

NORTHERN MINE RESEARCH SOCIETY



NEWSLETTER

MAY 1991

FUTURE MEETS

- 16th June 1991 Llanfrynach Area. South Wales.
Leader P.F.Claughton. Tel.09913 578 for details.
- 29th June 1991 Beldi Hill Mines, Keld North Yorks.
Leader M.Street. Tel.0422 839749
Meet in Keld village at 11.00am. NGR NY893012
Underground, no ladder pitches. Plenty to see on surface for those not wishing to go underground.
- 30th June 1991 Same area as Saturday. More details on Saturday or phone meet leader M.Street for further details nearer the time.
- 13th July 1991 Circular walk from Staithes to Port Mulgrave, 3-5 miles. Viewing the remains of the Ironstone industry - weather and tides permitting.
Leader M.Street. Tel.0422 839749.
Meet at Staithes car park at 10.30am. NGR NZ782186.
- 14th July 1991 Meet at Staithes car park at 10.30am. NGR NZ782186.
Phone Leader M.Street for further details nearer the time.

SOCIETY BUSINESS

The Annual General Meeting and Annual Dinner was held at the Ascot Hotel Harrogate on Saturday 9th March 1991 and was attended by 28 members.

The officers gave their reports as follows:-

Editor

I hope the publication accounts are self explanatory but I should mention that it will be obvious that Aftersales were somewhat down on last year. This seems to be "Par for the course" as money has been tight and sales of books take a back seat in such cases.

Concerning the future, and particularly the next publication. Donations totalling £1047 have been secured by the author towards the cost of BM42 and a further donation is expected from the British Academy.

I have already had promises of material for the Memoirs and by the time we come to issuing this, there should be sufficient for a reasonable volume.

I am concerned about the usual problem of flimsy packaging and, since BM42 will be a weighty tome I think serious thought should be given to sending this one

out in better packaging if possible.

To conclude, I thank all those members who have supported our publications in 1990 and express my own thanks to the committee for their tacit support also.

R.H.Bird

Treasurer

The total membership at the end of 1990 was 468 which is 14 below that of 1989, the first decrease for many years. It follows several years where the rate of increase has slowly diminished and it is clear that we must contemplate a period of slow decrease unless we can find steps to change matters. At this date membership is 25 less than at the same date last year. We have had, however, a modest increase in the number of members who covenant their subscription and have returned the completed Certificates of Income Tax deduction.

The financial statement has been in the past a record of cash in and cash out during the year, very analogous to the Victorian cost book statement for mines. The figures however were not truly the Accounts for the year since they included amounts relevant to other years. The following accounts are therefore more representative for the year 1990

I regret that I overcharged for insurance for 1991. The NAMHO figure was not available when we sent out the subscription requests and my guess of an increase turned out to be wrong. It went down to 70p - not up to £1.

G.B.Greenough

Secretary's Report

I have received 23 membership enquiries this year, mainly from individuals. Other general enquiries include a teacher, a mining company, museums etc. I never realised how much useless paper the Secretary received until now. The Council for British Archaeology send a mass of papers about six times a year, usually minutes of past meetings or notification of a meeting to take place in a few days time. The Council of Northern Caving Clubs goes one better: if I receive notification, which is rare, it usually arrives two weeks after the meeting!

I have noticed from the minutes book that the Secretary's report of previous years showed a good attendance at field meetings. Unfortunately this has not been the case over the past year. Attendance at Society meetings, it's annual Dinner, and field meets has declined. Meet leaders who have sometimes gone to considerable effort to organise the meet are understandably upset when few people turn up, and they rarely offer their services again. This is the situation that exists now. If you check your membership card you will find only one meet leader who does not serve on the Committee. Since the recent questionnaire, of which we have had over 25% returned at the last count, shows members wanting field meets, we have produced various venues for this year, some old and some new. Please give these your support.

M.Street

PRO/Newsletter Editors Report

I have nothing special to report with regards to the Newsletter production except to tender my thanks to contributors and to implore other members to send in material to be included.

The main item of interest is the questionnaire which was sent out with the November '90 Newsletter.

I have now received 113 completed Questionnaires and the replies are summarised as follows.

Members prepared to submit in the future a) Memoir articles :- 25
b) Monographs :- 14

Replies not wanting Field Meetings numbered 7.

