

SCMC 95

We seem to have set ourselves another hectic programme of trips for the New Year, ranging from South Wales and Shropshire, to Derbyshire, Nenthead, the Lakes and even Scotland and Ireland. Not to mention the NAMHO Conference in July! Despite this, very few trip reports make it into 'Below' - in-fact few are seriously mentioned at Club Meetings, so how about it, if you are on a trip why not write it up - the more the merrier.

999

As far as I can tell the reconstruction of Pete's accident is still scheduled for April (although this may change), just keep your eyes on the TV listings. I suspect it may appear in the first episode of the new series of 999 - unless they get the drinks bill from Cornwall first!

Photo Funds

To help raise funds at the Annual Dinner a certain photograph of a well known 'groaner' and the stunt dummy will be entered for the embarrassing photo award - unless funds are forthcoming to prevent its release to public gaze and/or the vice squad.

Warning

Whinberry Shortage

The landlord of the Stiperstones Inn is expecting to run out of Whinberry pies in the Spring. The crop of 1994 was good, but pickers were few. Whinberry picking was once very important to the local miner, not only for his diet, but to eek out his income.



E-Mail

I would like to thank everyone who has sent the Club e-mail over the last few months, it has been quite interesting to see how far 'Below' travels. This issue sees the publication of our first e-mailed article (see 'Gold', page6).

Incidentally I have been subscribing to 'The Cavers Digest', it does tend to swamp you with american trivia, (this morning I received over 100 pages of articles - actually 9 issues of CD, to cover the last 4 days!) There have been a few interesting items - I've given Adrian copies of Jan. & Feb. issues for temporary storage in the Library, but the sheer volume really prevents long-term storage.

For those of you with Net 'connections' you might like to know that the South Wales Caving Club Newsletter is now On-line (without pictures), the SWCC homepage is at: <http://www.acs.lamp.ac.uk/~malc/swcc/>

Snailbeach Remembers

Over the weekend of March 4th the village of Snailbeach marked the 100th Anniversary of South Shropshire's worst mine accident with a range of special activities. Including a memorial service to remember the 7 miners killed when the rope broke while descending the 252 yard deep shaft.

Thanks to all the Club Members who were involved over the weekend helping out both in the village hall and on the various surface events.

Mine Site Preservation

The South Shropshire District Council is applying for Conservation Area Partnership Schemes for both Tankerville and Grit Mine sites, with both sites possibly being listed. Tankerville is considered to be as important, archaeologically, as Snailbeach.

At the moment the Tankerville engine house is in danger of slipping down the shaft and urgent work is required on it. The 3 engine houses at Grit are also in need of treatment. It is hoped that funding for conservation work on the buildings will be available between June 1995 and April 1996.

The conservation work at Snailbeach is now also at an end and the site will be passed over to the County Council Leisure Services. The Loco Shed will form an unmanned interpretation centre with a key available to groups (if they can get in for all the 'artefacts' stored in there by the Club!!). A provisional footpath system has been agreed with the villagers working group, to try to minimise disturbance to residents.

Bilsthorpe Colliery

This colliery, scene of the tragic roof collapse in August 1993 when 3 miners were killed by the collapse of a roof bolted section of roadway, now has the dubious honour of being the first newly 'privatised' pit to be closed. Sold to Budge at the end of last year, its closure was announced towards the end of January. It is said that the pit only has 18 months supply of coal left.

Snailbeach

In December 1994, major reclamation works on the white tips at Snailbeach were nearing completion.

County Archaeologists had been on site during spoil removal to record finds. Most impressive were the brick-built buddles on the Halvans dressing floor at the lower end of the site.

An area of "samples" of waste has been formed for future collectors. The bulk of the tip area has been covered with a mat and 1 metre of imported soil.

Underground works at Perkins Level have been completed, a steel-supported adit entrance has been formed and underground access made to the Lords Hill workings. Snailbeach Day Level has been repaired (with steel supports) and the Engine Shaft chamber tidied, the shaft itself being covered by a steel grid.

Snailbeach Mine now has 2 tourist style mine entrances, although for the present there is no general access.

Blists Hill Mine

The recent issue of the "Ironbridge Quarterly" describes findings when Blists Hill shaft was being capped.

These include 2 insets at shallow depth, one of which contained 2 'V' shaped casings with rollers between them. They seemed to have been used to carry a cable from a surface engine to an underground haulage system.

Monktonhall Colliery

This pit near Edinburgh was visited by IJB in November 1994. It is the largest private deep coal mine in the UK. In 1991, 160 miners each put in £10,000 and leased it from British Coal.

Following near bankruptcy due to everyone being a "manager" and waiting for the profits, the miners have now appointed a real manager and started work again.

The pit is now making money again.

Draft Coal Structures

The Cranstone Consultancy have completed their draft of coal mine structures remaining worth preserving. 21 sites were considered in Shropshire.

They missed No.4 Enginehouse at Pontesford (up the lane) and the coal-mill waterwheel and rod site, looked at the wrong site for Dryton Coalfield, missed the Tar Tunnel, included Gitchfield Windlass (which was a clay mine), missed the Tuckies pit engine house and dropped the buildings at Kemberton pit, which impressed Peusner. The rest is Ok.

The 3 Pontesford engine houses are being put forward for the highest award for their "group" value, although much less remains of No.4 engine house it is part of the group and adds to its completeness.

Anthracite Mine

The EEC has approved a grant of £0.75 million to Ryan Mining towards the £12m needed to open up a large drift mine for anthracite at Pentreclwydau, Resolven, West Glamorgan. The mine already employs 75, but hopes to increase this to 120.

Images of Coal

The picture book "Images of Industry - Coal" published by the Royal Commission on Ancient Monuments, has been recently published (price £15).

It covers all aspects of the coalmining industry from bands to bath-houses supposedly, but finds nothing in Shropshire.

What about the Anstice Memorial Hall (memorial to a coalowner) and Fletcher Memorial Chapel, Madeley (memorial to the miners friend) and known as the "Chartermasters Chapel" because they built it for their workmen - both of which impressed Dr. Peusner in his books on architecture in Shropshire.

[Personally I was very disappointed with the "Images" book, Ed.]

The Moffit Story

Conclusion

An answer to the request 'Lilleshall Help' in the last issue of 'Below' can now be given. The accident which caused Mr. Moffit to be "sacked" seems not to have been a shaft incident but 2 explosions of gas at the Lilleshall pits in which 3 men died in 1884.

In both explosions the cause was use of open flame lights (candles?). In the first a coalminer died, in the second 2 ironstone miners. Inspector Wynne said the accidents were "owing to the grossest negligence on the part of all concerned, from the manager, chartermaster and fireman to the men themselves".

The manager Mr. Moffit had to leave the Managers House (Holly House) in 1885 and was in financial difficulties in 1886.

