

## An Active Start

We seem to have had an active start to the year so far, glancing down the "Meets List" produced by Adrian each month there appears to be on average at least 4 trips a month, with some months having 6 or 7 trips! This does not include informal Club "trips" like mid-week surveying training, MineCam drops etc.

On top of this a large number of members made it on the family trip to Cornwall, and quite a few attended the Gloucester CRO Rescue Practice, with all members making it underground, even if only to take part in the 'mucking out' of the kitchen area after the rescue was abandoned.

While trip leaders occasionally nash their teeth and complain about attendance figures on the odd trip, I think, with such a high level of activity that it is inevitable that some trips will be poorly attended. Not because members aren't interested in going on them, but because they are too knackered from all the other trips and that other little distraction - WORK!

## Underground Dangers

Probably the greatest unforeseen danger underground is one of gas, two incidents involving 'gas' of one sort or another have occurred since the last issue of 'Below'.

The first occurred during Gloucester CRO's rescue practice in April, when solid fuel, designed for initially igniting

a stove was used for cooking on instead. On its own not too bad, but in a small crowded underground chamber the fumes started making some people sick and generated a real fear of the presence of bad air.

Luckily on this occasion SCMC members, on a food run to the kitchen, arrived just as panic set in. By lowering the Club's Oxygen meter down into the chamber they managed to quickly defuse the situation before it got out of hand, then evacuated people in a more orderly manner.

The other incident occurred at Cwm Rheidol (see page 9 for details) with a genuine oxygen deficiency, unfortunately this time there was no meter available, but the members in the party recognised the problem before it deteriorated.

Both incidents highlight a problem which most of us tend to ignore, - gas monitoring. While the meters are generally expensive, the Club does possess one, and Club trip leaders should ensure that they take it with them.

If you are likely to be on a trip into new or recently re-opened mines or caves, try to learn the symptoms of oxygen deficiency, so that you can act promptly should the need arise.

Perhaps caving and mining clubs should put in an offer for all the redundant pit canaries that British Coal must have on their hands!

*Kelvin*

## Help Wanted

George Hall would like members to keep an eye out for a report on the "Geology of the Shropshire Lead Mines" by Arthur Waters.

The report was published, according to a mention in the Mining Journal, about 1880, when Arthur Waters was the manager of the Tankerville Great Consols, Roman Gravels and other Shropshire mines. The Mining Journal gave no indication as to whether the report was a separate booklet, or whether it appeared in some periodical, but it certainly was **NOT** in the Mining Journal itself.

Since Arthur Waters knew the orebodies of Shropshire better than anyone else before or since, his comments on the economic geology, even though they might not be written in a modern manner, would be exceedingly interesting.

George has searched every where that he can think of to find this report, but without a glimmer of success. If any Club members should happen across the report during their own research, please let George Hall know about it.

You can either send the details to the Editor 'Below' (address back page) or write to:

George Hall,  
17a Bridge Street,  
Kington,  
Herefordshire,  
HR5 3DL.

## Little Neath River Cave

An early drive down to Ystradfellte for a Sunday jaunt into Little Neath with Dennis Jackson as I latched onto a Hereford trip. It was a scorching day and everybody who passed me carefully explained that it was too good to venture underground. Relentlessly I continued to squeeze myself into a wetsuit. When was the last time I'd worn this? It seems to have shrunk a bit around the tummy!

The weather had been dry for the last three days and it was forecast dry, so there was no wimping out.

As it was my first visit to the cave Dennis, Phil and Kingsley democratically decided that I should not be denied the pleasure of going in first. So, with a wee bit of trepidation (the entrance is situated in and below river level) I crawled in head first through the stream.

In truth it was quite pleasant as the water was warm and not too high despite the constrictions of the passage. Phil assured me it was very dry by comparison to some previous trips and I assured myself that I wouldn't be going down it in 'wetter' conditions. The crawls ended in a short duck.

Our trip took us down the main streamway which is very active and can be followed, with the occasional oxbow bypass. The Canal is a wide, low bedding plane which stretches for about 150 metres and carries the entrance stream and all the water from Bridge Cave sump. In ideal conditions it is possible to swim and float down almost the entire length, but we had to crawl and doggy paddle our way through, emerging the far side with acute neck ache.

We continued down as far as the main stream sump following the streamway as closely as possible. On our return we bypassed the Canal by the aptly named Canal Bypass.

