should be available for consultation at the Bainbridge office of the Yorkshire Dales National Park from mid-summer'92. It is only a desk based exercise so the information will need field enhancement - up to date reports on the extent and condition of surface features will be welcome.

Robert White. YDNP.

Cornwall

The Mineral Tramways Project

Based in west Cornwall the Mineral Tramways Project is one of the most important mining heritage projects in the world. It is the largest of its type in Europe and part of it is being proposed as a World Heritage Site. The aim of the Project is to preserve and display to present and future generations one of the most important derelict mining landscapes in the world. The project area stretches across west Cornwall from coast to coast and encompasses the historic mining districts of Camborne, Redruth and St. Day.

For a century between 1750 and 1850 the centre of the world's hard rock mining industry was in Cornwall. At the height of the mining boom St. Day was described as the richest square mile in the world. Today the legacy of that industry still remains as derelict land and rapidly decaying ruins of engine houses.

The project which is being administered by the Kerrier Groundwork Trust, aims to conserve the engine houses, create a network of trails based on the old mineral tramways, linking together all the main heritage sites, and to provide visitor and interpretative facilities at specific sites as well as programmes of events such as guided walks and bicycle and horse rides.

When the network is complete, there will be over 100km of long-distance regional routes and shorter circular trails, which will link up over 40 mine sites on which stand over 70 engine houses and associated structures. Many of the engine houses stand in areas degraded by nearly two centuries of mining activity. The land is often highly toxic, contaminated with copper, arsenic and other metals, riddled with shafts and further marred by the recent tipping of domestic rubbish.

Through the U.K. Government's Derelict Land Grant Scheme, millions of pounds are being made available to restore these sites for wildlife and for people, by removing rubbish, covering the mine waste dumps and encouraging plant growth, whilst at the same time retaining the historic features and the unique atmosphere created by old mine buildings and dressing floors. Some derelict mine land has been left undisturbed for decades and the native heather and gorse have recolonised it, providing attractive wildlife habitats and evocative reminders of days gone by. Unless it is necessary to cap dangerous shafts, areas such as these will be left undisturbed.

The old mineral tramways were built to take copper ore from the mines to the ports of Portreath, Hayle and Devoran, for shipment to the copper smelters of South Wales, the ships bringing coal as a back cargo to meet the needs of the steam driven mine pumps.

Some sections of the old tramway routes are now used by British Rail, while others have been turned into roads, or built over. Many remain as public rights-of-way, where some of the old granite sleepers still survive. The old harbours, quays and ore bins also survive to some extent, but much has gone and more is lost every year. The Mineral Tramways Project seeks to safeguard what is left, negotiate for public access where appropriate, find alternatives where there is no hope of recovery and promote appropriate usage.

In addition to funding from the Government and Local Authorities, further financial assistance will be needed and a wide variety of businesses have already offered sponsorship.

Mining Magazine-May 1992

Cumbria

Force Crag Mine

Force Crag Mine in the Lake District has now closed and the Lake District Mines and Quarries Trust has bought the crushing and fines processing plant (excluding the flotation cells) for its museum.

NAMHO N/L.

Scotland

Gripps Level update:- At the end of March, the impounded water behind the blockage in the Gripps Level, Leadhills, Lanarkshire, continued to vent via the two shafts and the adjacent horse level. In addition a ground fissure near the penultimate shaft has opened and there is now a large flow from it. A result is that the flow at the two shafts has diminished.

The fissure could be on the line of the reverse fault referred to by Mackay* as evident in Gripps. The fissure is now seen as indicating that the blockage has been caused by a massive roof fall, and seems to suggest that there is an area of unstable ground in the hillside. The situation seems to have stabilised but has to be a cause for concern.

The Clyde River Purification Board have commissioned Babbie Geotechnical to investigate and they have had the Landale shaft on Susanna mine opened up in order to measure water levels. I understand these show that the head has been as much as 30 metres, but is now 20 - 25 metres. Steps are also being taken to monitor the flow at the horse level and the fissure.

In their report on remedial options it seems that Babbie Geotechnical find clearing the blockage would prove too expensive and suggest instead that the pressure is relieved and the situation stabilised, either by drilling bore holes from the valley floor to intersect with Gripps, or by making an open cut to one of the shafts and clearing this to the level. The latter option would have the advantage of providing access for pumps should it be found necessary to drain the level at some future date.

The report is now being considered by the River Board and the Hopetown Estates.

Gripps drains all the Leadhills mines via an estimated 8 kilometres of levels. It was begun in 1768 by the Earle of Hopetoun's miners in order to drain the Susanna and adjacent veins and was taken over in 1772 by one of his leasees, The Scots Mines Company. Susanna was reached in 1790 and by the 1840's Gripps had been extended to the south into Brown's vein, but at that time had not overtaken the older Poutshiel Drainage level.

Complaints about the problems of maintaining the level are a constant thread through the old records. In 1849 it was reported that some sections were "quite unsafe", and after the Leadhills Mining Company took over the whole ground in 1861, repairs included re-building the portal with an "iron pipe and well-hole".