It is believed that Mr. Moffit was later re-employed by Earl Gower in North Staffs and died in office in 1896.

Inspector Wynne's son is believed to have become manager of the Stirchley Pits, near Dawley.

Other papers show that Mr. Moffit had also had an interest in an old smelt works at Coedpoeth, Wrexham in the 1870's and seems to have sold some properties to Henry Dennis of Ruabon and Snailbeach fame.

Ivor Brown

(with acknowledgements to M. Lane, R. Haszard, B. Job and Leeds Library for assistance)

Chinese Explosion

A powder magazine, at a lead/zinc mine in China, containing about 8 tonnes of dynamite exploded last Autumn killing at least 73 people.

Mining Journal

Chinese Pit Deaths

Over 300 coal miners were killed in China in 1993 (40,000 in the last 10 years), of these 200 miners drowned "in badly constructed shafts".

Engineering & Mining Journal



Croesor - Rhosydd Connection or SCMC and the Temple of Gloom

Just back from filming “SCMC go Plumetting in Cornwall”, a motley crew of rather damp individuals (Yes, it rains in Wales too!) decided to have a last crack at traversing the route between the two slate mines situated on the upper slopes of Moelwyn Mawr.

Blizzards, whiteouts, exploding dinghies, collapsing bridges and the delights of deep water were all to add to the days entertainment, in which a certain Dr. I. Jones wouldn't have been out of place.

The party of nine met at the Croesor village car park at 09.30. We set off up the incline on foot or in Neal R's bright and shiny new(ish) Discovery. The track up the incline had further deteriorated but with Alan Moseley walking ahead we eventually reached the entrance to Croesor. The party then split into two. The 'downhillers' consisted of Alan M., Neal and Steve Powell with a large amount of tackle.

The 'uphillers' were Liz and Colin Armfield, Steve Holding, Ben Shaw, Vicky and my-goodself. Our route took us on a hike over to Rhosydd's Level 9 adit which runs into the mountain for nearly half a mile. This is the lowest adit and consequently drains all the upper workings producing a sizeable stream. Fortunately we had already been well soaked by the downpour whilst changing and walking across.

From the end of the adit we worked our way up an internal incline, across and around a number of chambers on Level 6. Here a rough cut sloping passage takes you out of Rhosydd and into the Croesor mine (Floor A.?). The passage size is smaller here than the typical slate mine levels. At last the interesting part arrives.....

Floor A (?)

The old tramming level for Floor A has been undercut in several places where the floors of chambers had been taken out between pillars. A series of wooden bridges were installed to fill the gaps, but they have not stood the test of time very well. Hence, after a 6m descent into a now moist chamber, it was necessary

to swim or float across two chambers to a rope/chain, climb up onto a marooned section of level.

The next bridge was all but collapsed, leaving two choices: another swim or a Tyrolean traverse off some fairly dodgy belays. Whilst pondering this we awaited expectantly for the 'downhillers'. At last they arrived fresh faced and **DRY!**

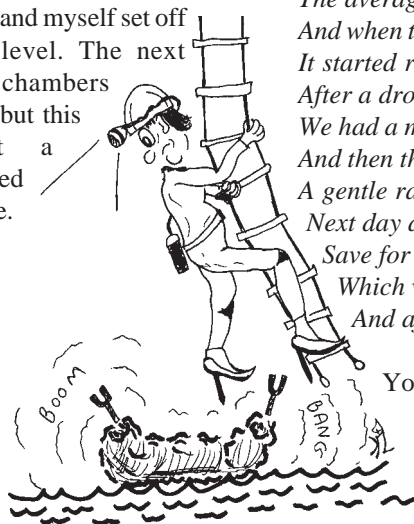
To help us on the next swim Steve P. kindly provided first class transport with a little blow-up dinghy. Neal and Alan valiantly steered their path to 'our' pillar using a rope which we had pulled across with an insitu line. Vicky was not so lucky. She descended to the dinghy, sailed across but her exit was greeted with a resounding bang, just as she clipped her jammer into the rope. The dinghy sank in less than 10 seconds, which goes to show that stilettos are not practical caving attire.

On hearing that the dinghy “*may be damaged slightly*”, Steve H. decided that he wasn't that desperate to see the 'other side'.

Snow where to go

Meanwhile back on the mountain Liz and Colin were counting snowflakes and wondering where had the rest of the mountain disappeared. The rain had turned to snow and the downpour was now a blizzard. Route finding was almost impossible and they chose a safer but long way back to the car via Cwmorthin. So, then there were 3.

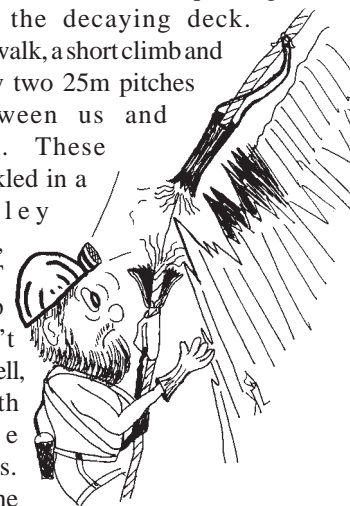
Ben, Vicky and myself set off along the level. The next couple of chambers had floors, but this ended at a slippery fixed line traverse.



Here, we inched our way across slippery slabs to the back floor of another chamber and then back along a narrow ledge and bold step to regain the level.

This was immediately by another bridge. This had a piece meal decking of totally rotted planks, but the main beams were okay (I think?). The trick was to keep to the line of the beam, while squishing through the decaying deck.

Another walk, a short climb and then only two 25m pitches lay between us and freedom. These were tackled in a gingerly fashion, as SRT and sharp slate don't mix too well, even with rope protectors.



Before the last climb, is a total morass of gigantic boulders strewn across the chamber, making navigation very interesting.

The two Steve's greeted us at the top of the last pitch to help haul tackle and let us know that it was still raining. We exited at about 19.30 after eight hours underground.

For those who travel to Welsh Mines often, I offer the comments of a New Zealander On their wet weather:

*“It rained and rained and rained
The average fall was well maintained
And when the tracks were simply bogs
It started raining cats and dogs
After a drought of half an hour
We had a most refreshing shower
And then the most curious thing of all
A gentle rain began to fall
Next day also was fairly dry
Save for a deluge from the sky
Which wetted the party to the skin
And after that the rain set in”*

You have been warned.

Alan Robinson



It may 'Go'

Imagine spending 1 night a week, every week for 3 years digging in a small, narrow, cold, wet, muddy, draughty cave with boulders dropping around you, all on the off chance that it might "go".

It takes a pretty determined sort of person for such a task, yet strangely enough the Cardiff based Morgannwg Caving Club (MCC) possess at least half-a-dozen people prepared to do just that.