Popularity of convenience of Field Meet days:-	Weekends	73	Areas for future Field Meets:-N.Pennines	62
	Sunday	60	Cumbria	53
	Saturday	46	N.Wales	50
	Bank Hol.Wknd.	28	Derbyshire	45
	Bank Hol.	27	S.Wales	32
			Cornwall	30
			Devon	29
			Scotland	22
			Shropshire	6

Types of Field Meetings required :-

	Dry	Wet
a. Surface walks in a mining area.	[81]	
b. Surface walk with walk-in underground trip.	[86]	[59]
c. Underground with low degree of difficulty.(Walk & crawl)	[75]	[57]
d. Underground with medium degree of difficulty.(Short ladder pitch)	[55]	[42]
e. Underground with high degree of difficulty.(Long ladder/abseil)	[20]	[19]
f. Visit to working mine.		[79]
g. Preservation working party.	Surface [34]	Underground [23]

Support for local groups and their organisation was as follows :-

a. See a local NMRS group set up in your area?	[75] yes/no [16]
b. Co-ordinate a local NMRS group?	[22] yes/no [55]

First of all I would like to say that the level of response to the questionnaire was significantly better than I or my colleagues on the committee had anticipated. However the replies only account for something like one quarter of the membership and as such there is a message.

As one would expect those who replied are interested in taking part in some way in the activities of the Society. I would suggest that the vast majority of those who have not replied are by their own lack of response happy to be members in order to receive publications and the newsletter and perhaps to make contact with other members on a more informal and private basis. I would hasten to add that this is not implied in any derogatory way. It is quite a satisfactory situation for anyone to join for those benefits, in fact, such members are more than welcome and as can be seen from the above figures form threequarters of our society and are the backbone of it.

The purpose of the questionnaire was to try to ascertain the wishes of the membership so that the committee can provide or attempt to provide for those wishes.

Returning to the replies received there were some surprises with regards to the most popular days with Bank Holidays and Bank Holiday weekends showing to be not very popular.

It was also something of a surprise to find the level of support for field trips of the more arduous nature although there is no doubt that the threat of water soon gets the numbers down.

Also surprising was the level of support for local NMRS groups and of people seemingly willing to organise such groups.

The committee will now be examining these results in some more detail and reporting back to the membership.

D.J.M^cCurdy.

Librarians Report

Since taking over the Library in March 1990, we have loaned 72 books to 23 members and also provided a large number of photostats to a member in the States. All members have returned the books promptly and in good condition with the correct postage.

E.V.J.Greenough

The Society Officers for 1991 were duly elected as below:-

President.	J.H.McNeil. 166 Irlam Rd, Flixton, Urmston, Manchester. M31 3NB. Tel. 061 747 8652
Vice Pres.	R.E.Burns. 3 Queen Elizabeth Way, Barton-upon-Humber, S.Humberside. DN18 6AJ. Tel. 0652 635523
Jnr.Vice Pres.	J.Hopkinson. 4 Knights Way, Newent Glos. GL18 1QL. Tel. 0531 820462
Secretary.	M.Street. 7 Salisbury St. Sowerby Bridge, W.Yorks, HX6 1EE. Tel. 0422 839749
Treasurer.	G.B.Greenough. 22 Elmhurst Rd., St. Annes-on-Sea, Lancs. FY8 3JH. Tel. 0253 723987.
P.R.O./News- letter Editor.	D.J.McCurdy. "Denefield", 111 Barn Lane, Golborne, Warrington. WA3 3PR Tel. 0942 718192.
Recorder.	M.C.Gill. 38 Main St, Sutton in Craven, Keighley, BD20 7HD. Tel. 0535 35588.
Librarian.	Mrs.E.V.Greenough. Address and telephone as G.B.Greenough above.
Editor.	R.H.Bird. 41 Windsor Walk, South Anston, Sheffield, S31 7EL. Tel. 0909 563229.

There were then interesting talks given by Mike Gill on Grassington, Sally Bassham on the limekilns of Ribblesdale and the Hoffman kiln at Langcliffe and John M^cNeil on the field activities of the Society during the 1970's.

JOHN MICHAEL DICKINSON

The Society regrets to announce the death of its founder, John Michael Dickinson who died on the 22nd of February, 1991. The Society was represented at his funeral by John McNeil, Malcolm Street, Caleb Wade, Mike Gill and Hazel Martell. The last two later helped to carry out his wish of having his ashes scattered in Fielding Rake, on Craven Moor, Greenhow. An appreciation of his life and work follows.

LETTERS

Combe Martin Mines:- Were they typical of the English Mining Industry?