The exit through the entrance crawls was much more exciting as a caver's body acts as a plug to the inflow of the stream. Progress out consisted of fast little dashes to points where the water was less impeded. In truth I think it is unlikely you would get caught out in the crawls itself as they take only a few minutes to negotiate, but entry or exit might easily become impossible with only a slight increase in water flow. So, it is recommended that you have a sworn affidavit from a fully qualified meteorologist that their seaweed is going to stay dry and crispy for the foreseeable future, before venturing down.

*Alan Robinson*

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## AutoCAD Divers

The United States Deep Caving Team are hoping to explore what may be the world's deepest underground river with the aid of a unique computer designed re-breather.

The use of computer based software, and in particular AutoCAD's Advanced Modelling Extension (AME) has allowed the team to simplify what is usually a very complicated design process. Some potentially serious design flaws were detected by simply looking at a solid hidden-line model on screen!

Another major advantage of the process has been the ability to convert the entire solid model to an IGES (Initial Graphics Exchange Specification file) that could be read by a CNC (Computer Numerical Control) milling machine.

The outcome has been the successful development of the MK-3R re-breather, a 1,500 part under water breathing device which recycles exhaled oxygen by filtering out carbon dioxide.

It is intended for dives as long as 18 hours at depths of up to 300 feet - allowing divers to spend 3 to 5 times more hours under water than comparable devices currently used by the military.

In spring 1994, an international group of divers and their support team will attempt to explore the Huautla River in the state of Oaxaca (southern Mexico) with the aid of the MK-3R re-breather.

The team lead by Bill Stone, an engineer at the U.S. National Institute of Standards and Technology, plan to establish a series of underground camps along the river, which runs through the San Agustin cavern at depths of over 4,000 feet below the surface.

The divers will spend about 6 weeks exploring the river with a typical divers "day" consisting of up to 50 hours of exploring, followed by a long meal (allotted time 8 hours!) and a 24-hour nap.

*AutoCad Focus, Spring '93*

## Moelwyn Fawr Death

Towards the end of April, a teacher on a Mountain Leader Training Course fell to his death down a shaft on Moelwyn Fawr near Blaenau Festiniog, whilst sheltering in the adit from rain.

Members should be warned if visiting this area, a lot of seemingly innocent looking adits contain shafts at the end of them, so **DONOT** enter any without a light!

## Cavers Fair

A Cavers Fair will be held at Pindale Farm, Hope Valley near Castleton from Friday to Sunday, 9th - 11th July.

There will be various workshops and field trips laid on, along with rope testing, trade stands (Neal will be there) etc.

If you are interested in going, provision has been made for caravans, camping, car parking and catering etc..

Contact Neal Rushton or Ian Whitaker for further details.

# Bryn-Eglwys Slate Mine

## 18th April 1993

**Members present:** Nick Southwick, Steve Holding, Mike Moore, Liz Armfield, Colin Armfield, Tom West, John Howley, Alan Moseley, Pete Ward, Rob Southwick, John Davies.

### Objectives

1. Explore Level Fawr
2. Explore Daylight Level and bolt this level, also Main Shaft for exploration of level 25<sup>c</sup>
3. Explore level 15<sup>c</sup> via level 10<sup>c</sup>

All members met at the Craft Center car park in Corris, at 10.30 am. Owing to severe weather conditions we waited until approx. 10.55 am - Pete Ward volunteered to wait a bit longer in case anyone was a bit later.

We then drove on to Bryn-Eglwys slate mine. When we arrived at the site, the severe weather abated, but it was clear by the amount of surface water and the small streams, which were now roaring torrents, more like rivers, that water was going to be a

problem - particularly in level Fawr.

On arrival at level Fawr it was evident from the surge of water coming out that it would be impossible, if not dangerous to enter it!

We all then carried on up to Daylight level, to which a surprise was in store.

As members were looking down Main Shaft from Daylight level to level 25<sup>c</sup> some 90 feet below - out of which a torrent of water was issuing. A sudden roaring sound was heard coming from further up Daylight level. Out of the darkness came the answer to the noise, a large amount of water came down the level and cascaded down the Main Shaft. It was decided to leave the bolting of Main Shaft and Daylight level for a future visit!

Our next level to explore was Level 15<sup>c</sup> via Level 10<sup>c</sup>.

On the way up to Level 10<sup>c</sup> we past the site of Level 20<sup>c</sup>, which is now a large open pit due to the level collapsing,

probably from the practice of pillar robbing. Here was the reason for the sudden flooding of Daylight Level. The water which goes into the now open pit is usually a small stream. This was now a large river and the pit had filled to such an extent that a lake had formed and the water was so high it was overflowing into Daylight Level and Level 25<sup>c</sup>.