Applying their talents to a small hole in the side of Pwll Ddu hill, below a tailings slope. While there are known caves to the North and West of here the area where they were digging is more noted for its coal mines (and the famous Pwll Ddu tramway tunnel), yet a British Coal borehole indicated that there were voids to be found in the limestone below the coal measures.

Such dogged determination deserves its rewards, and rewards it certainly got. After almost abandoning their efforts when faced with digging down to follow a stream and encountering continuously moving mud slides for walls and floors.

The long slow dig at Ogof Draenen looked like it might pay off in September 1994 with holes opening up at the bottom of the Club's 5m shaft. By October 6th the shaft was 8m deep and the hole was large enough for a person to climb down (as long as they didn't touch the sides or floors!).

Alastair Garman had the honour (?) of being the first to drop through to discover an open rift which lead to the head of a large pitch. The following evening an excited group of cavers laddered down into a huge chamber likened to Pant Mawr Pot, only bigger!

The dream had finally become reality. From this moment on the discoveries have come thick and fast, with a typical trip adding ½ to 1 km at a time to the system length. At the time of writing in the 3 months from October the cave has grown from a few metres long to become the fifth largest in Britain at 21km !

From all reports the system has an incredible mix of passages from dry routes to very wet streamways, and chambers ranging from vast caverns, that would almost put Snailbeach stopes to shame, down to small tight holes.

In such a labyrinth navigating is a bit of problem. Dig Hastilow who has already been on a trip there recounts entering small chambers with 6 exits, these in turn lead to other chambers also with multiple exits - only when you turn round to leave, which way did you come in?

Parts Unstable

At the moment there are still a lot of unstable areas with wet slippery boulders and hanging death. Morgannwg CC is understandably concerned in case there should be a serious incident as it will be almost impossible to get someone out (there have already been 4 accidents involving broken bones). To ease some of the problems the entrance series is being stabilised by concreting and scaffolding.

There is now a round-trip available through the system but a time in excess of 10 hours is normal for completing it - so don't forget the extra lights. This is definitely **NOT** a cave for novices.

Fossil Fauna

In several parts of the cave (notably in 'Beyond a Choke' streamway and the 'Big Bang' pitch area) a number of fossil fish have been discovered in the walls.

At first glance they appear as dark brown U-shaped pebbles, but have been identified as dorsal spines (Gyracanthus) and flat tooth plates (Psammodus).

Two small passages have been named after these unusual finds - one of which has a cross-section of over 5cm, (the fish NOT the passage) which may make it the largest currently known example of this genus.

Conservation

Considerable effort is being made to conserve formations and fragile areas of the cave.

In one section, known as 'Gilwern Passage', Pete Francis and friends have helped preserve some unusual formations on mud with the use of expanded foam, funded by the Brecon Beacons National Park - the next issue of Descent (No.123) will carry a detailed report on this novel technique.

In addition over 5km of tape has been taken in, to 'tape' off sensitive formations. Donations for this activity have come from the Countryside Council for Wales as well as other cavers and Clubs.

Surveying

As exploration continues there is a pressing need for the system to be surveyed, all visiting groups are encouraged/ requested to help with this, plus portering etc..

As groups push new passages they are asked to complete Grade 3 surveys, which are then plotted through Survex to allow for fast analysis of the finds.

This is also being followed up with a Grade 5 survey by teams from Hades CC, Chelsea SS and Morgannwg CC. If you look at the plan on page 5, and realise the 3-D nature of the system, I can't help thinking that it would make an ideal site for Kevin Russ (of Cornwall fame) to try out one of his 3-D plots.

Nothing to the West

So far the majority of the passageways discovered have been North-South and East, their direction controlled by a fault. The current hoped for breakthrough would be to find substantial westward trending passageways.

A promising high-level lead off 'Beyond a Choke' (near to where the dip of the limestone appears to level out), has lead to a small sump known as 'Bit of a Dive'. Peter Bolt has dived this but it becomes too tight. There are still a number of climbs in the main streamway, which may yield the hoped for breakthrough.



Prehistoric Paintings

On 24th December 1994 3 amateur archaeologists/cavers discovered over 300 glacial era wall paintings and a similar no of engravings in a cave at Vallon-Pont D' Arc in the Ardeche region of Southern France.

The paintings (in red and black) are unusual for their quality and include pictures of mammoths, bison, urus (wild oxen), ibex, lions, bears, horses, hyenas, reindeer and numerous woolly rhinoceros (some of them fighting), plus the only known prehistoric representations of a panther and an owl.

In addition to the paintings, tools, numerous footprints and the remains of fireplaces in the painted rooms were found.

Archaeologists believe that the paintings date from the Solutrean (early Palaeolithic) era 18,000-20,000 years ago (during the ice age) and think they were painted by a single artist or others trained by him/her. The majority of the pictures are 40cm high, but it is thought that the larger animals may have been painted as objects of worship, since a bear skull was found set up on what looked like an altar.

The cave or "Grotte Chauvet" as it is now called (after its discoverer) is several hundred metres long and formed from a large collection of galleries, each about 60m by 30m. The entrance is through a 500m long tunnel which had to be excavated in places due to roof falls.

The discovery was not announced until mid-January, this year, to give the authorities time to gate the entrance and install TV surveillance equipment. They are determined not to repeat the mistakes made at the Lascaux Caves, where visitors were not initially restricted and increased humidity etc.. caused some damage to the artwork.

The paintings at this new cave will eventually be shown to the public on video, CD-Rom or other multi-media methods. The French are stressing that preservation is their priority, and consider the cave to be "the only totally intact and ornate cave form the Palaeolithic era".

If you are connected to the internet and have access to a web browser, a number of images from the cave are available on-line at

<http://www.culture.fr/gvpda.htm>

By coincidence barely a week after the announcements a so call "virtual reality" fly through of the Lascaux Cave system (I think) was released to the press. Viewers are able to move through the cave looking at the digitised pictures as they go - the sequence I saw on the BBC News was very impressive.

Kelvin

Note:

"Grotto Chauvet" should not be confused with "Grotte Cosquer" - this is the cave found near Marseille in September 1985, where the only access is about 30m under the Mediterranean sea.

Gold

Whilst waiting up to my knees in black mud in Morses level in the Forest of Dean during the field meet of NAMHO in August '94, the conversation turned to the stories surrounding gold having been mined in the area. Mentioning that I would like to try panning during a forthcoming holiday on Cornwall, one of the group from there offered instructions on a good place to try.

He was as good as his word, and produced in front of the multitude gathered later at the entrance, what was in fact a treasure map. With the mention of one word, **GOLD!** the multitude fell into deathly silence.

During the rest of the weekend various unscrupulous attempts were made to make me divulge information but without success.

The Visit

The location described, lies near the coast between Tintagel and Padstow, in an area recognised more for its quarrying rather than mining, Delabole being close by. There are adits marked on the map and it would be worth having a look at sometime in the future.

