NORTHERN MINE RESEARCH SOCIETY Newsletter Nov. 1989.

I've apologised for some stuff over the years, but this is a first for this subject. Hands up all those who received a Sept newsletter in an envelope bearing postage of 46p. Next those who only got a Memoirs; now those who've had nowt or at best an empty envelope. Hopefully there is still someone with a smug look and a full set.

How could this state of affairs arise do I hear you ask? Simple. Strong glue. The batch of envelopes before last wouldn't stick properly because the glue was too thin, so we bought some with 'proper' stick the next time. Great in theory, pity about the practical. Once the flap was stuck it stayed stuck; the only snag was the time taken holding it down until then. In the first hour I'd done nearly twenty, only another four hundred and thirty to go! Plan B was unveiled. Lick flap... stick down... drop onto floor... stand on it with foot. Lick... stick... drop... under other foot. Lick... stick... hold. L...? Hang about, have you ever tried folding a newsletter and putting it together with the Memoirs into an envelope one handed? Not easy I can assure you. Things by now were, to say the least, fraught. Even the horse that had gone into the glue came in for abuse. The outcome was to send them out unsealed and hope for the best.

Win some lose some - we seem to have lost quite a few. The Royal Mail do at least send some of them back in tidy bundles. Unfortunately we don't know who lost what, so if you're without please tell us.

Covenants.

Although it may only seem like yesterday when you completed a covenant so that the Society could recover the income tax you had paid when earning your subscription, it is four years ago for most of you and the covenant has now expired. I can only continue to recover the tax if you complete another covenant. Covenanted subscriptions are vital to the financial health of the Society, and it is important that as many of you as possible take the trouble to do this (and also complete the certificate I send you later to show you do pay income tax).

The administration associated with covenants is quite considerable and, to make life easier for Sue and I, a blank covenant form is included with every newsletter. Unless you are certain that your last covenant was completed less than two years ago, please complete the new one and return it to me with your subscription; any new covenantors will be warmly welcomed. If in any doubt, complete it — it does no harm to substitute a new one for a part used one.

It costs you nothing extra so, look upon it more as a way of getting a donation for the society from the tax man.

G.B. Greenough.

(A lifelong ambition of mine, is to use my covenants to get the tax man to pay out more than I pay in. Ed.)

A.G.M.

Will you please make a note in your diary that the A.G.M. is now to be held on 10th March and not 25th February as on the meets card. This will coincide with the Annual Dinner and lecture session and will take place at the Ascot House Hotel, 53, King's Road, HARROGATE. N. Yorkshire. Commencing at 2.00 p.m.

Annual Dinner.

Seeing as how we are on the subject of the Dinner now is as good a time as any to tell you more about it.

The venue is as stated above, The Ascot House Hotel.

Following on from the A.G.M. and hopefully starting about 3.00pm, we have as in other years invited guest speakers to give a series of lectures.

Those for dinner (this means them wot 'as paid £9.50 to Bob beforehand) meet at 7.30 for $8.00 \, \mathrm{pm}$. start.

There is a choice of two menues, each of four courses, the decision you have to make is whether to have chicken or pork.

The hotel is offering reduced rates of £27 per single or £44 per double room per night including breakfast, service and VAT.

A booking form is included somewhere in this newsletter, so fill it in and send it off to R.E. Burns, 3, Queen Elizabeth Way, BARTON-upon-HUMBER, South Humberside, DN18 6AJ.

1990's Subs.

"...and now", as they say, "for the bad bit". Or the good, depending on whether you are paying out, or juggling the books as a treasurer.

On the 1st. January 1990 if you aint paid, then you aint in, so take the hint and

cough up now.

The kick when you're down as it were, is they've gone up. If you didn't pay yesterday then what you have to pay from now is as follows:-

FULL MEMBERS £10.00
ASSOCIATE £13.00
OVERSEAS £13.00
FAMILY 50

A renewal form is included with this newsletter for your convenience. (This means for you to fill in and send to Geoff.)

Easter Meet. 1990.

After an absence of a few years N.M.R.S. returns to the South West. To Tavistock in Devon to be precise, or if you're wanting to be really niggledy, to Longstone Manor Caravan Park, Moortown, Tavistock, Devon PL19 9JZ. Tel.0822-613371. The proprietor is called Mr. Allott.