Having read with interest Mike Gill's comments on the Combe Martin mines in the November '90 Newsletter, and his paper on Mining and Proto-industrialisation in British Mining 41, the two not being unconnected, some clarification is required on the position of those mines against the industry as a whole.

Mike comments that the Combe Martin silver-lead mines of the medieval period were not typical of the English mining industry. Such a comment is too general. If by the "English mining industry" he means the lead industry, principally Mendip, the Peak and the Northern Pennines, then Combe Martin was certainly not typical of operations in those areas. But that is not comparing like with like.

There was no structure of operations which was typical of metal mining as a whole in England and Wales. Each branch developed in its own particular way, depending on its requirements and the constraints placed upon it. Combe Martin was typical of the silver-lead industry, which must be regarded separately from the lead industry prior to the end of the 17th century. The application of Crown privilege, the working of deeper deposits at an early date and the complex smelting and refining processes, all combined to make the industry capital orientated; and the impressed labour force of the medieval period were necessarily denied any independence.

There were of course exceptions; at Bere Ferrers in the mid 15th century short sections of the veins were sub-let to individuals and small partnerships. But the norm was for the Crown to grant leases of all ore deposits within a set area, usually on a county basis or to a lesser extent individual manors.

The small scale independent farmer/miner operations were certainly a feature of the lead mining areas, and of the tin workings in the South-West, with customary laws evolving to control working. But they played little or no part in the silver-lead industry. By the time it was released from the constraints of Crown monopoly the industry, although reorientated towards the production of lead rather than silver, required heavy capital investment to continue deep working of known deposits; and it lacked the tradition of independence ingrained in the established districts.

A situation similar to silver-lead prevailed in the copper mining industry of the South-West. The restrictions of Crown monopoly applied here too; and even when that was removed at the end of the 17th century by the Mines Royal Acts, the copper revival relied on large capital expenditure. The Cornish mines were already deep and the best ore worked out. Much richer deposits in North Devon, the North Molton Copper Mine (Bampfylde), although shallow and easily worked were granted as a whole to outside capitalist interests shortly after 1690; and by 1725 had developed in a form familiar to any mid 19th century mining company.

The mines on the Courtney estates at Molland saw a brief period when limited lengths along the vein were granted to small local partnerships but these had been superceded by 1725 with leases on a set area (tenement) basis granted to outsiders; eventually amalgamated to cover the whole estate. Examples such as these do not fit easily into the proto-industrial model.

To briefly comment on the role of the "German" miner. They had been a feature of the silver-lead industry from an early date; brought in to investigate the alleged silver/gold/copper mine at "le Hole" in North Devon in 1263; and appeared regularly as specialist "kings" miners, and occasionally as lessees (keepers) of the kings mines, throughout the medieval period. Providing a free flow of expertise across the North Sea. Capital too was similarly introduced on occasions, as with the granting of the Devon mines to the Friscobaldi at the turn of the 13th century and the arrival of

Hochstetter in 1528.

Over the years many mining historians have concentrated on the lead mining areas, particularly the Peak and Pennines as demonstrated by the location of the two leading societies, or the tin areas of the South West; giving perhaps undue emphasis to the customary laws. Silver-lead has often been regarded as an adjunct to the lead industry, which it had become by the 19th century, masking the fact that it was a separate industry evolving from the medieval period with an entirely capitalist structure; enjoying free access to expertise from the continent. Of these Combe Martin was a typical example; perhaps not the most important, but still significant.

Peter Claughton

Hathorn Davey Engines at Bigrigg

In the February 1991 newsletter there was an interesting and useful description of William No. 2 Shaft at Bigrigg, Cumbria. The equipment at this shaft was supplied by the Leeds firm of Hathorn Davey and comprised surface engine, quadrants, spear rods and shaft pumps.

Ordered by the Bigrigg Mining Co. Ltd. of Workington on 22nd November 1911, it was delivered on 31st July 1913. Built at Hathorn Davey's Sun Foundry to order number 6566, the horizontal non-rotative steam engine was triple expansion. The cylinder diameters were 27, 46 and 72 inches. They were arranged tandem fashion and had an eight foot stroke. Steam pressure was 150 to 180lbs per sq. in. and there was a separate jet condenser. Fitted to the engine was the suppliers celebrated differential valve gear.

Two surface quadrants were supplied to convey the horizontal reciprocating motion to the vertical spear rods in the shaft. Each spear rod was 40 feet long and there were eight sets of spear rod catches presumably arranged at regular intervals down the shaft.