Did I find any! "You bet", 2 microscopic nuggets, but it was worth the experience.

It would be unwise to publish the exact position of the gold find as the farmer was very friendly, but I think things would change if we started a gold rush in the area. However if anyone is interested in panning for minerals, not just gold let me know.

Steve Southwick

e-mail: sous1@worc.ac.uk

Bat Bites

"Bats are cute, adorable and lovable", so why not indulge yourself in some chocolate Bats?

The American Bat Conservation Society is selling bat shaped chocolates to raise funds. \$25 buys you eight 2-ounce Bat Bites in plain milk chocolate, while for \$27 you can get the decorated versions - with peanut butter ears and dark-chocolate eyes. If you are interested ring, Absolutely Bats (in the USA) on:

0101-301-984-2287.

National Trust Centenary

This is the National Trusts Centenary year and as part of its celebrations it has initiated a number of conservation projects in its 16 regions.

Of particular interest to us are those in the Cornish region, where work will concentrate on the management and interpretation of the engine houses forming part of the Kenidjack mine complex near St. Just. The Trust acquired the site at the end of 1994 and plan to consolidate the engine houses

and ancillary buildings and cap the shafts.

The Trust's "Enterprise Neptune" - which aims to acquire threatened coastline and bring it under sympathetic management, also covers many industrial areas or to use the jargon "landscapes characterised by past industrial activity".

One of the many sites covered by this project are those of the Ravenscar Alum Quarries in North Yorkshire.



Birch Coppice

On the 20th of January this year drums of highly toxic Italian waste was found dumped in the abandoned canteen and shower block of this old colliery. It is thought that the waste may have been there for up-to 2 years, since the pit closed!

£6,000 to keep Pig

Museum experts in Harrogate are keen to keep a Roman 'pig' (ingot of lead) dating back to AD 81 and found near Pateley Bridge in 1731. However it is claimed that it will cost £6,000 to keep it in Harrogate and with cut-backs

Trafalgar House

This company has recently been in the news for trying to buy the North Eastern Electricity, over the sea in Galmoy (County Kilkenny, Ireland) they are also at work building a new zinc and lead mine, and processing plant. The mine is expected to be active within 10 years, and employ about 200 people, becoming one of Europe's largest producers of zinc and lead concentrates.

Rescue Station.....

Rescued

The Mines Rescue Station, Ellenbrook Road, Boothstown, has escaped the fate of most of the recently closed British Coal sites by been scheduled as a Grade II listed building.

Originally opened in 1933, to serve over 50 local collieries, it was built on a model layout with no expense spared. It is thought that 99% of the building is as it was when it was first built, 61 years ago. At it's peak it employed 2 full-time rescue corps of 12 men, whose houses still stand nearby.

Cornish Smugglers

Cornwall has long been associated with smugglers but an 'excuse' for smuggling of spirits in the 1820's and 30's was that the spirits being smuggled were "low hollands proof" and they were "disposed of to miners, who mostly lived underground, to whom spirits are beneficial, but never-the-less could not afford to pay for entered spirits".



AIA Fieldwork Awards 1994

In this the 9th year of the Association for Industrial Archaeology's Fieldwork Awards, several mining projects were successful.

Award for the Most Enterprising Piece of Industrial Archaeological Fieldwork in 1994 went to Mark Walters of the Clwyd-Powys Archaeological Trust. In the committee's opinion his Powys Metal-Mines Survey was "*an impressive example of a non-intensive rapid survey of mining landscapes, arranged complex by complex*" [What ever that means!]. The survey also contained a very lucid summary of the history of non-ferrous mining and a comprehensive catalogue of mining features in the County.

Highly Commended was Pat Frost's study of Clwyd metal Mines, undertaken for Clwyd-Powys Archaeological Trust, funded by Cadw. This study followed Mark Walters' model methodology and was also considered an impressive piece of work.

David Cranstone and Eric Instone were also considered to have produced a very competent and thorough survey of the mining landscape of Gunnerside Gill Lead Mines, off Swaledale, North Yorkshire. Their report "*discusses methodology, conclusions, comparisons and recommendations*" [!]. It also contains a substantial gazetteer.

Calf Holes Flood

I had an extremely near miss in Calf Holes in 1974. I hung on and watched the passage from the bottom of the entrance shafts fill to the roof in less than 5 minutes, caused by a heavy shower when the fells were already wet. The first shaft also fills with the water, so that the stream then flows into the normally dry second shaft, right down where the ladder runs. In these sort of conditions, Dismal Hill Cave entrance, which normally has no stream entering it, can be completely submerged. Not a place to go in wet or unsettled weather.

John Heathcote

Earlier this year I visited Tamang Gunung Mulu, Sarawak, Malaysia, the scene of several British caving expeditions in the 80's. This area contains the world's most voluminous caves. Since the expeditions, the tourist potential of the area is being developed on a small scale, and some of the caves are now lit.

Deer Cave is a huge passage, probably big enough to fly through. Daylight penetrates a long way into a passage that is often 30m wide and more than 60m high. Towards the far end (it's a through trip), there's a bit very much like the Green Canal in Dan yr Ogof, except that the water is brown. It's also pleasantly warm, no wetsuit needed. Deer Cave is home to some 5 million bats. Simple arithmetic leads to an obvious conclusion about the state of the floor fortunately, I had a cold!

Wind Cave is massively decorated, typical of warm climate caves. None of the subtlety that we see in Britain. The connecting Clearwater Cave system is very long, with a streamway (riverway ?) that's a serious undertaking because of the volume of water. Tourists don't get to see that much of it. One part you do see though is very near the surface, and the cave has been invaded by huge tree roots, 50mm in diameter, which run for several metres - a little dry rot, but on a grand scale.

On the surface, there are in some places clints - 15m high and razor sharp. The climb up Gunung Api to see them involves an elevation gain of ~1000m, at an average angle of 30° up a slippery tree root covered mountainside, in tropical heat and total humidity. When you stop for a breather, the leeches come for a snack!

The whole of Borneo is geologically very young, and it is possible that the 4 million year old Mulu Limestone was not deposited until after the formation of older British caves such as Ogof Ffynnon Ddu started.

Malaysia's a nice place for a holiday, warm (though sometimes wet), friendly people, good food, and surprisingly modern.

John Heathcote

The Activities of Shropshire's First "Mining" Club, 100 years ago

During the 1860's many Field Clubs were formed by the leisured classes, their chief interests being to research and visit historic and natural features. Aided by improving transportation methods, both road and rail, but not afraid of long walks and trips in horse-drawn vehicles and spending a few nights in local inns, they were able to visit even quite distant places. They had a passion to learn and to record in great detail their findings and to take turns in giving lectures to each other on chosen scientific topics.