We all then continued up to level 10<sup>c</sup>, where at the last chamber the SRT rope was attached to two very secure bolted plates. Most of the party abseiled down to Level 15<sup>c</sup> to explore the workings, and the winches and trucks left on the level.

Some members stayed on Level 10<sup>c</sup> to video people going down to level 15<sup>c</sup> etc.

The visit to Bryn-Eglwys Slate Mine was enjoyed by all who took part and was well worth the effort.

*Rob Southwick*

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## Riddleswood Vein, Huglith 2nd May 1993

**Members present:** Colin & Liz Armfield, Pete Etchells, Stewart Tomlins.

We started off at the top workings where we descended an incline shaft to the Upper Riddleswood adit. The decent was 100 feet with the shaft being fairly narrow in places between the roof and the floor.

Descending into a large stope, timbering and a ladder were seen in the roof. We reached the adit floor and set off to explore.

Inward the adit ends with a short blind heading to the left. There was a lot of copper ore to be seen on the floor and in the roof. Pete free climbed up into some stoping but could not proceed; a ladder is needed to explore.

Outwards the adit ran to a large fall from surface, which probably represents one of the collapses above the portal.

Upon leaving the shaft, when we pulled the rope up we found a cut about half way through the rope which we think had been caused by a falling rock.

We then descended the stope at the bottom of the large tip, below the upper adit portal. This was 70 feet down a muddy dirty slope to a very large stope. In the floor there were many timbers and signs of a higher level. We descended via loose rubble to the floor of the adit where there were some rails in a short section.

By scrambling, Pete managed to climb up a pile of rubble but could not get any further. The workings seemed to be rather confused with loose floors which

had been stoped from below in places then backfilled. Account 12 mentions flooded stopes but we found all the floors to be dry although the mine abandonment plans show stopes from below meeting the level.

We then descended to the open stope above the portal to lower Day Level. This descends down a pile of rubbish to a short length of adit which is blocked in both directions. In the floor of the adit there is a very small underhand working which must post date the adit being used as a tramway.

Finally we descended Main Shaft, which is now blocked about 40 feet from surface. By climbing up we entered some very loose stopes to surface. At the far end the lode, in the roof, was about 10 feet wide of sparkling white and pink Barytes.

*Colin and Liz Armfield*

## News Round-up 1 by Ivor Brown

### Oil Well For Sale

The recent auction prospectus of Pitchford Hall makes the "celebrated bitumen well" a selling point - natural oil seeps should have a good market these days.

A recent British Geological Survey report also refers to an oil seep in the cellar of the Woodbridge Inn near Coalport Bridge.

### Surveys Continue

The Consultants Wardell Armstrong have recently been appointed to do a further study on the South Shropshire Metal mines by Shropshire C.C. It will include Tankerville Mine.

This is, in part, a follow up to a recent study by the City of Hereford Archaeology Unit which is a reasonable historical survey, about 67 pages A4 size, closely typed.

### Fluorspar Mine

IJB recently visited Laporte's new underground Fluorspar mine at Great

Hucklow, Derbyshire. It consists of a 2½ km drift, fully equipped with rubber tyred vehicles (no rails) and will replace the present Sallet Hole Mine (when the market picks up).

### Snailbeach

In May 1993 the Snailbeach Mine site is a hive of activity, several contractors are set up on the dressing floor area and they are capping shafts, relining the Day Level, filling the stopes behind Black Tom and conserving the Lords Hill engine house.

The engine house is surrounded by scaffolding and access is now possible to all parts. The ivy has been removed from the outside, but some wall stones have been displaced by ivy branches over the years. When the walls have been repaired the building will be pointed with special mortar from the top downwards.

Standing on the bob-wall is a very memorable experience - it is much wider than it looks from below and the view off the top is fantastic in good weather.

### NAMHO Isle of Man

Held over the weekend April 23-26, on the Isle of Man, this bi-annual event was attended by 3 SCMC Members (total attendance about 80).

There were two days of lectures on a wide range of subjects (IJB gave one on Mining family history research), and a series of very good visits, including the Laxey Mine man-engine (underground near the big wheel), Braddha Mines and others. There was certainly plenty to see on the island of mining interest.

### Retirement

IJB has now taken early retirement from Staffordshire County Council and has set up as a consultant working from home:

**95, Manygates Lane,  
Sandal,  
Wakefield, WF27DL.**

Telephone: Wakefield 257137.

He is always ready to discuss aspects of mineral working and planning, waste disposal and mining history interpretation.

