

NORTHERN MINE RESEARCH SOCIETY

Newsletter February 1990.

The problem with starting the newsletter this time isn't so much having to apologise, as deciding which apology should come first. I suppose I'd better kick-off by explaining that, no we haven't given up including a nomination form for new committee members, nor are we being trend setters by sending it out with this one, its just that in the rush it somehow got forgotten when we did the last newsletter.

If you do fill in and return a nomination form, then please make sure that you have;

a) a proposer AND a seconder who are both paid up members.

b) the consent of the person you wish to nominate (Please consult them before nominating them as it can come as something of a shock to someone to find that they are on a committee that they know nothing about).

The rest of the apologies I'll ignore unless a plausible excuse comes to mind later, you can ponder yourself whether they be idiosyncrasies or boobs...!

Future Meets

Mar. 10th Annual General Meeting - Ascot House Hotel, 53 King's Road, Harrogate at 2pm to be followed by lectures and slides.
Evening 7.30pm for 8pm Annual Dinner. See booking form.

Mar. 11th Surface Walk in Yorkshire Dales. - Contact Malcolm Street for details.

April 13/16th South West England. Surface & Underground.
(Easter) Leader: R.E.Burns. Tel (0652) 635523.
Meet daily at Langstone Manor Caravan Park, Moortown, Tavistock, Devon N.G.R. SX523738, at 10am.
This meet will be a mixture of surface and underground trips, covering Datrmoor and the Tamar Valley. There will be something for everyone, even the kids and some members will be staying on to make a full week of it.

May 12th Day School- Men and Mines In Yorkshire. (see Nov. Newsletter)
Library HQ, Baln Lane, Wakefield, Yorks.
For users of British Rail, the venue is just around the corner from the station
Contact; John Goodchild 0924 371231. OR Harry Houghton 0532 758505 if you wish to attend

May 19/20th Cleveland Ironstone Mines. Surface walks.
Leader: Simon Chapman. Tel (0287) 76483.
Saturday. Meet outside 'The Miners Arms', High Street, Eston. N.G.R. NZ555186, at 10am. Visit site remains of Eston & Upleatham mines.
Sunday. Meet in car park, Tom Leonard Mining Museum, Skinningrove. N.G.R. NZ711192, at 11am. Walk around site remains of Skinningrove valley. Optional guided tour of Museum (fee payable).

Nov. 10th General Meeting - Sicklinghall Village Hall, NGR SE 364484, at 2pm., to be followed by President's "Talk-in" and Pie & Pea Supper.

Book Reviews

The Politics of the NUM - A Lancashire View by David Howell, published by Manchester University Press, Oxford Road, Manchester M13 9PL. 1989. Price - Hardback £29.95, softback £9.95. 231pp, no illustrations, copious references, index.

While a relatively 'heavy' academic book, this book is of value to mining enthusiasts with an interest in more recent history. From the start it offers a slightly different view to the left wing view of the Yorkshire miners. The Lancashire miners, while still supportive of their union, tended to be rightwing although in many ways they have suffered more. Even in the last few years the Lancashire mining industry has been almost annihilated. This relatively small coalfield produced great leaders like Joe Gormley and for its size had surprising influence even over the larger coalfields. The book is not easy to follow and as the author admits it needs more than a 5 year study of a twelve

month dispute to understand fully the politics behind the situation. Interesting to dip into but rather expensive. I.J.Brown.

At the End of the Rainbow - Gold in Scotland. by G.F.S.Adamson, published by Albyn Press Ltd, Whittingehame House, Haddington, East Lothian EH41 4QA. 1988. Price £6.95, 94pp, many sketches and location maps.

While not intended for the serious mining enthusiast this book, by a much-respected 'rockhound' for other 'rockhounds' has much to commend it. It is written in an easy to follow style well illustrated by photos, maps and sketches, and keeps very much to the point. It covers a topic of great interest (with three major international companies still active in the area today not counting the hundreds of weekend panners) and one on which little has previously been written. It describes the Kildonan Gold Rush 1868 to 1870 (with some remarkable contemporary photographs), gold mining in the Leadhills and other mining areas and even contains notes on the other gemstones and river pearls to be found in Scotland.

This is a most interesting book, of considerable mining interest and good value for money. It does have flaws, the 'gold-tinted paper' used has spoiled the photos, most now appear very dark and the system of referencing is quite unique! I.J.Brown

"Having read in the November Newsletter about publishers Bradford Barton, you might like to know that their 1970 publication:

A Harris: Cumberland Iron The story of Hodbarrow Mine 1855-1968 is still around. The price is £9.50 inc p & p. direct from us (Michael Moon, 41/43 Roper Street, Whitehaven CA28 7BS)

How come after nearly 20 years?.....