In Shropshire 2 such groups were active, the Caradoc Field Club and the Severn Valley Field Club. They were made up largely of country parsons, business men, and landed gentry and well educated middle class ladies.

The Caradoc Field Club had always had an interest in Shropshire mining, having apparently caught the bug in 1868 after a visit to the Gravels Mine near Shelve (see 'Below' 94.1).

Other visits followed and in 1893 when the 2 Clubs amalgamated their interest in mining and geology became a shared one. The following few years saw some visits to exciting places outside the County, to N.Wales, the Lake District and further afield but they were also able to see things in Shropshire that we can only imagine today.

Among the most interesting trips and meetings were the following:-

May 30, 1893 - The Stiperstones area, looking at its geology and metal mines, some of which were still active.

June 29, 1893 - Pontesford and Lydhole, to study a "vein of pitch" recently located by mining engineer and member W.Yelland.

July 27, 1893 - Laurence Hill Quarry and The Wrekin, to examine 2 dykes of dolorite and many seams of barytes "unfortunately too thin to work economically".

Aug. 10, 1893 - Hawkstone, exploring its subterranean galleries and passages.

Sept. 21, 1893 - Grinshill Hill, Mr.Kilvert's Quarry, to inspect portions of the skeleton of a lizard-like animal and to examine its fossilised tracks.

June 5, 1894 - John Randall of Madeley, consultant in mining geology, gave a paper to the Club on the Shropshire Coalfield.

July 11, 1894 - Lake District, member were "lowered into the bowels of the earth at Elterwater Green Slate Quarry, by means of a steam lift" in groups of 3. They saw chambers 200ft. wide and 8ft. high with the aid of candles as used by the workmen.

July 19, 1894 - Lincoln Hill Limestone Mine, Ironbridge, recently re-opened by Mr.Ward of the Madeley Wood Co., consists of a long steep flight of steps leading to large and lofty galleries. Studied the numerous fossils using candles for illumination.

Oct. 4, 1894 - Sharpstone Quarry, mainly to inspect the quarry pond in which lived quantities of water flea. Many members had recently joined a camera club to help pursue their interests further.

Nov. 30, 1894 - Mr. D.Jones, a mining engineer gave a paper on the Forest of Wyre Coalfield and described a recent shaft sinking at Tip House Farm.

April 18, 1895 - Lilleshall Area, mainly to experiment with their new cameras.

June 8, 1895 - Lake District, return visit to study further its geology, surface exposures and The Lakes.

Sept. 30, 1895 - Dr.Galloway gave a paper on "Igneous Rocks of Shropshire".

Oct. 10, 1895 - Haughmond Hill, to look at the fossils in the quarries and to study the numerous small veins of pitch.

April 20, 1896 - Meeting to consider the history of the 2 clubs, all previous visits were listed. For example Roman Gravels Mine near Shelve had been visited by the Caradoc Club in 1868 and 1875, the Severn Valley Club had been there in 1870 and 1890. The Grinshill/Clive quarries and mines had been visited by the Caradoc Club in 1868, 1880 and 1888, the Severn Club had been only once in 1867.

April 30, 1896 - Pontesford Hill, to see the basalt at the top, andesite and rhyolites on the flanks in places.

May 7, 1896 - Steeraway Lime Works and Limekiln Woods, to visit the horizontal drift mines into both limestone and the coal measures. Found them to be the highest in the geological sequence locally, poor and shaly but with many fossils.

May 22, 1896 - Wyre Forest, to see the coal mining remains and watch charcoal burning in progress.

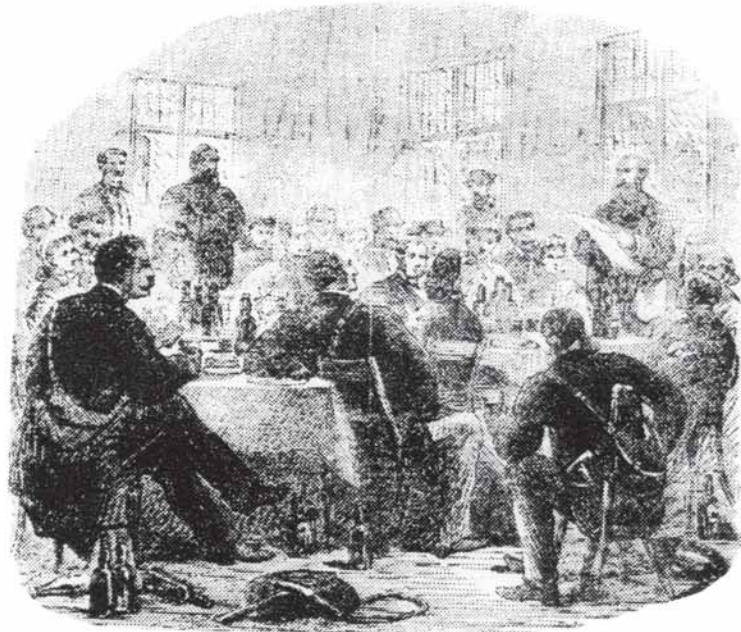
Aug. 27, 1896 - Stafford Colliery, near Shifnal, descended the shafts 300 yards, travelled to the coalface and watched the 'holing' and undermining of coal at the face. Two hundred men were employed at the mine using only Davy lamps for lighting. There seems to have been some sort of problem getting out, members and miners seemed to have become entangled during the rush at the end of the shift.

Sept. 17, 1896 - Snailbeach Mine, met by Mr. Job the manager and consultant Mr. Yelland. Taken by Mr. Oldfield, underground manager to a level 250 yards below ground, saw workings for "carbonate of lime, sulphate of baryta, carbonate of baryta (very poisonous) and lead ore".



The Activities of Shropshire's First "Mining" Club, continued

Later visits took the members to Brown Clee Coal workings, underground at Glyn Ceiriog Slate workings, then Minllyn Slate Quarries to see the hydraulic engine and several visits to the Welsh Gold Mines. By the end of the century they seem to have become quite skilled with their cameras and a photographic trip was made to Hazler Hill sandpit near Church Stretton to record the workings and later to the Whixall Moss Peat workings. The whereabouts of the bulk of these photos is not known, but a few survive and several of their meetings are depicted in lithographs in the illustrated London News.