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## Oldest Gold in the World

What is probably the oldest gold in the world, and certainly the oldest in the Middle East, has been uncovered in a cave near Samaria.

The cave can only be entered by crawling between the muddy floor and rocky ceiling of passages not more than 40 cm. high, into a cave containing beautiful stalactites and stalagmites.

While 140 objects were found on the 5 different levels of the Nahal Qanah cave, which no human had entered for thousands of years, the highlight is the gold - 8 ingot circlets, weighing a total of 1 kilogram. Two circlets are solid gold, 6 are electrum, that is 70% gold and 30% silver. Their origin is in the Chalcolithic culture, late fifth to fourth millennium BC.

The cave was apparently inhabited some 8,000 years ago by early farmers who grew cereals and vegetables, kept domesticated animals and hunted.

Ceramic vessels, sickle blades, flint arrowheads and clay spindle whorls have also been found. About 2,000 years later the cave seemed to have served as a burial place.

The gold circlets, stone beads, shell ornaments and a copper mace (one mounted on a wooden staff with a head of perforated hippopotamus tusk), are believed to be tomb offerings.

Source: *The Star in the East* vol. 111 No.2 Summer 1993 (*The Bible Lands Society*).

*Brian Tildesley*

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## Swallow Hole

A five million gallon lake **VANISHED** over night down a 20ft. hole earlier this year.

One day the two-acre man-made mere at Silksworth, Sunderland was the haunt of boating enthusiasts and waterfowl, the next it was a soggy bog.

The lake may have gone down an old mine shaft, or heavy rain could have opened a fissure in the rocks.

A council spokesman said:

*"There are so many underground workings here that the land below the lake is like a Swiss cheese, BUT we want to know where the water went and how the hole appeared..... some of our best scientific experts are looking into it."*

# South Shropshire Project

Over the years, the Club has intermittently explored and surveyed the metalliferous mines of South Shropshire. Some of this work has been published in Accounts, some placed in the Club library and a lot more kept in personal records. These mines seem to have been ignored by the Club in recent years, (apart from Snailbeach) and our knowledge of current surface remains and underground workings is out of date.

This was recently highlighted when we were asked to submit details of surface lead mining features for consideration of scheduling by English Heritage. We were unable to confirm which sites were worthy of consideration since we had not visited many for several years and did not know what condition they were in. There were probably others as well that had not been fully recorded. At the same time, we were asked to assist South Shropshire District Council in a survey of open mine entrances and it was apparent that our records were badly in need of updating. As we checked the sites, it was found that some features had disappeared, some were in-accurately recorded and some had been completely missed.

It was thus decided to carry out a comprehensive survey of the South Shropshire Mines over the next 2 years which will involve surface surveys of remaining features and underground surveys of accessible workings. At the end of this time, we will produce a 3 part publication as follows:-

- a) Surveys and descriptions of accessible underground workings
- b) Surveys, drawings and photographs of surface features with brief histories of the sites.
- c) Gazetteer with locations, references, total production, etc.

For this project, we need as much assistance as possible from members. This also includes Associates since many of these have valuable knowledge and skills. A regular meet takes place on each Sunday following the Club meeting and this will continue until the project

has finished. Dates for 1993 are:-

|         |         |         |
|---------|---------|---------|
| 4/7/93  | 8/8/93  | 5/9/93  |
| 3/10/93 | 7/11/93 | 5/12/93 |

Anyone wishing to attend should meet at the Snailbeach car park (NGR SJ 373 023) at 10am. All sorts of skills are required and you will be welcome for whatever you can contribute. The project leaders are Colin Armfield for the surface surveys and Neal Rushton for the underground surveys. We have already carried out a preliminary reconnaissance to list the sites for surveying. Although there will be one official meet per month, there is nothing to stop members exploring/surveying sites at other times. If you want to do this, contact the appropriate project leader who will advise on suitable sites.

## Project Update

### Sallies Mine (24/4/93)

**Members present:** Adrian Pearce, Brian Tildesley & wife, Stuart Tomlins. A surface survey was carried out of this barytes mine and there are several concrete machinery bases, a capped shaft and a well preserved brick magazine and fuse store. The adit is open but gated and there is no current access since it is used for a domestic water supply. The sites of shafts on the hillside above are now either collapsed or infilled. A further visit is required for some extra measurements.