Those who remember the last Society visit to this site will be pleased to hear that Herr Grumpyfuhrer, the resident commandant at the time, has now gone, along with his stock of ancient caravans.

There are new caravans for hire ranging in price from about £70.00'ish up to £92.00 inc. VAT. for the Yuppy de-luxe version. You are advised to book early: like now.

Easter next year is over the weekend of Friday 13 April, but there will be some members staying on for the full week.

I am assuming that more details will be forthcoming for the Feb. Newsletter, but in case you want to know more before then, you can contact Bob Burns at,3 Queen Elizabeth Way, Barton-upon-Humber, S. Humberside, DN18 6AJ. Tel.0652-635523.

Men and Mines in Yorkshire.

A Day School will be held at the Library HQ, Balne Lane, Wakefield, on Saturday 12th May 1990, dealing with the matter of HOW-TO-FIND-OUT IN THE HISTORY OF THE COAL INDUSTRY IN YORKSHIRE.

It will be conducted by JOHN GOODCHILD, M UNIV, author of many published works on the history of the coal industry regionaly.

The proposed programme will be as follows:-

10am. Growth, widening markets and technological innovation: sources and story.

11.30 The collier and the capitalist: sources and story.

1pm Lunch (own food), study of documents and informal discussion.

2pm The story of a colliery: the sources. A case study.

3.30 Discussion, questions, evaluation of the day.

If you intend to attend this Day School please let me (Harry Houghton, add. at end of newsletter) know.

Admission is free and there will be a large display of source materials.

Meets For 1990.

If, despite all that's been said recently, you are prepared to lead a meet next year, please contact little Johnnie and let him know where and when. (We may as well get our monies worth out of him before he goes)

All despatches to J.H. McNeil, 166 Irlam Road, Flixton, Urmston, Manchester, M31 3NB.

Further to

Following from the book review in the last Newsletter "Slate from Blaenau Ffestiniog", W.J. Houston sent the following comments.

"Page 3 mentions 'Penrhyn and Dinorwic Quarries of the Nantlle' being served by the

Nantlle Tramway; a cursory glance at any map will show how wrong this is.

Page 17 claims that the Oakeley Quarries closed in 1969/70 'out of the blue'. Speaking as both an earstwhile shareholder in the old company and being associated with David Saunders of Denbigh who scrapped some equipment at the quarries at that time, this

statement will not hold water. The business took a long time to die and it was obvious the quarries were leading up to closure for some some while even before the pumps were switched off for good."

Future Members?

Roy and Mary Starkey have been at it again. This time its a 71bs 6oz boy. (None of yer continental rubbish here - \pounds .s.d or nowt) The youth's birthday is on 19th sept. each year and he is called Brian Paul.

Seems they've acquired a taste for it; there'll be no stopping them now 'till they've produced their own society.

<u>Ta Everso.</u>

Its always gratifying to feel appreciated, even more so when the thanks come unsolicited.

"In view of the remarks about poor attendance on meets, you may like to know that there was a good turn-out at the Cromford meet last week-end. Roy Paulson not only laid on a superb days mining at Ash Tree on the Sunday, but also - when I told him I would like an alternative to the Saturday surface walk - sent me by the next post some photocopy information about the underground potential of Via Gelia Mines. It kept Ken Geddes and self busy all day.

I'm sure I wasn't the only one to say thank you to Roy on the spot, but this note records yet again my debt to Roy and his mates, and to the Wirksworth M.R.G. for the Rolls Royce winch."

Peter Hay.

Here! Here!

Now can I have a meet report?......Please!.....

Miners Library.

For one afternoon a month, just 12 members tramp up the stairs of Library House in the North Pennine village of Westgate, Co Durham, to use what must be Britain's oldest subscription library.

There, in a converted bedroom which holds almost 4,000 volumes, secretary and treasurer, Brian Hunter, checks a handful of books in and out.

The subscription is 5p per month - equivalent of the shilling villagers paid when the library first started in 1788. It has its roots in the prosperous lead mining industry in the area and the thirst for knowledge through books by miners and their families.

In 1850 Library House was bought by public subscription and left to a village trust. But the arrival, in the remote rugged dales, of the council's travelling library signalled a gradual fall in the subscription library's popularity with the 300 villagers.