The publisher, now retired, rang me up about 8 years ago saying he had an offer to make me I couldn't refuse. What he offered us was 960 copies of the book, sewn sheets, no bindings which had been overlooked at the printers. We bought them all and had them bound up and used the original jackets. To date we have sold over 90%, and I don't think there will ever be a reprint. Its a well written book on good paper. 122pp, 21 illustrations and a map. It was published as Monographs on Mining History No. 2. Mint copies in the familiar orange banded dustjacket. (Every home should have one!)"

M.J.Moon.

For Sale - Back copies of NCMRS & NMRS Publications.

Jack Burnett has kindly donated his collection of our Publications for us to dispose with for our benefit. The Committee would like to record their thanks for this generous gesture. After making up the deficiencies in the Library set we are in a position to invite offers for the rest, which are as follows:-

NCMRS

Individual Survey Series -The non-ferrous mines of S.W.Scotland '67. Foster-Smith
-The non-ferrous mines of Denbighshire '72. Foster-Smith
-The non-ferrous mines of Flintshire '74. Foster-Smith
Vol.2 Nos. 1-4. Memoirs of NCMRS 1971/74

NMRS

BM1 - Memoirs 1975
BM2 - Bay Mine, Wanlockhead. '76. W.Harvey & G.Downs-Rose.
BM3 - Memoirs 1976
BM4 - Mines of Anglesey & Caernarvonshire. '77. Foster-Smith.
BM5 - Memoirs 1977
BM7 - Conlig & Whitespots Lead mines. '78. A.Woodrow.
BM9 - Llandudno Copper Mines. '79. C.J.Williams.
BM11 - Memoirs 1979
BM13 - Grassington Moor & Wharfedale. '80. NMRS Records.
BM14 - Manganese Mines of North Wales. '80. C.G.Down.
BM16 - Gallantry Bank Copper Mine. '81. C.J.Carlon.
BM17 - Cwmystwyth Mines. '81. S.J.S.Hughes.
BM19 - Memoirs 1980-82
BM20 - Caradon & Phoenix Mining area. H.R.Shambrook.
BM22 - Welsh Potosi Lead & Copper Mines of Cardiganshire.'83. Marilyn Palmer

- BM23 - Memoirs 1983
- BM24 - Metal Mines of Isle of Islay, Argyll. '84. Callender & Macaulay.
- BM25 - Memoirs 1984
- BM26 - Mines of Llangynog District (Powys). '85. R.A.Williams.
- BM27 - The Rheidol United Mines. '85. R.J.Prichard.
- BM28 - Memoirs
- BM29 - Lead Mines of Arkengarthdale. '86. L.O.Tyson.
- BM30 - Frongoch Lead & Zinc Mine. '86. D.Bick.
- BM31 - Talargoch Mine. '86. J.A.Thorburn.
- BM32 - The Bassett Mines. '87. Marilyn Palmer & P.Neaverson.
- BM33 - Yorkshire & Lancashire Lead Mines. M.C.Gill
- BM34 - Memoirs 1987.
- BM35 - The Goginan Mines. '88. S.P.S.Hughes.
- BM36 - Kelton & Knockmorton Iron Mines 1852/1923. '88. R.E.Hewer.
- BM37 - Memoirs 1988.
- BM38 - Lead Mines of Marrick, Swaledale. '89. L.O.Tyson.
- BM39 - Memoirs 1989

We would ideally like to sell them as one 'lot', but all reasonable offers will be considered. If you're interested in buying, then make us an offer and if its not a silly one the collection will go to the highest bidder. All replies to me H.Houghton. The cost of delivery, if appropriate, to be borne by the buyer.

Further To

My first reaction when I read the newspaper clipping about the subscription library at the village of westgate, and the claims therein (see last newsletter) was to make heavy use of the blue crayon and add the odd comment or two. Then I thought "might be short of copy for the next issue", so left well alone. After-all who am I to argue with the claims of a professional journalist ?

The Clans were roused, Scotlands honour was at stake, and Ron Callender never fails in the hour of need.

"Please excuse the delay in writing to you," he says," but it has taken a few days to recover from the shock claim that 'the North Pennine Village of Westgate... must be Britains oldest subscription library'. After all, it only dates from 1788 and the celebrations are no further advanced than bi-centenary!

It will be no surprise to you by now that Scotland has claim to the title with the Miners' Library at Leadhills which was founded by Allan Ramsay in 1741 and which was included in the events of 1986 to celebrate the tercentenary of the great man's birth in 1686. The library is, of course, still in existence and even if it were not, waiting in the wings is the Miners' Library at Wanlockhead which was founded a few years after the library at Leadhills."