The horse level referred to was driven in the 1860's as part of a programme

to use the Poutshiel level, whose original portal was on the other side of the burn, as a tramway out to an adjacent dressing floor. It seems probable that the water now flowing from it is rising via a shaft in the Mill vein, sunk from the level around 1900, and, or, the Borlaise (Wembley) shaft sunk to the Mill/Glasgow veins in 1924, for both linked with Gripps.

* Mackay.R.A. The Leadhills and Wanlockhead Mining Districts. Proceedings of Symposium, Non Ferrous Mining in Scotland. Institute of Mining and Metallurgy

Bill Harvey.

Wales

Report on Conservation in the Gwydyr Forest. R.W.Vernon.

1. Nant Uchaf Tailing Lagoon.

The tailing lagoon is being landscaped and surface water which was originally flowing into the Parc mine workings has been diverted. A large stope on the reservoir Lode has been capped, but access for bats has been retained. Several adits have been grilled in the area.

2. Hafna Mine and Mill.

All open shafts and adits have been "bat grilled", with minimal damage to the site. The fine spoil has been grassed. Several blind stopes have been filled in. Work has started on the mill which will involve repointing masonry and establishing a route around the site with interpretation panels at various points. Scaffolding has been placed around the smelter chimney ready for repointing and replacing missing masonry.

3. Cyffty.

Most of the spoil in the areas directly away from features of importance have been seeded. No alterations to tip profiles were deemed necessary. The eastern shaft has been located and capped. This was the shaft whose engine house was bulldozed into in the 1960's. The Eastern Engine shaft with the balance bob is currently being worked on. The ginging is being repointed and the shaft is being made ready for grilling. It is not intended to cap this shaft; the balance bob and pump rods will be "on show" to the public. Further work is to be carried out on site buildings, wheel pits etc., and an interpretation trail laid out around the site. The Gwynedd Archaeological Trust have surveyed the site and carried out limited excavations on various features.

4. Vale of Conway Mill.

This well preserved crusher house has recently been brought forward into the current financial year for conservation. The Gwynedd Archaeological Trust are to survey the site prior to repointing of the structures.

Feasibility Studies:-

Aberllyn and Penyrallt Mines.

A feasibility study has put forward various proposals for this site and a decision is to be made soon. As the site is close to Bettws y Coed, it is proposed to link the site in with a mines interpretation trail around the forest, which is going to be given Forest Park status in 1992.

Sites Approved for Feasibility Studies:-

Alltwen, Coed Mawr Pool, Pandora and Cae Coch have all been given the go ahead by the Welsh Development Agency for feasibility studies to be conducted. This will mean that features of archaeological importance will be examined and considered for conservation. It is likely that the Gwynedd Archaeological Trust will carry out the surveys. In all instances I am writing short descriptions of the sites to go out with the tender documents.

Other Sites:-

Recently the Gamfa Fawr site (see Mines of the Gwydyr Forest - Part 3) was destroyed by thoughtless action by the Forestry Commission. This was an excellent small site that illustrated hand dressing methods. Fortunately I did a survey of the site in 1985. A letter has been written to Professor Fowler of Newcastle University, Archaeological Adviser to the Forestry Commission, by John Bennett expressing disgust as to what has happened. It is hoped that the F.C. can put their house in order so that the right hand knows what the left hand is doing.

NAMHO Council Mtg. Minutes.

FOR SALE

Pre-publication offer of papers presented at the "Boles and Smeltermills" seminar held at Reeth, Yorkshire on 15-17th May 1992. Edited by L.Willies and D.Cranstone.

Contains over 15 papers detailing current research read at the seminar, considering aspects of lead smelting and manufactures from Anglo-Saxon times to the 19th century, including boles, smeltermills and cupola processes, and slag and silver processing, at sites in the South-West, Derbyshire, mid-Pennines and north Pennines, together with consideration of archaeological techniques based on botany, geophysics and geochemistry, and scientific examination of artefacts, slags and related products.

A4, paperbound, three column layout, 50-60 pages with illustrations.

Normal price £10 plus p&p. Reduced price in first three months after publication (expected July 1992) of £8.00 plus 80p postage. HMS members post free for UK only. Published by the Historical Metallurgy Society Ltd in association with the Yorkshire Dales National Park. Available from HMS Sales, Peak District Mining Museum, Matlock Bath, Derbyshire. DE4 3PS.

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:- John McNeil

The next Newsletter will be published in November 1992. Please send any material for inclusion to the Newsletter Editor, at the address below before 30th September 1992. Damian J.McCurdy, "Denefield", 111 Barn Lane, Golborne, Warrington. WA3 3PR.

Tel:- 0942 718192.

The views and opinions expressed in this Newsletter are those of the correspondents and are not necessarily agreed with or shared by N.M.R.S. its officers or the Editor.

The accuracy of submissions is the responsibility of the authors and will not always be checked for validity by the Editor.