Lithograph from the Illustrated London News, 1873, Showing a meeting of the Severn Valley Field Club

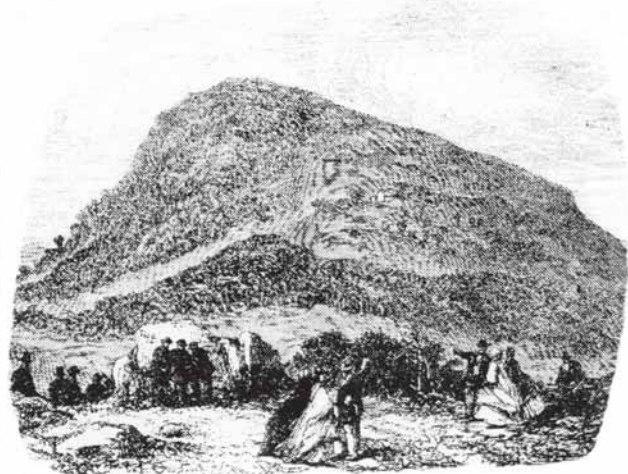
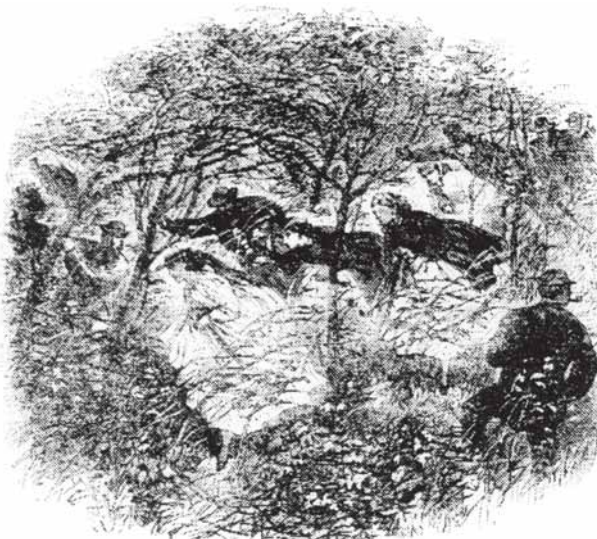
The transactions and other printed works left by the Clubs are a real gold mine of information for any researcher today and an example to all modern clubs. Not all papers were given in smoky public rooms, one at least, a 'Geological Address', was given on the top of Titterstone Clee. Many papers such as those by Randall on the Coalbrookdale Coalfield and by Jones on the Forest of Wyre Coalfield were followed by visits - and both papers and visits are fully recorded. Other such combinations were the mineral veins of Shropshire, Peat of Whixall Moss and Minera Lead Mine, N. Wales.

The Club continued to record its activities in detail into the 1930's, but by this time much of its enthusiasm had gone. Its activities tended to be taken over by professional groups and later groups of enthusiasts. The Shropshire Mining Club and its successor comes into this later category but its programme of activities does tend to much of the old Club 100 years ago. It is rather mouth-watering however to think of

the opportunities the members of the old club had to meet so many mining and geological worthies, to talk to men who had spent their lives in the now long closed workings and to see the actual operations at many still in progress. We know that there were about 8 steam engines then at SNailbeach Mine, they could see them and watch them while we can only imagine them.

Ivor Brown

Lithographs depicting a visit of the Severn Valley Field Club to the Wrekin on June 18, 1873, which appeared in the Illustrated London News.



Engine House Stone

All the 8 engine houses at Snailbeach, Grit, Ladywell and Tankerville are described in the official list of listed buildings as being of 'limestone'. But is this the material of construction for all the engine houses in the lead mining field?

Some of the mine operators had their own quarries on site as at Roman Gravels, where large quarries are shown between East Roman Gravels (ERG) and Roman Gravels on all large scale OS maps.

The Mining Journal May 3, 1871 quotes from the report of the West Tankerville Mining Company (later ERG) as follows:

"Upwards of 30,000 cu.ft. of masonry, amounting to about 1,460 tons of stone (the whole of which we have quarried) has been built on the mine.

This stone was used for the masonry work for the following:

1. New 30" Cylinder engine and boiler complete, pumping and winding

gear, flat rods with stands, also stands and pulleys for the wire rope (California Shaft).

2. On the dressing floors, winding engine and crusher with boiler, complete new dressing floor area with plant for jiggings, grating etc. reservoirs for water.

3. New roofs on the smiths shop, new front wall built-up, hearth erected, agents house and a large roomy office built (the latter being furnished at Company expense).

4. Half a mile of tramway connecting the workings on the north boundary to the dressing floor."

Within the quarries there are still the remains of 2 buildings but the nearest powder magazine, if powder was used, was on the track in the present woodland to the south of the main road almost opposite the old row of cottages (The Sun Inn, of former days).

Ivor Brown

Letters to the Editor

Winders

The Littleton Winders article in 'Below 94.4' contains a very large number of factual errors. You may well be hearing from UK Nirex Ltd with some corrections. Briefly, the shafts on which the winders may be used are for scientific investigation, in advance of any decision to dispose of radioactive waste near Sellafield. The repository itself is planned to be accessed by drifts. The shafts are only proposed and were refused planning permission on 20th December 1994.

The investigations in respect of the proposed Sellafield take much of the blame for my absence from the Club over the last 5 years. Should it be built however, it'll be quite a trip!

John Heathcote

Aerial Ropeways at Shropshire Mines

Periodically I get a request for information on the use of aerial ropeways at Shropshire Mines (similarly also requests concerning navigable levels and mine incline railways), but rarely does anything appear in print. Has any member seen any articles or perhaps tried to follow their routes?

The ropeway from Highley to Alverley Colliery over the River Severn may well have been the last coal mine ropeway to be constructed in England. Does anyone know the actual date of opening?

It was in the 1950's because I remember being at Highley on a course at the time. The great day came, a grand spread of food and drink was prepared by the NCB and the board's top local management arrived to greet the press - but the press never came, a national event had occurred (was it Churchill's government resigning?). The top management had a party on their own, the ropeway started up, the buckets broke loose and several finished up in the River and at least one of the managers crashed his car on the way home. What date was it?

Ivor Brown

Mining Sites and Museums

The following sites may be of interest to Club Members and worth visiting if you are in the area:

Pendeen Crafts & Mining Exhibition

Pendeen Cornwall, SW 383 343

This small mining museum houses a large working model of the Crowns section of Botallack, showing both skip roads in actions.

Rosevale Mine

Near Zennor, Cornwall, SW 459 379

This disused tin mine was leased to the West Cornwall Mining and Minerals Club in 1974. It is gradually being preserved and reconstructed by Mike Skipp and Tony Bennett. Arranged visits may be possible.

Woodhorn Colliery

Ashington, Northumberland

A project supported by Wansbeck District Council, Leisure Department.

Sygun Copper Mine

One mile from Beddgelert on the A498 road to Capel Curig.

Open all year round. The fascination of history and the wonders of modern-day technology combine to create an unforgettable experience at this Prince of Wales award-winning family attraction, set in the heart of the stunning Snowdonia National Park.

Each stage of the mining process is clearly explained by audio presentations, as you make your way around the quarter mile route which rises 140 feet via stairways to emerge at the Victoria Level for a breathtaking view of the Gwynant valley and surrounding Snowdonia mountain range.

SCMC Special rates:

If you present your Club Membership card at the desk you can get a 10% discount on the entrance fee.