### Huglith (25/4/93)

**Members present:** Colin & Liz Armfield, Adrian Pearce, Pete Etchells, Mike Moore, Neal Rushton, Nick Southwick, Stuart Tomlins. The intention had been to start a surface survey but wet weather meant that a reconnaissance was made instead. There are a number of buildings by the main shaft and the metal chimney is lying on its side. It was possible to ascertain the purpose of most of the features but some are still a puzzle. A number of open workings were seen on the Riddleswood Vein and these will be explored in the future (see Trip report on page 3). The engine house and chimney of Wescott Mine were visited,

with the permission of the owner in whose garden they lie. Stuart proved to be a perfect PR man - no female can say no to him! There are 2 open adits in the field to the south of here and extensive workings for copper are visible. Since Stuart knew the owners of Huglith Farm, he was sent to check out reported shafts in this vicinity. They told him that all had been filled but workings still occasionally opened up.

### Burgam Mine (13/6/93)

**Members present:** Colin & Liz Armfield, Pete Eggleston, Pete Etchells, Alan Moseley, Alan Robinson, Neal Rushton, Brian Tildesley & wife. Three of the lower levels were surveyed and preliminary measurements made of the buildings higher up the hill. It was impossible to carry out a surface survey due to the extensive vegetation and this will have to be done later in the year. The opportunity was taken for Neal to train some members in underground surveying techniques. At least one more visit is required to finish this site. A number of members and several from Dudley CRT took the opportunity to explore the upper level during the day and then went on to look at the Rock Mine.

It was disappointing to see such a poor attendance from members on what was a very important project. If you weren't there - **WHY NOT?** One day a month is not much to devote to putting something back into mining history. As well as helping the Club to update its records, you can have the opportunity to visit a number of mines that are just on your doorstep. You don't have to be a surveying expert, we need as many bodies as possible to help out - even if it is only holding a tape or writing down measurements.

For those that are interested in learning, this is the opportunity to learn surveying techniques in a practical manner. The meets list gives all the dates for future project trips this year - let's hope we get a much bigger attendance next time.

*Adrian Pearce*

# BOOKS

Shire Publications have recently published (or republished) several books in their range of Shire Albums of interest to members. One of the former is:

**“The Slate Industry” by M. Williams** (Album No.268 price £1.95).

Good value for the 35 pages of details and some 50 photographs of slate quarries and their equipment. This is only one of several on the extractive industries (others include: Tin, Copper, Quarries and Coal).

In the list of republished works there is one on:

**“The Industrial Narrow Gauge Railways” by I. Dean** (Album No.145 price £2.25).

This contains many excellent pictures of past railways especially quarry railways. Other books of related interest include titles dealing with Brickmaking, Limekilns, Charcoal burning and even icehouses.

All are of similar format and useful to have in every enthusiasts library.

*Ivor Brown*

**“British Mining Volume 46, The Grassington Mines”, by M.C.Gill** (published by the Northern Mine Research Society).

This latest publication from the N.M.R.S. is as comprehensive as ever. It covers the development of the mines at Grassington from the Norman Conquest up to the twentieth century and the present day on-site remains.

Additional sections cover the geology and Customary Mining Laws relating to the area and only serve to enhance a very thorough publication.

The section on present day remains is particularly useful and provides the reader with 4 different routes, of varying lengths, around the sites.

A very interesting book, well worth adding to your library.

*Kelvin Lake*

## The Return of Level Fawr Plaque

Older Club Members may remember the nice slate plaque that used to be at the entrance of Level Fawr, Cwmystwyth. Originally erected in 1898 by the Cwmystwyth Mining Co when the mine was re-opened, the plaque disappeared in the mid 1970's.

The North Cardiganshire Mining Club put up a glass fibre replica but that too was subsequently stolen.

Last Christmas the original slate plaque re-appeared, and was anonymously donated to the Welsh Industrial and Maritime Museum. This at least ensures (hopefully) the future of the plaque, and there is a possibility that another replica can be re-fitted at Level Fawr if the current proposed reclamation work should take place.

## Club Publications

All Accounts currently cost £3 (to members), available from Mike Moore.

### Account No.12

*A Survey of the Metal Mines of South Shropshire*

This publication is a revised and updated version by Steve Holding, taking into account a lot of the recent changes to the mine sites in South Shropshire.

65 pages, plus 17 maps/plans (which are legible this time!).

### Account No.14

*The Mines of Llanymynech Hill*

Originally written by Dave Adams, as Account No.8, this version has been edited/re-written by Adrian Pearce and includes reference to recent discoveries at ancient mine sites, plus 16 B/W photographic plates.

### Account No.15

*Snailbeach Recent Explorations*

A new publication written by Steve Holding, charting the Club's activities in exploring Snailbeach over the past few years. It includes sketch map sections of the areas around and below Chapel shaft and “Sheep” shaft etc.