The pumps were also of eight foot stroke and as supplied comprised two pairs of vertical pumps, each pair to lift eighty fathoms. They must have been arranged in two lifts as the whole equipment was designed to raise 75,000 gallons per hour from 165 fathoms. The cost of the full equipment was £6,586.

All this information came from the order books of Hathorn Davey & Co. Ltd. which have very fortunately survived, almost intact, from 1852 until at least 1936 and are deposited in the Leeds District Archives.

Another order supplied to Lord Leconfields Bigrigg mines was number 5090 for a compound condensing Differential engine, 34 and 50 inches diameter by 6 foot stroke. This was delivered in July 1894 and perhaps another member could suggest to which site it was actually supplied.

Simon Chapman

An Appreciation

John Michael Dickinson 1934-1991

John Michael Dickinson can be regarded as the true founder of the Society. Better known to many as Dicko, his interest in lead mining began in the late 1940's when he and a friend cleared a series of falls in the Deep Adit Crosscut at Cononley Mine. Around the same time, he joined the Bradford Technical College Pothole Club and later the Skipton based Craven Pothole Club. After three years of army service, part of which was served in Korea, he returned to Skipton and eventually became the leader of a Craven Pothole Club group centered on Stump Cross Caverns. This group was

digging for extensions to the Mongo Gill - Stump Cross system, which lead miners had broken into on many occasions. This reinforced his interest in lead mining and he began to collect material related to it. By the late 1950's, this interest had expanded to such an extent that it was suggested that the Mongo group form a club which would spend more time on mining. Internal tensions within the Craven Pothole Club were to precipitate this and by late 1959 it was agreed to form a new organisation based at Stump Cross. This was the Northern Cavern & Mine Research Society and Dicko was its first Recorder, getting together the first of what is now a large and nationally recognised collection of records. Dicko also designed the Society badge, Affectionately known as the railway tunnel, as it was somewhat unkindly thought to represent his interest in railways as well as mining.

Although a leading force within the Society, it was not until 1967 that he became its President, an honour which was repeated in 1984. His work for the Society was further recognised in 1975 when he was made an Honorary Member. Dicko was not a man to rest on his laurels, however. The 1960's and 70's saw him play a principal part in Society projects, many of which he initiated. These included the Grassington Moor Survey, Lumb Clough Smelt Mill excavation, the Hebden Moor Ropeway project, The Buckden Out Moor Smelt Mill excavation and the organisation of the Chimney Shaft project. He also wrote many articles for the Society, as well as a monograph on Greenhow, and published a popular book called "Mines and T'Miners".

He was one of the few members of the Society to have worked at the mines on Grassington Moor and Greenhow Hill. After they closed, he went back to civil engineering and spent the rest of his working life with Skipton based companies.

A man of dry wit and many interests, he also had great determination and considerable vision and was the driving force which kept the Society going through its early days and established it on the road to success. In the 1950's he took a correspondence course in surveying and was an early proponent of high-grade cave/mine surveying. He also taught himself to play the trumpet and later the electronic organ. In recent years he devoted much time to his other great hobby, steam railways, and qualified as a guard, working on the Embsay railway.

Although it was unusual to meet Dicko in a pub, his interest in beer was not confined to drinking it and, at the time of his death, he was planning the final stages of writing a book on the pubs of Craven, past and present.

As his co-founder of the Society, Caleb Wade said, "There was only one Dicko".

He will be greatly missed.

Mike Gill & Hazel Martell

GENERAL NEWS ROUND UP

The Russell Society

The Russell Society has now formed a North West Branch and will be holding meetings every 3rd Wednesday in the month commencing at 8.00pm. at Unit 16, Rowan House, Padgate Business Centre; Green Lane, Padgate, Warrington. All are welcome, but please check with the Secretary Rex Cook on 0282 64615 to confirm the time and venue.

Medieval Coal Mining

Medieval coal workings found in Leicestershire will lead to a rewriting of

mining history. They show that sophisticated methods were used in 1450, at least 100 years earlier than previously thought.

The remains of 100ft shafts, coal cutting galleries and oak pit props show evidence of the oldest accurately dated deep mines to be uncovered in England. They have been found at a British Coal open-cast site at Coleorton, near Ashby de la Zouch.

Archaeologists say that the finds contradict an assumption that the arrival of the German miners in the 16th century revolutionised mining in England. Tree-ring dating of the pit props by scientists at Nottingham university showed that they were made from timber felled as early as 1450. Coal baskets, jointed timber frames to support the shafts, two wooden shovels and a leather boot have also been found.