Ron even offered copies of Allan Ramsay's poetry.....(which was a great influence on Robert Burns apparently) but there are limits to which even this rag will stoop.

As an aside to this topic, Bill Harvey has mentioned that 1991 will be the 250th anniversary of the founding of the library at Leadhills, and some thought is being given to marking the occasion, probably with a number of events.

Information wanted

"I have recently bought the memorandum book of one John Gibbons of Oswestry in Shropshire, a banker in that town but also a considerable investor and entrepreneur in various mines, who died in 1811.

I am writing a study of him, and I would be most grateful for information relating to any of his ventures. Indeed, in one case, despite using topographical dictionaries, I have been unable to locate the place concerned - Pen Cerrig Mine. Gibbons was closely associated with the Llwynymean coal mines and calamine mines near Oswestry, with coal mines at Mostyn, Ewloe and Chirk, with a mine at Meadow Town, lime quarries at Pant and Treflach. He had a major agricultural interest and produced large quantities of cheeses; he had a financial interest in Evelith Mill, in Dolobran Forge and Prescott Forge, in the timber and bark trades, in the Oswestry House of Industry, a local turnpike and the Ellesmere Canal.

Could any reader help with references to any of these concerns, please? If so contact John Goodchild, 12 Shakespeare Avenue, Normanton, Yorks. WF6 1EA."

"Can anyone help with information as to the background of the following men of Leadhills?

Richard Bray. Came to Leadhills from North Wales as mine manager in 1852.

Harrison Bell. Came from Derwent dale circa 1838 as overseer of the dressing plant.

John French Niven. Appointed manager circa 1861. I cannot find anything about him, so he may not have had a mining background.

Please contact Bill Harvey, 86 Beechwood Drive, Broomhill, Glasgow G11 7HQ."

Peter Hay of 8 Hove Park Way, Hove, BN3 6PS writes "I have just been reading David Owen's 'Canals to Manchester' which includes a mouth-watering account of his 1963 visit to the underground canal incline at Worsley. He says that these canals (there were 3 levels at Worsley, and they extended over many miles) are now inaccessible as barriers have been built inside the tunnel mouths to raise the water level to the roof.

Have we any readers in the North West or elsewhere who know if any access to the Worsley underground canal system is possible?

Owen also mentions other underground canal systems, to Wet Earth Colliery at Clifton on the Manchester, Bolton & Bury canal. Does anyone know what their present state is?"

Legalised vandalism

Ian Tyler has written wanting to know when the wanton destruction of our mining heritage in the Lake District will cease. The various examples he gives are:-

"Uzzicar" Borrow Mine Here stood a fine old building with slated roof, the "Old Smithy" built around 1865 by the "Keswick Mining Co". Has now been demolished.

"Howthwaite Air Shaft" Calebreck, Hesketh Newmarket. This small air shaft securely fenced has been totally filled in and the site obliterated. This was a rise driven virtually single handed by a miner named "Turner" i.e. Turners Rise. The rise was well off the walkers path and presented no danger.

"Air Shaft" Old Copper Level, Sandbeds. This ancient air shaft has been liberally filled with boulders and rubbish. This mine was cut prior to the 1800's. The site is ruined.

The mines of the Lake District are part of our heritage and they should not be forgotten. Towns like Conistone, Glenridding, Hartsop, Keswick etc., owe their growth and in some cases their existence to the mines and the prosperity which they gave.

What can be done to stop this on-going destruction, and on who's authority is it done?

"I am a young member and I would be glad to hear from any members who live ... and around Newcastle so that the prospect of AGM's single handed is not so daunting. I probably know a few of you already through the mining study, which brings me to my second point.

I was glad to see Mike's piece about the Mining Study. Many of you will know of the DOE's commission to Ove Arup already. We, the workers, have been gradually collecting data on mine locations since May 1988. These were originally plotted on the 1:50,000 geological maps, and have now been transferred to the 1:250,000 maps where only hatched boxes are used to depict the mining areas. Each box has its own number relating to a schedule which gives brief details on the mining area and the key references available. We are also compiling ten case study reports on a selection of mining areas e.g. Cumbrian Haematite mines and the Derbyshire Metal Mines. These accompany some technical reports on mine shafts, monitoring systems etc.

It is a large project to which some members have already made valuable contributions. The DOE are due to review our draft report in March and I hope, once we have gained their approval, we will be able to make some sort of presentation to the Society. I am well aware that this will be no small task, faced with such knowledgeable people, but I hope this overview will still be of interest. We seem to have succeeded in producing a set of maps which do reflect the awesome extent of our mining history".