### Account No.16

*The Mines of Lilleshall and Church Aston, Shropshire.*

Written by David Coxhill, this informative account, draws heavily on David's Geology background. It brings up to-date an old Club account originally written by Dave Adams.

### Account 17

*Snailbeach Lead Mine, nr. Minsterley, Shropshire.*

A short history of some of the surface remains of this fascinating mine site, written by Dr. I.J.Brown. Many of the buildings mentioned in this Account are currently being restored/preserved.

## 6 Mining Sketches

From the ‘pen’ of Malcom Newton. These superb drawings need **NO** explanation, you **CANNOT** afford to be without them! **Club price: £5**



## Mineral Spot

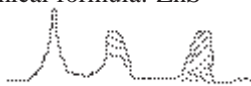
*Sphalerite* - Zinc Sulphide.

An important ore of Zinc and an abundant sulphide. It occurs in hydrothermal veins in all types of rock and is often found with **galena**.

It usually contains a lot of iron in solid solution, which affects its appearance. It is often a product of contact metamorphism of sedimentary rock by igneous intrusions (in other words a chemical produced when magma is injected into cold rock).

Also known as: **Blende, Black-Jack or Jack.**

Common chemical formula: ZnS



## Welsh Quarry Scenes



BRIDGE OVER CHAMBER 2 EASY OLD VEIN CWMORTHIN



DOLRHEDYN ROAD BRIDGE, TAN Y GRISIAU VILLAGE INCLINE

*by J.G.Isherwood*

## South Shropshire Project Update-2

### Crowsnest Dingle

The top Adit is still open and the site is very much the same as described in Club Account No.12

### Stapeley Mine SO 309992

Records for 1863-66 indicate 568 tons of ore worked from here by John Taylor & Sons.

The adit is still open, with about 18 inches of water. It goes in approximately 75 yards at an angle of 80 degrees. At the end there are 2 piles of loose fill on the left-hand side.

On the hill above are 2 depressions corresponding to the filled areas in the adit. Below these workings there are signs of another adit (now blocked) and some working floors. Shot holes were present.

### Cwm Dingle SO 296 980

This mine was possibly worked in collaboration with Weston (Church Stoke) mine.

The adit is open, but nearly blocked by a pile of rubbish and soil. Inside there is about 3½ feet of clean water. The adit goes for about 75 yards at an angle of 310 degrees, at this point we reached an area of stoping above and below adit level and could not safely proceed.

This level could be easily drained and goes further on. it should be noted that this adit is on private land.

### Watercress Level

#### SO 348 998

This adit is open with about 3 feet of clean water. On the right near the entrance is a silted up passage which seem to go on for some way, but was not investigated.

The main passage strikes 145 degrees at the entry and then turns almost due west until it finally silts up to near the roof. Along the adit there were recent survey marks (last 20 years). This adit is hand picked and shows no signs of blasting.

W.J.Lewis states that gunpowder had been used in Germany since 1670 for mining, but the first record in Wales was at Llanymynech in 1692. General use for blasting was about 1740. If this is correct it suggests a very early date for mining in the Tankerville-Roundhill area. This is possibly the oldest adit to be seen in the South Shropshire mining area and MUST be preserved.

### Callow Hill SO 386 049

Abandonment plans show a very long adit, but no directions. Dines mentions Powell Shaft and the position works out to be SO 384 043, where the shaft can be found just inside a gate. The abandonment plans show the adit going as far beyond Powell Shaft as it had already come. These workings are in a direct line with Snailbeach although not reaching the lode and probably relate to the requirements in the lease from the Marquis of Bath in 1880 to spend £2,500 on work at Callow Hill mine (about £100,000 today).

*Colin & Liz Armfield*

## Spring Vein Shaft

On Friday 18th June, the latest version of the MineCam (Mark IV) was put through its paces at Spring Vein Shaft, Ladywell.

This latest version is a full colour camera with complete pan and tilt control plus a natty "rain-hood".

For the descent down the shaft a wire blondin arrangement was used, coupled with a tripod made by Alan Taylor.

The shaft was descended 55m to water (the camera was nearly rested on the surface of the water). At this depth the shaft appears to have a mixture of trees and empty chemical tins under the water. The current "bottom" is about the same depth as discovered in the Air Shaft recently descended by Andy Yapp and Pete Etchells. It is thought that this almost coincides with Wood Level - although Spring Vein Shaft is not actually directly on the level, but might have been connected by a short cross-cut.