As well as some old and interesting books on local history and the mining industry, Mr Hunter still has the original book of members which dates back to 1788.

Last year they celebrated the bi-centenary.

The state of the s

Derbyshire Mines, Ancient and Modern. April 22/23.

The Saturday morning meet at Sallett Hole Mine was well attended. Transport along the adit and roadways to the area of Deep Rake now being worked, limited numbers to two parties of ten in each, one slot left by a latecomer was filled by a stand-by member.

Originally, Sallett Hole was an adit to drain lead mines on Deep Rake along Longstone Edge and other smaller veins, it has been enlarged twice by Laporte Minerals who now use modern methods to extract the remaining vein material which has a high fluorspar content. Roadways are driven in the limestone, parallel to the vein, windows opened on to the vein and the 100m+ of vein material up to the surface fractured by charges in long vertical drills traversing the vein. Powered loading of the shattered material on to rubber typed transport is done through the windows. Working has now reached the east end of the vein below the water table, one member discovered the prescribed wellingtons meant the mansized variety, not the diminutive version worn in Leeds. The Society are deeply indebted to Laporte Minerals and to Nick Hardie for making this visit possible.

While this was in progress, the left-overs were conducted to the top of Longstone Edge to see the rake, more strictly where the rake had been. It seemed much further up than 100m. The shrinkage stoping had left a chasm 3-5m across and was well worth the walk.

The afternoon was spent at Magpie Mine site. The remnants of the 1880's engine house

for pumping, and the earlier winding drum are prominent, but there are also many shafts of earlier mines, the tops of which have been repaired and gridded by PDMHS, who hold the lease of the site and have done much work to preserve the relics. The meet leader had clearly done his homework (well, no-one had the nerve to contradict) and gave short chats on the main historical aspects. Members were faintly surprised to hear he had been round Magpie Mine during one of the many attempts to re-open it (in 1880? No, in 1953).

Sunday dawned with snow falling. Only two intrepid (or foolish?) people appeared at the meeting place and we rapidly decided that 2" wet snow was not the surface to walk over looking at old mines; the meet was abandoned. It was fine and sunny in St.Annes!

Gwynfynydd Gold Mine

"The reference in the Newsletter prompts me to write.

In June 1974 I was up in North Wales with a friend, and we decided to call on my old friend George Hall, then Manager of the mine. My map did not show the site, so I drove down the main road until I saw some men working, and stopped to ask one of them is he could help me. "I'm looking for the Gwynfynydd Gold Mine", I said. The man gave me a queer look and replied slowly "I've been looking for a gold mine all my life".

To those who do not have the Welsh may I note that the correct pronunciation is gwin-vunnith."

Justin Brooke.

Barton's Books

There can be few members who have no titles on their bookshelves from D.Bradford Barton Ltd.

From small beginnings at the bookshop in Frances Street, Truro, (where, it is said, old locals brought in second hand mining books for re-sale and which, today, would fetch very high prices) Denys Barton began publishing volumes on Cornish Mining History which were to become household names in mining history circles.

His Redruth & Chasewater Railway, 1825-1915 appeared in 1960 and was followed by almost a dozen books dealing with different aspects of metalliferous mining. Moreover, in addition to the reprinting of various old mining works (Sparo's regionalised guides, for example), Barton also edited the short-lived series Monographs on metalliferous mining history, of which five volumes ultimately appeared: Levant; Cumberland Iron; Botallack; Lead mining in the mid Pennines and The St. Just Mining District.

A move to larger premises at Trethellan House near Lemon Quay, enabled the publishing business to expand and concurrently titles by other authors began to appear. Hamilton Jenkin's series Mines and Miners of Cornwall and Nellie Kirkham's Derbyshire Lead Mining through the Centuries also emerged under the well-known engine house logo, adopted by Barton. A branch of the business which became Tor Mark Press, catered for casual readers - mainly annual holidaymakers - with such titles as The story of Cornwall's enginehouses; Cornish Shipwrecks; Cornwall's Old Mines; Tales of the Cornish Miner etc, these being 'flimsies' retailing at about 30p.

Eventually there was a move away from the 'traditional' Barton output, with a flood of railway picture books taking precedence, this, since such titles were presumably more viable.