Club Winch

The winch is finally complete and by the time the next issue of 'Below' comes out operational tests should have been completed. The winch has been designed primarily for vertical lowering and raising of personnel in a mining situation. While it will not be damaged by the raising or lowering of goods it is essential that its overall capacity is not exceeded and in no circumstances must the cable be connected to an immovable weight. This is most important as when the winch is being driven there is no way of telling how much it is pulling.

A detailed maintenance and technical manual is being written to accompany the winch, but members might be interested in a few details.

General Details

The winch is mounted on a welded frame, which in turn is bolted to a 4 wheeled trailer, fitted with a standard 50mm ball coupling. The trailer is fitted with brakes, but only on the rear wheels, it also has a "break-away" device - which applies the rear brakes if the coupling becomes detached.

The total weight of trailer plus winch is 705kg, this means we will have to tow it with a vehicle (ideally) weighing at least 1410kg (if we treat it as an unbraked trailer).

The winch can be operated on the trailer, or removed to operate "skid mounted" if necessary.

The Winch

The winding drum is equipped with 200m of 9mm, 18x7 construction, fibre core, non-rotating, ungalvanised cable - which has a safe working load of 958kg. The actual designed lifting capacity of the winch is 269kg.

It is powered by a 5Hp, series 5 JAP engine with 2 gearboxes (1 for raise/lower, the other for 1 of 4 speeds). The final drive to the winding drum is a 30:1 worm and worm wheel - in normal operation frictional load on the drive train will prevent the 'passenger' running away down the shaft. However to cater for abnormal conditions there is also a hydraulic foot brake plus a ratchet and lever hand brake - both operating on the winding drum cheeks.

When winding, 2 interlocks are also provided, 1 to prevent the engine being started while in gear and another to activate a "Dead Man's Handle" to prevent the winch operating in raise or lower gear if the winding seat is unoccupied.

While the basic skills to operate the winch are those for driving a vehicle, there will be no sensation of movement when in operation (unlike driving a car), so the driver must rely on received instructions, observations of drum rotation and markings on the rope. It is suggested that a training scheme for winch drivers be set-up and that the Club maintains a register of permitted drivers - perhaps with periodic refresher courses. It is also suggested that a set of standard codes and instructions be agreed so that coherent instructions can be given to the driver - particularly in places where the winch is some distance from the 'shaft'.

See you at Ramsden's shaft for the tests.

Alan Taylor

Rescue Round-Up

Irish Accident

The worst accident in Irish caving history occurred on Sunday 15th January, 1995 when 3 cavers from Eire were drowned in Cradle Hole Pot (part of Marble Arch Caves), South Fermanah.

A group of 10 students from the Dublin Institute of Technology and University College Dublin entered the cave during heavy rain, despite the advice of locals not too.

They had been in the cave (renowned for flash flooding) about 20 minutes

when the 3 members were swept away and drowned. The Irish CRO team (lead by Tim and Pam Fogg) were called out, but were unable to save the cavers.

French Tragedy

Two divers died on Saturday 4th February in a sump in a recently discovered cave in Tourtoirac, Dordogne.

The divers were part of a group of 4 from the Speleo-Club of Perigueux. The other 2 team members had difficulties getting out, initial (un-confirmed) reports suggest that they got entangled in their safety line and had to cut it to get out.

German Rescue

On Saturday 25th February at 2pm, 2 cavers entered the very wet, 5km long Falkensteiner Höhle, near Stuttgart. About 1,400m from the entrance one of the cavers dived a small siphon, but before the other could follow the lifeline 'slipped away' and they were separated. They stayed, waiting either side of the siphon for nearly 12 hours (during which time their lights went out).

The first rescue divers reached them about noon on the Sunday and installed a telephone line and 'thermo-tent' (!). One of the cavers was only wearing a 3mm wetsuit (water temperature 6°C). Despite this the cavers were in good condition and were able to walk out. The rescue finished at 4pm on Sunday 26th.

The rescue operation went well, by all accounts only marred by the sudden appearance of numerous reporters and TV crews (sounds familiar!).

More News

Parkside Colliery

On Sunday 9th October 1994, the concrete headframes of Parkside Colliery were blown-up. This marked the end of the last deep pit on the Lancashire Coalfield.

Earliest Iron Mine?

An iron mine, which worked red haematite as long ago as 41,000 BC, in the Hhohho District, Swaziland is thought to be one of the world's oldest mines.



The Potteries

by D.Sekers, Shire Album No.62, Shire Publications Ltd. A 1994 reprint of 1981 publication (with updates). Price £2.25, 32 pages, 40 illustrations.

In common with other books in this series which have dealt with the extractive industries this is an excellent book with intriguing old figures and photographs and a clear text. There are many similarities between parts of the Shropshire Coalfields and the Potteries including similar strata and similar industries. Many Shropshire built steam engines, workers and ideas (including the name of Coalport China) all finished up in the Potteries!

The development and growth of the six towns is vividly shown by old photos of the quarries and the tatty polluted towns which survived even until the 1950's. The chapters on the types of product and the production processes explain clearly, the very technical terms used in the ceramic industries.

The sections on the buildings and the working conditions are short but well illustrated, but the details given on the

organisation and changes in the industry are too brief.

As the Author himself agrees, surprisingly little has been written on this unique mining area so this book plays a small part in filling this gap (Coal Mining in the Potteries has recently been given a more comprehensive treatment in "Mining Memories - A Portrait of the Collieries of North Staffordshire" by Fred Leigh, SB Publications, 1992. Price £5.99)

Ivor Brown

Erccall quarries, Wrekin, Shropshire
by P.Toghill & S.Beale, published by the Geologists Association as Guide No.48. Price: £3.50

The genesis of the West Shropshire Orefield, evidence from fluid inclusions, sphalerite chemistry and sulphur isotopic ratios

by R.A.D. Patrick and R.J. Bowell in the Geological Journal Vol.26 pp 101-115 (1991). This forms an in-depth study of the manner and timing of the various mineral deposits using modern laboratory techniques.

The Chartermaster System of Mine Management in Shropshire in the 19th Century.

By I.J.Brown. Appears in "Cent ans de Conventions Collectives, Arras, France 1891-1991" published in English by Universite Charles-de-Gaulle, Lille, 1994.

Copies are available from Mike Moore.

The Shropshire Lead, Zinc & Barytes Mines, past and present.

By I.J.Brown. Appears in Industrial Heritage Vol.12, No.3 Autumn 1994.

The Shropshire & Montgomeryshire Light Railway under Military Control 1941-60

By Mike Christenson. A5 40pp, published by the World War II Study Group, Price: £4.25 (not a mining book but deals with one of Colonel Stephens' Railways).