The technical details, as viewed by the camera:

### Spring Vein Shaft

Depth to water: 55m.

Average diameter: 2-4m.

Unlined through-out its depth, very rough rock sides, which creates interesting overhangs.

About 1m down there is a small cavity set in a pocket.

Several fault planes are visible, including slickensides at several places. Numerous shot holes can also be seen in the rock walls.

In places the shaft is almost elliptical, while in others it becomes almost 5 sided (an effect created by the fault planes).

There is a considerable amount of water running down the shaft.

### Surface details:

Overall depression of shaft at surface: E-W 8.8m diameter.

Shaft length N-S: 3.6m

A trench leaves the shaft area on its North side. Maximum width of trench bed: 2.3m.

## News Round-up 2

### Blue John Bakery

Speedwell Cavern have recently installed a Gallenkamp Vacuum Oven (of school chemistry equipment fame) to speed up the process that allows Blue John to be worked into jewellery.

Traditionally the process took several days and involved dipping the very brittle crystalline Fluorspar in a pan of pine resin, then curing it in an oven, before cutting it into slabs, the process was repeated until the "stone" was the right size for the piece of jewellery being made.

By using the Vacuum Oven, the whole process only takes 24 hours, and it makes it possible to cut far thinner sections.

### Rat Alert

Various journals and cavers are reporting "rat sightings" in Porth-yr-Ogof, so if you suffer from flu-type symptoms after visiting there it would be wise to get a blood test as soon as possible to check for Weil's Disease.

### First Chunnel Train

The first train passed through the Channel Tunnel, from France to England this week (23rd June). For safety reasons the high-speed engine was towed through by a normal French Diesel engine. The historic trip taking 2 hours to complete. While here the loco will undertake trials on BR tracks.

### British Coal

British Coal is to lease redundant pits to private operators after the High Court decision on the 26th May, to allow closure of the 10 mines at the top of the corporations closure list.

British Coal, which estimated that it cost £13 million a month to prevent the 10 flooding, will offer them to commercial firms along with another 10 collieries **surplus** to requirements.

More than 20 firms have expressed an interest in 11 of the mines and British Coal hopes to dispose of the first 4 or 5 shortly. Mines not wanted by the private sector will be abandoned.

Over 16,000 mine employees have taken redundancy since the initial run-down was announced last October and the workforce is down to 31,000 - a sixth of the total in 1985 at the end of the year long strike over pit closures.

The UDM have agreed to the closure of Cotgrave and Silverhill Collieries in Nottingham and BC will now move to lease or shut: Grimethorpe, Houghton Main and Markham Main in Yorkshire; Vane Tempest in the North East; Trentham in Staffordshire; Parkside in the North West; and Betws and Taff Merthyr in South Wales.

Arthur Scargill, president of the NUM vowed to continue the fight against pit closures.

### Men trapped

*Monday 19th April:* Three men were trapped underground 7 miles out under the North Sea at Wearmouth Colliery, Sunderland after an accident involving machinery.

This mine was the scene of a serious underground train accident last year.

The 3 men are thought to be private contractors brought in to maintain underground equipment. One man with serious crush injuries to head and legs was dead by the time the rescue team reached him.

### South Africa

A methane explosion 500 feet below ground, on the 13th May, at the Middelbult colliery, Secunda, eastern Transvaal which killed 53 miners has added fuel to the bitter row over safety standards in South African mines between the African National Congress, trades unions and the government.

The colliery is owned by the partially state-owned Sasol Corporation and produces coal for the massive South African oil-from-coal plants.

It was the second accident in the mining industry within 24 hours - earlier 5 men were killed in a rock fall 6,000 feet underground at a gold mine near Orkney, western Transvaal.



## Cwm Rheidol 1st May 1993

About a month ago Simon Hughes re-opened the silted up entrance of the lower level (No.9) at Cwm Rheidol. Due to the build up of water there was a possibility of a blow-out and the N.R.A. had requested the work to prevent pollution to the river. The mines in this area contain a large amount of Marcasite which forms the yellow ochre for which this mine is particularly notorious.

On this trip John, Rob Southwick, Mike Moore, Colin and Liz Armfield democratically decided to go into the lower level first; before tackling the adit at the very top of the hill.

We waded into the thigh deep water which quickly thickened into ocherous mud. The entrance was held up by original arches of bent iron rails supporting timbers and corrugated iron.

This went on for about 10 yards, thereafter just the timber frames remained. We stepped over one piece of timber fallen across our path and about twenty yards on found fallen timbers and mud which were partially blocking the adit. At one point 2 small jets of water were spurting out of holes in the hanging wall above us indicating that the rock was holding back a considerable force of water.