The late 70's and early 80's saw a contraction of the business and Denys Barton moved overseas, leaving Trethellan House in charge of other hands. Ultimately, D.Bradford Barton Ltd ceased trading and, a couple of years ago, Trethellan House stood empty and sadly deserted.

Barton was a superb author, his writing technique being lucid and absorbing. It is to be regretted that his promised *Cornish Miner Overseas* advertised as 'in preparation' on the dust jacket of his last book, will probably never see the light of day. It promised to be his most interesting and important work to date.

Of all his works, two stand out as exemplary. They have been out of print for some years and are regarded by many as standard works on their subjects. Happily, they have just been reprinted.

Read on.

The Cornish Beam Engine 286pp. numerous plates & drawings. ISBN 1 871060 04 4 case bound £14.95
ISBN 1 871060 08 7 paperback £ 7.95
AND

A History of Tin Mining and Smelting in Cornwall 303pp, plates, maps.

ISBN 1 871060 03 6 Case bound £14.95

ISBN 1 871060 09 5 Paperback £ 7.95

Both published by Cornwall Books, Wheaton Publishers Ltd. Hennock Road, Marsh Barton, Exeter, EX2 8RP.

I am sure that anyone with an interest in steam technology and metalliferous mining history will have come across these titles. They are both packed with information and anecdotes, the latter often included as fascinating footnotes; both can be thoroughly recommended.

Some writers cannot seem to make history - be it mining or otherwise - very interesting; their work is both dull and tedious. Barton, on the other hand, had the knack of putting flesh on the bones of yesterday and of bringing events and characters vividly to life. Such are his volumes that they can be picked up and put down at random, time and time again; they are books of which one never tires. My own copies are "well used".

Further, the presentation, typography and general layout of Barton's work are pleasing in the extreme; I am unashamed to admit that they have influenced me very, considerably. It may be possible to see this mirrored in my own attempts in preparing N.M.R.S. publications for the printer!

These two reprints are a straight 'lift' from the originals and, if anything, the halftones have suffered a little in the process. However, no one could quibble about such a minor point and, bearing in mind the high cost of printing and binding these days, Messrs Cornwall Books offer these volumes at a very reasonable cost.

Without waxing too lyrical, there is a quotation from Carlyle which appears in the preface of Essays in Cornish Mining History which reads:

"In books lies the soul of the whole Past Time; the articulate audible voice of the Past, when the body and material substance of it has altogether vanished like a dream".

With his ten excellent books, Barton has done much to add weight to this truism. If you did not have the opportunity to purchase the originals some years ago then my advice is don't hesitate to invest in these reprints.

Dick Bird.

<u>Items from a Notebook</u>

Anthracite in lead smelting - The question was put to me recently as to why Eytons, the North Wales lead smelters, should have taken a share in Moreton Colliery, near Saundersfoot, Pembrokeshire, in 1828; and whether it was to secure a supply of coal suitable for smelting?

Anthracite from the mines near Bideford, in North Devon, was used successfully in the reverbatory furnaces at the Combe Martin smelter in the late 1840's. Pembrokeshire anthracite was of similar composition to that found in North Devon, but whether it justified shipping from one end of Wales to the other is debatable.

Any information on the use of anthracite in lead smelting, or the Eyton's coal mining connections would be appreciated.

<u>Huel Providence</u>, <u>Bere Ferrers</u>?, 1783 - In the Norfolk Record Office is an agreement between Christopher Gullett and Lady Buckingham re. a 64th share in Huel Providence 'New East Lode' dated 31 July 1783. This silver mine could be in the parish of Bere Ferrers, South Devon, where Gullett had extensive interests in the 1780's, but cannot be positively identified.

Has anyone come across the mine before?

MC 3/285, 467x

Shropshire Mines, 18th century - Recently identified in the Bristol Record Office, an assignment of mortgage concerning lead and copper mines in "the lordship of Neither Heath called Pennally" dated 1732. Pennally had been tentatively identified as Penally in Pembrokeshire, hence my interest, but the mines appear to be at Pennerley, near Stiperstones, in Shropshire.

BRO ref. 09467(7)

Any information? Contact Peter F. Claughton, Blaenpant Morfil, Rosebush, Clynderwen, Dyfed SA66 7RE.