So writes Jenny Lines (nee Sherlock) c/o Ove Arup & Partners, Bede House, All Saints, Newcastle upon Tyne NE1 2EB.

Those of you who attended to Pie & Pea Supper will remember being entertained with an illustrated tour of some of the mining sites in America given by Richard Hewer. Richard had also done a write-up on the visit, however due to the length it will have to

be published in serial form.

Part I.

Once again your local NMRS reporter has been scouring the world for interesting bits of information for our highly acclaimed newsletter.

For a change we decided to bring news from America, trekking high into the mountains of Colorado having first stopped at New York... Teeny Weeny Airlines were late and we missed our connection through to Denver.

Denver, a city sited a mile high, the most atmospherically polluted city in Colorado. You couldn't tell, although the sparrows did have a funny cough! Denver was originally a ranching town until Gold was discovered in Cherry Creek. Thereafter the gold fever spread across the region. Present day Denver is more of a major finance and mining centre.

Having caught our breath! we moved 30 miles north to Estes Park, a popular American tourist centre, but also ideal for walking and exploring the mines hidden in the forests. Lots of mineral shops, you can buy gold bearing sand, take it home and pan it in the garage...not very sporting, but still... From Estes Park the Trail Ridge Route leads over the Rocky Mountain National Park. The route steadily climbs up to an altitude of over 13,000 feet and allows one to see (as far as one can) the expanse of the Rockies, and to appreciate the climatic and geographical changes still taking place. At 13,000 feet effort has to be kept to a minimum, a twenty foot climb requires a 60 second rest, well it did for me anyway! Tundra flora hangs on to life by a thread, any change or damage (tramping feet) and it takes up to 400 years to recover. Later on we were to see the old 1880's waggon trails still rutted but not overgrown. Whilst descending the pass we saw trails leading to the old abandoned mines of 'Lulu' famed for boasting of rich silver ore but went bust. An 1880 report quoted assays as high as 240 oz of silver to the ton. Fort Collins Express stated:- "There is mineral all around Lulu; to the right and left, before and behind, to the east and west, everywhere but straight up...". The town boasted a population of between 50 and 200, but the lodes were never rich, share jobbing continued for a while until 1885 when the settlers started to drift away. John Shippler's 100 yard tunnel with it's white spoil heap remain. He never made much profit, but game and fish were plentiful. Now one can see the latter plus one or two cabins and an old bear trap.

Mine adits in this region are well barricaded with equally ominously illuminated warning signs scattered around and the park wardens are very active. (No doubt a hacksaw and wood saw could solve some of the obstacles).

We crossed the continental divide and continued towards Dillon and the 'Georgetown/Silver Plume Steam Train Loop'. This recently reconstructed rail line follows the tortuously routed trackbed of the original 1870's steam rail line which used to supply the famous Silver Plume mine and it's satellites sited along the valley flanks. As an unusual tourist trip it is worth the ride, if only to be towed around all the loops in an effort to gain height. Not a tremendous amount to see, but the guide did explain the history of all the surrounding mines and of the plans for the future. The stop halfway on the return leg took us to the Lebanon mine. Quite interesting and promises to be good when fully reconstructed. The trip up the adit to view a 'silver vein'?! was of the 'granny ilk'. One viewed a small sump, winch, stope, a half inch lead vein and miners lunch room.

The following day we made our way towards Leadville calling at the Climax molybdenum mine on the way. A great gouge in the mountain side clearly exposed the veins, we couldn't get close in, there were guards about. Apparently environmentalists have been active in this area and anyone carrying a camera is considered to be a Apache! The adjacent valleys are literally filled to overflowing with tailings, future sand deserts. Leadville was a little disappointing, most of the mining has been shaft works, however this is offset by the fact that anyone can wander over all the tips. Minerals abound, the minerals we buy in the shops as prize specimens are just lying around, especially iron pyrites. The method of collecting was simple, find a beauty-- carry it until you find a better one-- usually 30 second intervals. !!! We wandered up to the Emmet Mine. This mine was worked by Finnish miners. Their homes are still occupied and the mine buildings survive, even containing the remains of bedding, stoves, racks for tools, cups and plates etc. I can't tell you much more, I bought a book on the history of Leadville but my wife, Eileen has taken it away for a birthday present!! Still, there's certainly a lot more to be seen around town than time would allow us. By the way, it's OK collecting minerals but remember, one has to get the mineral passed the wife and then passed the customs man.