The discovery was made after aerial photographs showed dozens of medieval earthworks around the site. Fred Hartley, the Leicestershire museum service's archaeological survey officer, said yesterday: "There must have been professional, fulltime miners working here in the 15th century. It bears the hallmarks of being a sophisticated industry."

Craig Seton-"The Times"

Limestone Mines Infilling

Walsall Borough Council has received a £10M derelict land grant award for infilling more of its limestone mines. The Wolverhampton Street mines which underlie a heavily industrial part of Walsall bordering the city centre are the fourth group of mines to be given the treatment.

Last year the Borough won an ICE engineering award for its work with Ove Arup following the completion of 10 years work on the Littleton Street mines, also running beneath central Walsall.

The Wolverhampton Street mines have been known since the 1860's as a potential source of trouble. They are to be infilled by pumping a mixture of fuel ash, lime and water. The three year project scheduled to begin in the Autumn of 1991 in conjunction with Ove Arup will protect about 18 hectares of land. Approximately £7M a year is currently being spent investigating and filling old limestone mines in the area.

"Surveyor" March 1991.

Shropshire - Snailbeach

Shropshire County Council has acquired the derelict land at Snailbeach and are looking to the Department of the Environment to support them in their efforts to tackle the problems which exist there.

The Council is looking for a derelict land grant to help to fund a £1.4M reclamation scheme in the vicinity of Snailbeach village. A detailed engineering study by Ove Arup & Partners and Wardell Armstrong has been completed from which a scheme for the improvement of the area has been drawn up.

The County Council's policy is to ensure retention of all the mine buildings, 11 of which are listed grade two and the preservation of spoil heaps of archaeological, geological or botanical interest. Proposals for reclamation at Snailbeach principally affect the contaminated fine tailings heaps, the mine entries and unstable shallow workings which need to be treated for safety reasons. It is the intention that the historical features of the site will be conserved and presented as an industrial monument accessible to the public.

CUMBRIA

Whitehaven Museum

Aubyn Austin has written giving details of several interesting publications which are available from the Whitehaven Museum. A reprint is available for £1 plus postage of the "Stock Exchange Gazette" supplement dated 19th August 1909 which features The Workington Iron and Steel Company. This 12 page supplement contains several interesting photographs of West Cumbrian iron ore mines, six of which were owned by the Company.

The museum also publishes a contemporary account of the Coal Mines at Whitehaven in 1801-£1.50 plus postage. Also various reprints from the local press of pit disasters from 1910-1947.

Maps and plans of the mines at Whitehaven can also be supplied and there is an extensive archive of old photographs including many of the mines.

For further information, write or phone to:- Whitehaven Museum, Civic Hall, Lowther Street, Whitehaven, Cumbria. CA28 7AS. Tel.0946 67575. They can let you have a list of publications which covers all the above and much more. If you are passing, the museum is open from 9.00am to 5.00pm Monday to Saturday with a display of mining artefacts from the local mines.

Northern England

Weardale Minerals Ltd. is in Receivership and operations at Kambokeels, Frazers Hush, Grove Rake and Whiteheaps have ceased. The Blackdene processing plant is also likely to be closed. The Receiver has to date not accepted any of several offers which have been made by various interested parties. The Company holds extensive leases in the area including the Allenheads complex. There is also talk of a possible project to open a mine in the Nenthead area.

RTZ Corporation's Capper Pass tin smelter in the north of England is to close with the loss of all 489 jobs because low prices are starving it of suitable feed material. Capper Pass produces about 10,000 tonnes a year of refined tin from low grade feedstock. Tin prices are at their lowest level for 30 years.

In November 1988 the production was halved from 20,000 tonnes per year and had been losing money for the previous three years. Capper Pass was established in Bristol in 1830 and moved to Humberside in 1937 where until recently it was one of the largest employers in the area with a workforce of more than 1000.

It had a worldwide reputation for smelting low grade tin concentrates (20% metal) and tin in waste products.

South West

Geevor Plc. is currently negotiating the sale of its Cornish assets including the tin mine at St. Just which is the origin of the company which has now diversified into coal mining with operations at Mainband Colliery in Cumbria and Pinnacle Creek in West Virginia. It also has precious metals interests in Ecuador and Costa Rica. There is considerable uncertainty about what may be the outcome and the effect on the existing care and maintenance situation at the tin mine.