Protecting Mine Sites

Almost every issue of the Newsletter contains news of yet another mine site destroyed or threatened, often by so-called 'reclamation' of 'eyesores' rather than any constructive use of the land. I am pleased to say that work is under way which should protect at least a sample of the best sites.

This work is part of the Monuments Protection Programme organised by English Heritage, a systematic review and updating of the list of Scheduled Ancient Monuments (i.e. legally protected archaeological sites). For the first time, scheduling is being systematically applied to industrial monuments. The review is being performed industry by industry, and the lead industry (including mines, wash floors, and smelters) is one of the first to be covered.

The method of working is that a first report on each industry is commissioned (from the Institute for Industrial Archaeology at Ironbridge in the case of lead) to set out the technological and chronological framework, define general priorities, and produce a shortlist of sites for protection. This list is passed to a consultant (myself in the case of lead) who visits the sites and reports on exactly what features are present, and recommends which sites should be protected.

My own involvement covers lead industry sites in Northern England (down to the Trent). As well as looking at sites on the existing shortlist, I am consulting the local experts in each of the orefields to ensure that all the most important sites are covered, and I do have the flexibility to add sites on their advice. Several NMRS members have heard from me in recent weeks, and have been extremely helpful. My brief specifically excludes underground mining remains (partly because of practical problems, and partly because, with no underground experience, I'm not the right person to advise on that aspect); I understand that English Heritage are talking to NAMHO about underground protection.

By the time this appears in print (I missed the deadline for September) the Northern England lead survey should be completed. However, there will be surveys of lead in the rest of England, and of other mining-related industries, so it would be no bad thing if NMRS members in each area had their ideas ready on which sites would merit protection (to be scheduled, a site has to be of national importance, for a defined reason).

It may also be worthwhile, where members know that a site is threatened and think it would make the grade for scheduling, to approach English Heritage direct with a request for emergency scheduling. The County Archaeologist will generally be able to advise on who to contact (and may be willing to do the formal part him/herself); failing that try a letter to 'Inspector for(county), English Heritage, Fortress House, 23 Savile Row, London Wix 2HE.

N.B. The above is written purely in a personal capacity, as an NMRS member, it isn't an official English Heritage statement at all.

David Cranstone. 3/10/89.

Round and About in 1989.

1. Plynlimon South Mine (Mid Wales)

I visited this small mine at 791839 early in the year and found that someone had been tipping untreated sewage down the shaft, they had even left a length of tanker flexi hose hanging down it, there was an emission from the run-in adit into the Nant Nod stream. (reported to Welsh Water).

Wemyss Mine

Here the fine wheelpit has been filled in.

3. Nantiago Mine

The timber cradle supporting the Pelton wheel is rotting away and the wheel itself is slipping down. The adit is open but very wet, and I am suspicious of the floor of the level where it is driven on the vein.

4. Aldersons Level, Rheidol Valley

This was blocked by a fall some distance in, however, the way ahead is now open, either by water pressure or the hand of man. The continuation is very wet and ochreous, the water has a P.H. of 4.4 (I expected my blue overalls to turn red!). This is due to sulphuric acid being formed as a product of the reaction of pyrite with the oxygen of the

air. The air in there is good however, there are some good formations, and a laddered rise leads to a small stope with an overturned ore truck and a few miners tools. The lower level has bad air.

5. Cwm Ciprwth Mine (North Wales)

The wheelpit has been cleaned out and restored, with concrete! I am a bit dubious about the aesthetics of this.

6. Greenside Mine (Lake District)

Progress below the 48 fathom level is now threatened by a large flake of rock which has detached itself and is now resting against a ladder support stemple, directly above the head of the next ladderway down. It is very easy to miss and I believe it is recent.

7. Box Stone Mines, Wiltshire.

The Clift entrance is now locked again. This leaves only Jacks and Backdoor. Jacks entrance leads to Jacks workings which connect with the rest of Box by one passage only, known as the V.S. route, (very shaky, it is) which I don't recommend. A passage (part of the O route) goes from Backdoor to Clift passage, the junction being at a water tank, but this has two major roof falls; the first (passable with care) at Backdoor, left as you go in; the second is solid and requires a complicated deviation to pass it, so I have marked the way.