We continued our journey to Glenwood Springs where we visited a small settlement

called 'Marble' - real Hill Billy Country. Unfortunately the quarry was closed (it had supplied marble for Denver's State Capitol Building and other important constructions), however, one could walk through the abandoned saw and shaping mill (listed monument). This was very interesting. Hidden in the undergrowth were the stub ends of columns, square bases. Columns which had flaws in them and had been discarded. Thousands of cutting saw blades, rails, and slabbed marble. The local historic society had provided photographs of the mill in operation. Well worth a visit but you have to use your imagination.

Grand Junction provided a stopping place for a visit up to the dinosaur quarry (not bad - but how come David Attenborough managed to walk along the rocks picking up fossils - they wouldn't let me! Perhaps my accent was wrong! Southwards we roared across plains, through gorges and along rocky ledges to Uravan to see the Uranium mine. Well actually I told Eileen it was only a few miles off our track and wouldn't take long - I mentioned 90 miles, she thought I meant there and back, but that figure should have been 180 miles. She sulked a bit, but she got over it (three weeks later). Well there wasn't a right lot to see. Three large, bright yellow tailings dams covered with a white foamy topping. Looked a bit like a lemon meringue pie. The soak away leat fed into the Delores river, I mention this fact because the perimeter of the tailings was stuffed with 'Keep Out' signs and 'beware Radioactive'. I don't think I could give the containment effort a glowing report! The mine was sited over the top of a plateau and the mill was totally covered, including conveyor belts. King Solomon mine was also well hidden. There were a few old copper mines nearby which had worked zones of copper carbonate. At one part of the return trip we travelled near the edge of the canyon overlooking the Delores river. A staging ran along the canyon side about 50 feet above the river. This turned out to be a leat which had been constructed to tap water supplies in the dry season when the Delores turned into a trickle to feed the gold workings lower down the valley. However, it was never fully completed and even when it partially operated all the worthwhile gold had already been recovered.

From Richfield we turned south to the Arches National Monument. As we travelled towards an area famed for the indian pteroglyphs we spotted the hillocks on either side of the road glistening in the sunlight. This, of course, had to be investigated; they were covered in large selenite crystals. Many of the crystals were clear and up to 9 inches in length. The Arches Park is very interesting, lots of natural arch formations, trails and flora and fauna - a semi desert area - hot too!

We continued towards Bryce Canyon passing a small ghost town called 'Frisco' near Minersville. The mine 'Frisco' is under investigation once again judging by the drilling rigs. But the older workings can be seen up the hill's flank together with engine house and shaft head gear. We couldn't approach (Sunday), but I think we could have looked around if we had called during the week. The mine, in it's heyday, employed 4,000 people and produced 60,000,000 dollars worth of lead, zinc, copper, silver & gold, which were hauled out initially by mule trail and later by rail. By the 1920's only memories were left. Now, besides the mine and odd timbers from the mining town all that remains is an enclosed cemetery in the middle of scrub land. The graves contain the bodies of children from a few hours old up to about 14 years old who died at the end of the last century and into the first decade of this. There are also a couple of family graves. It was a sad reminder of those hard days and the desert was attempting to hide those graves still exposed.

See the next Newsletter for the final part.

Underground Loco Exhibit.

The Leeds Industrial Museum at Armley Mills has recently opened a new exhibit to celebrate the 50th anniversary of the first flameproof diesel loco to be used in a British coal mine. The exhibit covers the development of underground transport from hand carried baskets to horse-drawn tubs and the development of the shaft cage. The next improvement was the introduction of steam powered haulage engines and, in 1890, the Siemens trolley wire loco was introduced in USA coal mines. These were regarded as dangerous and the battery loco took over. In 1937, the Hunslet Engine Co Ltd began experimenting with methods of removing the exhaust fumes from diesel engines and the emission of sparks. They were successful and the first diesel loco was introduced into a British coal mine in 1939. The exhibit has four examples of diesel locos which

demonstrate the improvements made over the years. A mock-up mine level has been built with several examples of man-riding devices. The total cost of the exhibit was £100,000 and sponsors have provided £80,000 of this.

Mining Magazine. Oct.1989.

Caphouse museum don't seem too pleased, by all accounts, being a bit miffed that the world doesn't agree that they have the monopoly on all things mining North of Watford.

Cornish Mine Engine Houses

At the peak of mining activity in West Cornwall, during the mid 19th century, it is estimated that well over 1000 engine houses were in use, in this area of that county. Each contained a beam engine used for pumping, winding and stamping. Only a small percentage now remain scattered around the West Cornish landscape. Many of these will further decay and fall in the next two decades. Only those owned by the National Trust or enlightened landowners will survive.