South Crofty & Wheal Jane the last two working tin mines in Cornwall were closed in February as the price of tin reached its lowest levels for 30 years. Wheal Jane would be allowed to flood after heavy equipment had been removed. Flooding would be quick since Wheal Jane is one of the wettest mines in the world. South

Crofty where the cost of production had been reduced to £3,500 per tonne would be placed on a care and maintenance basis in the hope that the tin price would recover in the future and make operations viable once again. There is reported to be about 11,000 tonnes of ore on the surface and 30,000 tonnes underground awaiting processing. A decision on a planning application for a £35m leisure complex on the Wheal Jane site is awaited by the company and it was hoped that this could provide funds to pay for pumping at Wheal Jane to keep future mining there as an option for the future.

Notes on a visit to Cornwall - Easter '91

On the way down to South Cornwall we called to see the Excelsior level on Kit Hill, an area which I had visited at Easter '90. Since then someone has cleared an area adjacent to the huge wheelpit above the portal to the Excelsior level revealing several circular buddles and low walls of what must have been a dressing plant, perhaps for the Excelsior mine. A word of warning - this area is on private property and is very well guarded by large ferocious dogs and fairly ferocious people as well.

Also visited later in the week was the Basset and Grylls enginehouse at NGR SW693328 which has been restored to make it a very fine example indeed. Apparently the restoration was done by an individual who was hoping to convert it into a dwelling. However planning permission was subsequently turned down. The result is very good for enginehouse enthusiasts.

Since I last visited the compressor house at Boswedden mine in 1983 it has suffered almost terminal damage, I think from storms. There is now only part of one wall left standing and most of the machinery has disappeared leaving just part of the compressor and the bottom housing of the small pelton wheel. The adjacent adit has also been blocked up. The nearby Porthledden mine has also suffered from erosion with the retaining wall and buddle above having now almost completely disappeared.

D.J.McCurdy

Wales

Anglesey Mining has yet to get the financial backing it requires to bring the Parys Mountain mine project into production. Finance should have been in place by March 1991 but there have been problems which have not yet been resolved nor has any statement been made by the company to explain matters to their shareholders.

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: G.B.Greenough, B.Sutcliffe, T.Jeffcoat, D.Blundell, M.Street, J.H.McNeil, M.C.Gill. A Roberts.

The next Newsletter will be published in August 1991. Please send any material for inclusion to the Newsletter Editor, at the address below before 30th June 1991.
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.

NORTHERN MINE RESEARCH SOCIETY

GENERAL ACCOUNT FOR 1990

INCOME	£	EXPENDITURE	£
Subscriptions	4163.54	Publications A/C	3524.78
Insurance	40.50	Donation-Friends of	
Income Tax Refund	647.78	Cononley	500.00
Interest	821.58	Stationery	342.12
Donations	329.69	Officers Expenses	260.21
Dinner	323.50	Subs.to other Socs.	53.00
Talk-in	40.07	Hall Hire	10.00
Miscellaneous	20.00	Insurance Premiums	50.40
	<u>6386.66</u>	Dinner	304.85
		Talk-in	55.25
		Miscellaneous	26.09
			<u>5126.50</u>
		Surplus income	<u>1260.16</u>
			<u>6460.31</u>

CASH ACCOUNT

	<u>Current A/C</u>	<u>Investment A/C</u>	<u>Total</u>
	£	£	£
Opening Balance	423.92	6097.62	6521.54
Closing Balance	669.00	6852.73	7521.73
Movement	245.08	755.11	1000.19

Adjusted balance at year-end £6460.31

G.B.Greenough

NORTHERN MINE RESEARCH SOCIETY

PUBLICATIONS ACCOUNT FOR 1990

INCOME	£	EXPENDITURE	£
Income from General A/C	3524.78	Printing	4578.52
Aftersales	1608.94	Stationery	90.04
Mineral Stats.etc.	157.50	Postage	773.64
Bank Interest	372.24	Editors Expenses	16.45
	<u>5663.46</u>	Sales Expenses	10.30
		Bank Charges	1.03
		Payment to Gen A/C	13.00
			<u>5482.98</u>
		Surplus income	180.48
			<u>5663.46</u>

CASH ACCOUNT

	<u>Current A/C</u>	<u>Deposit A/C</u>	<u>Total</u>
	£	£	£
Opening Balance	924.41	1910.83	2835.24
Closing Balance	607.87	2407.85	3015.72
Movement	-316.54	497.02	180.48

R.H.Bird
Editor.