8. Coniston Copper Mines.

Much work has been done in this area (Lakeland Mines and Quarries Trust, I think). Hospital level has walkways and handlines over the collapsed false floors; Deep level is accessible from South Shaft (180ft) and Gaunts is being dug. The workshop at Old Man slate quarries has also been cleaned out. Well worth the walk, Pelton wheel, generator, compressor, and other goodies to see.

Roy Fellows.

<u>Help Wanted.</u>

Does the name W. Dean mean anything to you? then John Dodds would like to hear from you.

Very little can be found out about Mr Dean, but it was known that he was at least associated with Hexham, and was a contemporary of Trevithick and involved with hydraulic engines. As far as John's researches are concerned, he appears to be a very elusive character.

If you can help to shed any light on this chappie then John can be contacted at;—Ashtree House, Slaley, Hexham, Northumberland, NE47 OAA. Tel. Slaley 673310.

Recorders News

1. The Society Records have grown significantly in 1989 because a small number of very active members continue to donate copies of their research notes. This growth is important because it allows the Society to provide up-to-date information to enquirers.

As part of the Society's long-term policy of methodically recording details of mining, dressing and smelting sites, I have overhauled the index for the Yorkshire and Lancashire Pennines. This now has around 1500 entries. Work has commenced on indexes for the North Pennines and the Lancashire coalfield, and the first draft of an index for the non-ferrous mines of Shropshire is almost complete.

2. In September, I presented a paper on "Customary Mining Law in Yorkshire" to the second International Mining History Congress. This was hosted by the German Mining Museum, at Bochum, and comprised of a series of sessions, on specific topics, which lasted five days. Each session had a chairman, aided by rapporteurs, who identified and discussed themes in the papers before it.

Because the German Mining Museum was host and the German Miners Union's pension fund, the City of Bochum and the Rhur Coal Company were the principal sponsors, the Congress was heavily biassed towards coal mining and its labour relations policy. It was interesting to observe the gulf which separates the approaches of academic and amateur mining historians. The latter tend to be concerned with producing descriptive narratives of particular mines and the former with constructing elaborate models of social or

economic behaviour which they apply to mining, textiles, transport etc. Each group has clearly a great deal to learn from the other.

3. During the summer, I provided a proof-reading service for a firm of civil engineering consultants, called Ove Arup, which was preparing a "Review of Mining Instability in Great Britain" for the Department of the Environment. This was a broad-brush attempt to locate all types of mines in Britain and thereby to assess the potential size of the instability/safety problems posed by abandoned mine workings. The study was based on the 1 Km grid squares, which were to be used as pictels in a series of large scale maps.

The payment for this work was used to buy files and other materials for the Records and to cover some of my expenses in preparing a detailed rebuttal of the Ironbridge Institute's report on the Industrial Monuments of the English Lead Mining Industry.

4. As a result of submissions by this Society and NAMHO, English Heritage has asked me to prepare a paper on underground non-ferrous sites of national importance. This will be used in discussing the case for extending scheduling protection to such sites.

Scheduling has hitherto dealt with visible or sub-surface features and English Heritage is reluctant to include underground sites because of the difficulties that its inspectors foresaw in their protection. Nevertheless, it agrees that there are important underground sites and that they should be identified and, if possible, a representative sample of them protected.

Designation as a Scheduled Ancient Monument means that a specified area of land, including the site and its curtilage, is sterilised and Scheduled Monument Consent must be obtained before the site is disturbed. Loss of scheduled underground sites, like those on the surface, is subject to natural decay and some may be lost through roof falls. Greater damage is often done, however, when landowners or local authorities block entrances and disrupt the mine environment. Whilst the protection given to a deeper site may not need to extend vertically to the surface, it may, therefore, have to include the means of ingress and egress.

Not all of sites will be readily accessible to the public, but not all ancient sites are either - those on MOD land, for example.

My paper will set out the categories and components of underground sites and it will include a <u>provisional</u> list of sites.

In order to establish the categories, with their constituent components, into which underground sites could be placed, I chose the processes which determined their origins. My suggestions are as follows:-

Categories of Underground Sites.

Mining: hand cut or fire-set levels; early use of black-powder for blasting; climbing methods; modes of working; stowing of deads; roof support.