Many of the houses were vandalised after the great mining decline for building materials, roof tiles, lintels, dressed stones. A few were blown up during the war as they might have acted as land marks for German air attacks on the nearby coastal command airfields. Others have been destroyed for no real reason.

One reads a lot about the great heritage of the Cornish mining industry, but little has been done to preserve this unique piece of industrial archaeology.

During the past few years I have been walking the cliff paths and lanes of West Cornwall, photographing and recording the general state of the engine houses. Some of the mines went by many names due to change of ownership and amalgamation of adjacent setts.

My first list includes mines along the north and south coasts, west of Helston, and the Porkellis and Wendron areas.

North Coast

St Agnes area

Blue Hills mine. SW 727518. Ruinous, little remains.

Blue Hills East mine. SW 728517. One engine house and chimney in good condition.

Wheal Friendship. SW 720514. Engine house in good condition.

Wheal Kitty. SW 725514. Engine house and two stacks all in fine condition.

Wheal Polberro. SW 718513. Excellent, house re-roofed, in use purpose not certain.

Porthtowan, Porthreath

Wheal Coates. SW 700500. Owned and being restored by the National Trust.

Charlotte United. SW 701490. Slowly falling, only two walls of engine house standing, top of chimney missing.

Great Wheal Charlotte. SW 701490. Owned by National Trust, ruinous and beyond repair.

United Hills. SW 699471. Fair condition, top of bob wall missing.

Wheal Ellen. SW 702468. Gables fallen but fine castellation on top of chimney visible.

Wheal Towan. SW 695475. Stack only.

Wheal Fox. SW 691480. Now private house and cafe.

Wheal Lushington. SW 681472. Modern working, chimney and flue c.1920, both good.

North coast west of St Ives.

Wheal Trevalgan Head. SW 481405. Both gables fallen, no chimney.

Zennor Consols. SW 444388. Ruinous, little remaining.

Gurnards Head. SW 438281. Ruinous.

Carn Galver. SW421364. Pumping and winding houses, restored by the National Trust.

Morvah. SW 407358. Ruinous, only stump of Engine house remains.

Pendeen

Wheal Heale. SW 370345. Stamp house in good condition, pump house in poor condition.

Levant mine. SW 370345 c. National Trust own a small winding house of the cliff edge, rest of complex slowly deteriorating.

Higher Levant. SW 371340. House on engine shaft in good condition.

Dotallack (Crowns shaft). SW 361338. Recently restored, used by the BBC in the Poldark series. Calcinerators at SW 363332 in poor condition. Engine house at SW 363333 ruinous.

Wheal Owls. SW 362328. Fairly good at present, but one wall starting to fall.

Wheal Edward. SW 362328. Decaying rapidly.

Boswedden Mine. SW 360323. Engine house ruinous, many other items of interest to be found on site.

Bosweddon Calcinerators. SW 360323. Chimney good, rest of site in poor condition.
Cape Cornwall. SW 350318. Stack restored, rest of site all cleared.

~~Boswone and Billa Well SW 350312 Chimney only.~~

~~Botallack Coast~~

Wheal Prosper. SW 594270. Engine house owned and restored by National Trust.

Trewavas Head. SW 600265. Two excellent houses in superb setting.

West of Helston, Tregonning Hill and Godolphin

Wheal Grey. SW 592291. Engine house and two stacks all in fair condition, near site of Cookworthys 1745 clay workings.

Great Work. SW 596307. Engine house in poor condition, both gables gone. Chimney good.

Wheal Wreath. SW 587301. Modern concrete remains only.

Old Wheal Wreath, Ladys Gwendolen Shaft. SW 586404. Chimney only.

Wheal Junket. SW 585317. Large engine house in fine condition.

Wheal Metal. SW 619298. Large house in fine condition but surrounded by rubbish. ('87)

North Tregurtha. SW 537313. Engine house being restored and re-roofed ('88).

Porkellis

Basset & Grylls. SW 694328. Engine house gradually decaying in rural charm.

Medlyn Moor. SW 707336. Engine house being restored ('87).

Great Wheal Lovell. SW 694304. Only two stacks remain.

East Lovall. SW 699315. A fine engine house near to A394 road.

Wendron

Trumpet Consols. SW 678304. Two engine houses in good condition. (Wheal Ann & Dream).

At many of the above sites only the engine house remains. The mining complex has been 'landscaped'. The following short list contains sites well worth visiting although interpretation can be at times difficult.

East Blue Hills; Wheal Coates; Wheal Lushington; Levant; Botallack; Bosweddon.

Ken Franey.

Roy Fellows article "Round and About in 1989" in the last newsletter has elicited a couple of responses.