We had gone in about 200 yards when Colin thought "gosh this wetsuit is tight", Liz thought "How odd I've got asthma", Mike thought "Oh I am unfit, too many Balti's", Rob and John thought "that beer last night must have been powerful".

On we trudged for about 20 yards when Colin also felt a little dizzy (as did Rob). Colin leading stopped, at which point Liz said "Is there anything wrong with the ...", Mike said "Is anyone else puffing and panting?".

There was a silence lasting for a fraction of a second while we all realised what was happening, at which point, as one, we all turned tail and made an orderly retreat. Rob, the last one in the procession, who was the only other person to experience some dizziness,

had some difficulty in walking steadily out and Mike relieved him of his heavy bag of photographic gear. The preceding members of the group had obviously used up some of the available oxygen and he is of course closer to the floor than the rest of us - which could explain why he was the worst affected!

Never have 5 people breathed fresh air with such relief as we emerged.

What was special about this mine was the wonderful formations on the walls and the parts of the roof which had been touched by the water.

All was a glorious golden ginger colour, and there were smooth globular lumps, like the pustules of a giant blackberry in the joints. There were coral formations, clumpy groups and delicate tendrils un-spoiled by searching fingers, in every possible size and pattern.

There were delicate curtains as thin as a woven cobweb, and dribbles of a glistening black substance.

In some parts there appeared to be a layer of a stiff shellac like substance. From the beams tiny silver fronds hung, our lights revealing delicate hairs and drops growing from them.

In the bits of the roof where air bubbles had prevented the mud from touching the rock, the clean areas appeared blue because of the presence of so much of the complimentary orange coloured mud.

### Two Lessons maybe?

- 1) In hindsight, we should have taken the oxygen meter.
- 2) When exploring underground if you feel any odd physical sensations, you should speak out, **DO NOT** assume that it is just you!

*Liz and Colin Armfield*

### Editors Footnote

The problem encountered in the level at Cwm Rheidol, would appear to be that of oxygen deficiency. There are several 'classic' factors present in the above account, which give clues to the possibility of poor air:-

- a) A recently re-opened level that has been flooded for a considerable period of time.
- b) The large amount of timbering present in a very wet level
- c) The presence of a large amount of ochre or mud

The first 2, on their own, can be clues to a potential lack of oxygen, but combined should make anyone attempting exploration very cautious.

The third one, while also a potential contributor to a reduction of oxygen can be a source of a number of gases, (e.g.: carbon dioxide, methane and hydrogen sulphide) particularly if a lot of organic material is in the mud.

The answer is, take care when entering places where such conditions exist, and if you feel "funny" tell everyone else, because if the air is bad, chances are the others will also be affected too.

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## Coral Reef Surfaces

Over the weekend 23rd-25th April (the NAMHO weekend) a team of volunteers from the National Trust started work on exposing a coral reef in Knowle Quarry, near Ironbridge, a section of Wenlock Edge recently acquired by the Trust.

By exposing the 430 million year old reef it is hoped to get a better understanding of the sites geological history and the sub-tropical sea that it was part of. Sounds remarkably like quarrying by another name to me!

## Club Officers

**President: Alan Taylor**

**Membership Services:  
Mike Moore**

**Chairman & NAMHO Rep:  
Steve Holding**

**Tackle & Rescue Officer:  
Neal Rushton**

**Vice Chair: Malcolm Newton**

**Training Officer:  
Alan Robinson**

**Secretary: Adrian Pearce**  
*scmc.secretary@factree.org.uk*

**Treasurer: Bob Taylor**

**'Below' Editor: Kelvin Lake**  
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## Diary Dates 1993

The names in brackets indicate the trip organiser or contact.

**10 July:** Llanymynech Ogof [Mike Moore]

**16-18 July:** Caving in Yorkshire [Steve Holding]

**25 July:** Frongoch Mine, Mid-Wales [Steve Holding]

**7-15 August:** Nenthead Mines, Cumbria [Adrian Pearce]

**26 September:** Cave Rescue Practice Shropshire [Neal Rushton]

**16 October:** Club Dinner, Wroxeter Hotel, Llanymynech Ogof on Sunday. [Mike Moore]

**12 November:** Nottingham Caves [Mike Moore]

### 1994

**25-26 March:** 2 day celebration of 500th Anniversary of the birth of Georg Agricola, Chemnitz, Germany

**17-20 April:** I.of M. & M. Extractive Industry Geology Conference, Sheffield University.