Handling: hoppers; railways; sleds; windlasses; whims; self-acting incline.

Ventilation: fans; fangs; air-doors; stoppings.

Drainage: waterwheel powered pumps; hand powered pumps; steam powered pumps; water-pressure powered pumps.

The final date for submitting my paper is December 8th and contributions from NMRS members will be welcome until then. I need a full description of the site, however. Just a name is totally inadequate.

Mike Gill.

British Museum (Natural History) Dept. of Mineralogy Open Day 21/10/89.

Almost exactly three years to the day since the last Mineralogy Open Day in 1986, an enthusiastic crowd of familiar faces and friends gathered in the Flett Lecture Theatre at 10.25am to be welcomed by Dr Paul Henderson (Keeper of Mineralogy).

In his introductory talk, Dr Henderson reviewed the work and research activities of the Department as it faces up to the challenges of the years ahead, and looks forward to the 21st Century. Primary tasks include the continued requirement to characterise new mineral species, investigations into the structure and macroscopic properties of minerals, and work aimed at the prediction of stable mineral assemblages. The role of mineralogy in relation to earth and planetary sciences, materials science, economic studies and environmental issues was discussed. Using illustrative examples Dr Henderson explained the links between meteoritic research, isotope geochemistry and mineral structure. The Department is also involved in the development of applications for, and evolution of,

modern physical and chemical analytical techniques.

A new initiative of research programmes is due to be launched later this year targeted at the following areas:-

Crystal chemistry of minerals: Carbonate-bearing geosystems: Environmental mineralogy: Mineralogy and origin of ore deposits: Cosmic mineralogy: Gemmology

Turning to the Departments' extensive collections of mineralogical material, Dr Henderson contrasted the importance of the BM(NH) in relation to other major research institutions, concluding that the Department could be considered as the 'best in the world' for the number of Type specimens, systematic display, publication of important research catalogues and books. The collections are also particularly strong on a large representation of species from important localities. The gem collection is undoubtedly of 'world class' status.

In 1985 the BM(NH) assumed responsibility for the collections of the Geological Museum, and the task of integrating the catalogues and specimens is expected to take around 15 years to complete - even with the aid of computerised systems.

The museum are looking for new ways of using collections, and suggestions from museum visitors and the general public will be welcomed.

An interesting question and answer session followed Dr Henderson's presentation, including a debate centreing on use/over-use and 'wear out' of collection material, and proposals to re-house the mineralogy gallery and all geological material into the Geological Museum building. This latter topic created much concern amongst the audience, as the systematic display is seen as a vital resource both for serious collectors and newcomers to the hobby/science. However, this possibility is at present only a proposal, and clearly we as interested parties should ensure that the museum management board are aware of our views.

During the course of the day, the 350 or so visitors were able to take conducted tours 'behind the scenes' to view research equipment, meet members of staff, and view collection material not normally on display.

Our guide, Tony Wighton, proved an able and informative companion as he lead us on a strictly timed itinerary to the far flung corners of the Department.

Peter Tandy provided an interesting review of the history of the Museum and its collections, covering a period of some 250 years in 8 minutes, and encompassing a bewildering number of general elections and changes in the British Government policy towards museums.

Alan Hart, on this occasion manning the Russell Room, gave a fascinating insight to the work and recording of the German born mineralogist, Ashcroft, whose fine collection of Alpine minerals and photographs now resides in the museum. The opportunity to view a few drawers of the Sir Arthur Russell's 14,000 specimens was universally appreciated, but alas all too soon it was time to move on again!

David Bailey (not of Olympus fame) summarised the work being done to set up computerised catalogues, and illustrated the accession procedure for new material coming into the museum.

Roger Harding, the department gemmologist, described the non-destructive techniques used to identify gemstones, and gave an insight to the problems presented by the high quality synthetic stones now being marketed.

Chris Jones, in the rock and mineral preparation lab. explained the variety of equipment used to prepare and study thin sections of rocks, typically 30 microns thick, and also polished thin sections used for electron microprobe work and studies of opaque minerals, which range down to only 5 microns in thickness.

In the X-ray department John Francis demonstrated the painstaking process of identifying minerals from powder diffraction patterns, and the recent developments in technology which have meant that some 70,000 JCPDS data cards can now be stored on a single CD rom, with instant search and retrieval for any item, and room for twice as many records on the same single disc.