The first, concerning Box Mine comes from Mike Breakspear who says that there are still three open entrances, Backdoor, Jacks and Lady Hamilton's II, also there are two connections from Jacks Workings to the rest of Box, these being Bat Route and Rem's Crawl. There are also many routes between these and Jacks Entrance, which according to Mike are quite passable.

He also mentions the deplorable practice of 'route markings', which he says are over abundant by far in the mine, many conflicting and some obscuring the old miners graphiti. (If you really must leave route markers, then why not adopt the practice of cutting old fertiliser bags into 3" to 4" long triangles, or arrow heads, and placing these pointing to the way out? They can then be collected when you are leaving. Ed.)

Finally I have been asked to point out that the Back Door is on land belonging to Mr. Price, Tel. Box 742734, who would appreciate a call before this entrance is used. He owns two large dogs!

Secondly, Dave Blundell, writing on official headed paper even, sets the record straight by pointing out that all the work Roy *thought* may have been done by the Lakeland Mines and Quarries Trust, had in some instances been done by Cumbria Amenity Trust and others.

Roy and I are members of a rather select group, amongst my pre-christmas mail was one letter (or more correctly it was a copy of a letter to another committee member) complaining that the newsletter was puerile, another that it was too academic and two saying how much they enjoy reading it. Which I suppose must prove something, even if it's only that "there's nowt queerer than folk".

Letter From China.

Ken Geddes, in his latest missive from the Orient, tells of during a visit to Sichuan Province (in Chongqin) he was told of 1,000 metre deep salt mines. After expressing some surprise at the depth in comparison with Winsford, it was said they were mining at 3,000 metres elsewhere in the province. Later the gaff was blown when he enquired of someone else, who told him it was only brine pumping via boreholes.

Chongqing must be one of the most polluted cities in the world. Part reason is the 'local' high sulphur content coal. "How local?" he enquired, "mined or opencast?"

"Ah.....well, not sure....."

Chongqing itself is honeycombed with tunnels, said to be dug as air raid shelters against the Japanese in WWII.

The dispatch included these two newspaper cuttings:-

Coal: achievements, problems and solutions.

China's coal industry has developed at the highest rate in the world over the past few decades, and yet it faces some serious problems which call for national attention, according to a recent report.

Since the founding of the People's Republic in 1949, China's coal industry has been developing steadily with an annual growth rate of 9.3%. In 1988, the country turned out 980 million tons of coal, second only to the United States. The rise has enabled China to increase exports of coal with last years exports reaching 14.2 million tons.

Small locally run coal mines have rapidly increased in number to 78,900 across the country. In 1988 these mines produced 332.5 million tons, or one-third of the country's total.

Mechanisation of coal industry has also been promoted with 32 mines having been modernised by the end of 1988. The mechanisation level in tunnelling and haulage went up from 24.5% to 55.5% in the 1978-1988 period.

On Sino-foreign co-operation, the report states that the coal industry has made use of US\$1.6 billion of foreign funds in construction and expansion of 13 mines with a combined capacity of 55 million tons.

Yet China's coal industry still faces various kinds of problems, such as the inadequate coal transport facilities and funds for building new pits as well as waste in coal consumption, which have seriously hampered its development.

from China Economic Weekly, Nov.'89.

Huge Coal Mine Planned

The Huaneng Fine Coal Corp. is developing the biggest coal field in the country.

Work is under way on the 25,500 Sq-kilometre Shenfu-Dongsheng coal field involving 12 separate coal mines with a total annual production capacity of 8.1 million tons. One mine, with an annual capacity of 600,000 tons, will go into production this year.

The coal field, with an estimated deposit of 230 billion tons of high-quality coal, is expected to supply 10 million tons of coal a year to the country by 1992 and 30 million tons by 1995.

The field is located in a remote area of Shaanxi Province near Inner Mongolia Autonomous Region. The government has concentrated on developing coal resources in Shanxi, Shaanxi and Inner Mongolia, where most of the country's major coal mines are located.

Xiao Han, Huaneng's president said their goal is to supply 45 million tons of coal a year for a century. To meet that goal, Huaneng will build a total of 1,100 kilometres of railway lines for moving coal from the mines to the Bohai Sea. Projects in the blueprint stage include 500 kilometre of highways, a new harbour with an annual loading capacity of 35 million tons and a 120,000 kilowatt power plant for the field. The estimated cost is 22.7 billion yuan (\$6.1 billion).

from China Daily, Oct. '89

The Datong coal field in Shanxi Province is the largest in China, with an annual capacity of 23.5 million tons and reserves of 37.5 billion tons.

The biggest coal mines in China include the Xinglongzhuang and Baodian mines in Yanzhou County, Shandong Province, Panji No. 1 mine in Huainan, Anhui Province and Xiqu Mine in Gujiao, Shanxi Province. Each has an annual capacity of about 3 million tons.

The Antaibao open-pit coal mine in the Pingshou coal field in Shanxi Province is the biggest of its kind in China. It was put into operation in 1987, with an annual capacity of 15 million tons.

from China Daily, Oct. '89.

Caldbeck Mining Museum & Outdoor Shop

Opening 18th March 1990 in Priests Mill, Caldbeck, a small private museum, specialising in Mineral Mining in the Caldbeck Fells and the Lake District, displaying original artifacts, mine plans, minerals, photographs etc. Guided surface walks to mine

sites a speciality. The Outdoor Shop will stock a range of outdoor gear including Cagoules, boots, socks, hats, mining books, minerals, lamps. Curators Ian Tyler & Warren Allison, Tel. 0228 41255.

Medway Mineral Fossil Fair - 30th June, 1990.

To be held in the Upstairs Community Hall of Hempstead Valley Shopping Centre, Gillingham, Kent (M2 motorway, Junction 4) from 10am to 5pm. The event, sponsored by the Medway Lapidary & Mineral Society (Tel. 0795 477745) will include sale of minerals, fossils, gemstones, jewellery, books etc. Admission 50p, children 25p.

Horse Cragg

Horse Cragg slate mine in Tilberthwaite Valley, near Coniston, in the Lake District has been re-opened. It was last worked 50 years ago, and is thought to be Britain's only working underground slate quarry.

From Daily Telegraph Jan. '90.

Gold at Tyndrum

Dublin-based Ennex International plc gold property in Scotland is located about 3 km southeast of the village of Tyndrum at the site of the Eas Anie lead mine which exploited a southwesterly striking vein structure accessed by two adits. In 1984 rock sampling showed the presence of gold and spurred Ennex to launch a 10-hole drilling programme. Gold was encountered in all holes down to a depth of 50m but, with the exception of two holes, values were disappointing.

Following a review of all exploration data an intensive exploration programme was re-launched in 1987 and drilling was stepped back to test the lateral extent of the earlier drilling intersections. This rapidly led to the discovery of the auriferous quartz-sulphide structure running parallel to, but a few metres north of the main Eas Anie lode. The gold-bearing structure, which is hosted by a succession of Dalradian psammites and pelites, was traced westwards over a strike distance of 700 m with gold intersected in 35 of the 55 holes drilled. Gold grades improved along the strike with intercepts of up to 13.5m at 29.14 g/t in the westernmost section. No hole has been drilled deeper than 300 m vertical depth and mineralisation remains open at depth.

By the end of 1987 Ennex had secured exploration licences with mining lease options over 100 km². A planning application was submitted for an underground operation programme of drifting and raising, the objective being to validate the ore reserve estimates above the adit level and provide data necessary for the full-scale feasibility study. Work on the adit began in September 1988 and is progressing at the rate of 20/30 m/week. To date it has reached 700 m and its planned length of 900 m will be completed by the end of 1989. Originally it was intended to extend the 'old man's' adit along the structure on the 448 m level but a decision was made to step back 200 m east and drive a new adit on the 400 m level. The surface drilling had indicated that the gold structure plunges west so that locating the adit at a lower level gives access to 0.2 Mt more than would have been the case otherwise.

Thus far the underground exploration has borne out the surface drilling, confirming the continuity of grade and structure. The structure averages 1.65 m in width in the section developed to date and the richest ore is concentrated along a well-defined hanging wall in the psammite. Grades diminish away from the hanging wall and tail off in a brecciated zone which forms an ill-defined foot wall. Mineralisation tends to favour the psammite rather than the pelite horizons because the former are more competent and the fracturing more open. Warp structures also give rise to thicker zones and better grades.

Close to the hanging wall the gold is sometimes visible but for ore reserve calculation purposes, where individual assay values exceed 60 g/t they have been cut to 60 g/t and values between 30 g and 60 g have been cut to 30 g/t. Gold occurs at 5 to 100 micron-sized grains, chiefly intergrown with galena contained in microfractures in pyrite grains. Wallrock alteration includes chloritization, sericitization and haematization. A later episode of more widespread non-auriferous quartz-carbonate-sulphide veining forms the basis of the historical lead mining. Both appear to be shear-zones associated with the main regional control, the Glen Fyne fault.

All contributions for May newsletter to H. Houghton, 29 Parkside Road, Meanwood, Leeds LS6 4LY. Tel. 758505. Any complaints - keep 'em to thisen. T.F.N.(T'fa For Now).