The final port of call on our tour was the electron microprobe department, where Terry Williams showed off the capabilities of a Hitachi S25000 Energy Dispersive Electron Microprobe. This instrument uses a 15KV electron beam, focussed to around 1 micron diameter to provide television images of the specimen at magnifications up to tens of thousands, and qualitative and semi-quantitative analysis of specimen composition. The rapid advances in this field now mean that an un-coated specimen can be used in many instances to obtain good image resolution and rapid analysis.

The last event of the day was a lecture by Dr Chris Stanley on the Minerals of the Caldbeck Fells, Cumbria. This talk described the background to a project which will culminate early next year in the publication of a lavishly illustrated book on the area. (Cooper and Stanley - Minerals of the English Lake District - Caldbeck Fells).

Dr Stanley recalled that it was from early discussions with two NMRS members that the idea to produce a monograph on the mines and minerals of the Caldbeck Fells first originated. Later, an approach from Mick Cooper, for assistance with an article destined for the Mineralogical Record provided a renewed interest, and following the success of 'Minerals of Cornwall and Devon' it was decided to approach the BM(NH) publications department with a view to producing the work as a full colour, authoritative reference on the area.

During the course of the day visitors were made most welcome in the Palaeontology Common Room - where Cally Oldershaw and her helpers (including at times some very distinguished mineralogists indeed) provided light refreshments, and friendly conversation.

A final mention must be made of the superb 'Rock Festival' exhibit being staged in the Geological Museum until 15 January 1990. This dramatic display, concentrating on the aesthetics of minerals and their portrayal in jewellery and art, has been specially conceived by the City of Strasbourg as part of its 2000th anniversary. The BM(NH) is the UK debut of this touring exhibition. If you haven't seen it yet - don't delay, truly a spectacle not to be missed!

The day was a resounding success, and we record our grateful thanks to the head of department, Paul Henderson, Cally Oldershaw and Bob Symes, the organisers, the tour guides and commentators who gave so freely of their time to make it a really worthwhile day out.

If you enjoyed the visit, please write to Paul Henderson, Keeper of Mineralogy, British Museum (Natural History), Cromwell Road, London SW7 5BD and tell him that you'd like to attend another Open Day in the Department of Mineralogy.

Roy Starkey.

Eston Ircnstone Mine.

At the time of writing, the extensive mine stable complex at California (Eston) faces imminent destruction to make way for housing. The surface evidence for the south-east section of the mine at Chaloner (Guisborough) is all but obliterated. Remnants of the pit headgear and houses at Barnaby Moor are negligible.

And yet Eston Ironstone mine was not abandoned until 16 September 1949. In its 99-year history, it had a marked effect on both the physical and the social environment of Teesside. Indeed, this could hardly be otherwise with a mine which, for twenty years, surpassed an annual output of one million tonnes of ironstone, and even as late as the 1930's produced 20% of Cleveland output. In total the workings produced more than 69 million tonnes, all of which was drilled and loaded by hand - a testimony to the large staff employed, particularly the miners and fillers.

Much of the history is as yet unrecorded. However, by a careful search on site, combined with systematic analysis of documentation, and by talking to people with memories of the mine, it is possible to make significant progress.

Cleveland Industrial Archaeological Society in conjunction with Kirkleatham Old Hall Museum are celebrating three anniversaries in the story of Eston: The 50th anniversary of the closure of Chaloner Mine, (12th August 1939): The 40th anniversary of the total closure of the Eston Mines, (16th September 1949): The 140th anniversary of the commercial discovery of Ironstone in the Eston Hills, (8th June 1850).

The museum is holding an exhibition titled 'Blue Billy'(the miners name for Ironstone) which will run from 12th August 1989. (For further information ring Redcar (0642) 479500.

Cleveland I.A.S. are running a programme of events comprising of trips and lectures, which although part way through, doesn't finish until April.

All contributions for the Newsletters to me please: H.Houghton, 29 Parkside Road, Meanwood, Leeds LS6 4LY. Ta everso!

Don't forget, if you write to any Society officers and want a reply, please enclose a S.A.E.

A MERRY DOINGS AND A HAPPY WHOTNOT TO ALL OUR READERS.