Ivor Brown



Mineral Spot

Calcite - Calcium Carbonate

One of the commonest minerals - being the main constituent of limestone. Formed from Carbonic acid (derived from solution of atmospheric CO₂) and Ca²⁺ ions (dissolved from rocks).

It is the principle material of stalactites and stalagmites (speleothems) deposited by the de-gassing of CO₂ from water percolating through caves.

Most calcite occurs as small crystals cemented into massive limestones. Heat and pressure can cause re-crystallisation and grain growth to form marble. Large crystals also grow from solution in cavities, as in hydrothermal veins.

Crystals are usually rhombohedral, but Dogtooth spar crystals are common, other shapes also occur. In limestone calcite is white or grey, fine-grained, and massive, but crystals may be colourless (Iceland spar) or tinted. If it precipitates at temperatures near to freezing point it forms a fine clay-like "moon-milk".

Chemical formulae:
CaCO₃



Mining Videos (available from the Club)



If you are interested in doing a bit of armchair mine exploration the following videos, produced by I.A.Recordings with help from Club members, may be of interest to you.

A Tour of Clive Copper Mine

£14.95

A comprehensive guided tour of Clive, with Edwin Thorpe acting the 'experienced' expert and Kelvin Lake the 'novice'. The tour covers both the upper and lower levels, plus the Northern stope (the access to which is now a bit dodgy).

Clive Rescue Practice, £9.95

An action packed 'head banging' record of a Club rescue practice, featuring the 'infamous' maypole winze traverse!

Snailbeach, £14.95

The rise and fall of Snailbeach, once renowned as the "richest per acre of ground in Europe", is traced in this production through the use of historic photographs, animated plans and sections, and unique underground video footage.

Collections from the Archives

The following tapes contain almost all the footage recorded at the given mine, and are intended as a resource base, not a finished production:

- C.15: Dudley Tunnel '88 to '89, £14.10
- C.18: Donisthorpe Colliery, £11.75
- C.20a: Snailbeach- Final Frontier, £9.87
- C.23: Bagworth Colliery, £11.75
- C.28: Morse's Level, £9.87

For more details contact: I.A.Recordings, PO Box 476, Telford, TF8 7RH
e-mail: info@iarecordings.org



Shropshire Mines (in 1895)

Coal Mines etc.

Employed: 2,965 underground,
1,008 surface,
3,973 total

Produced: coal 698,128 tons.
fireclay 12,666 tons.
ironstone 42,408 tons.
pyrite 309 tons.
red clay 55,168 tons.

Accidents: 5 men killed
Pudley Hill 1 killed by explosives
Ash Tree 1 killed by fall of roof
in claypit
Dark Lane 1 killed by fall of roof
in ironstone pit
Old Park 1 killed by explosives
Barrack 1 killed by a kick from a
horse

Serious incident: 2 men injured in
gas explosion at Kemberton
Colliery in ironstone seam.

Mining Offences: 8 miners fined for
single offences.

New Shafts: being sunk at Kinlet near
Bridgnorth & Dunge near Broseley.

Metalliferous Mines etc.

Employed: 159 underground,
90 surface,
249 total

Produced: lead ore 1,566 tons.
zinc 307 tons.
barytes 4,340 tons.
Stone u/g 3,835 tons.
red clay 55,168 tons.

Accidents: 7 men killed by breakage
of winding rope at Snailbeach.

Mines in Operation: 10 including;
Snailbeach 136 employed,
Wotherton No.2 27,
North Tankerville 19,
Bog 16,
East Roman Gravels 13,
Rhadley 8,
Pennerley 3,
Perkins Beach 10,
Roman Gravels 4.

Quarries: 1 quarryman killed at
Brandley Limestone Quarry, fell
off a trolley on an incline.

Ivor Brown

(based in Mines Inspectors Reports)



Copper Mining with a difference

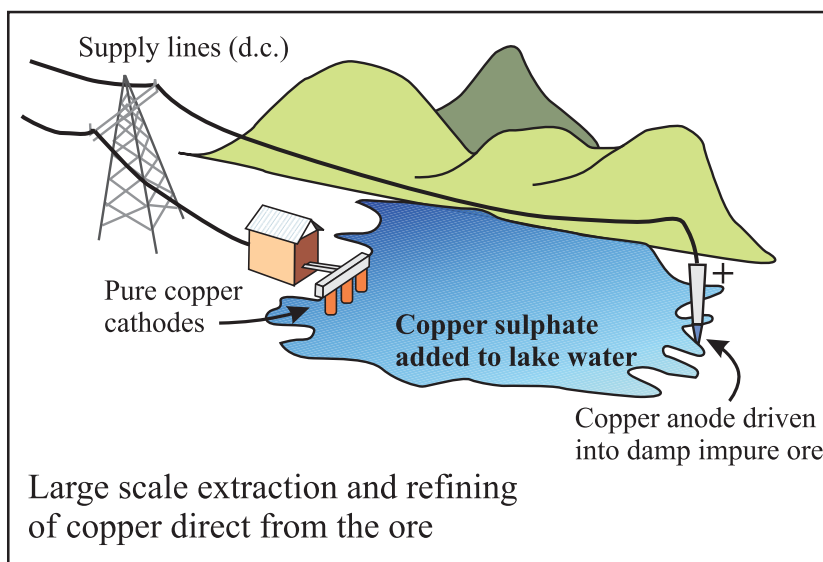
The refining of copper electrolytically is a well known technique in which a pure piece of copper is used as the cathode (negative terminal) and an impure piece as the anode (positive terminal) in an electrolytic cell holding a solution of copper sulphate. When a current is passed through the cell the pure cathode gains more metal by deposition from the solution, while the impure anode is dissolved.

In modern refineries the cathodes can increase their original weight by over 200 times in just 2 weeks. Other metals like zinc, tin, gold and silver can also be separated from their impurities after a preliminary chemical extraction in this way.

While browsing through an old (1970's !) book at work, I came across an interesting example of this process applied to mining in Canada. There entire lakes were (are?) turned into giant electrolytic cells by adding copper sulphate to the water, a copper anode is driven into the impure ore (in situ) while pure copper anodes are placed at the other end of the lake. The process has the advantage of extracting the copper and refining it all at the same time!

I wonder if they have ever done any environmental impact studies?

Does any one know if this technique is still used?



NAMHO '95

As most Club Members are aware, we are hosting the next NAMHO Conference, over the weekend 15th-16th July, although activities will take place on Friday 14th & Monday 17th.

The Conference will be based at the National Sports Centre, Lilleshall and a large cross section of speakers, and a

wide range of visits (both surface and underground) are planned, plus a Saturday night social event.

As the organising of this event is going to take a lot of effort, any offers of help (if you haven't already had your arm broken by Adrian or Mike) will be gratefully received.

Deepest Pit?

Western Deep Levels Gold Mine, Carletonville, South Africa is reputed to be the deepest mine in the world, at 3,581m (11,749 ft.) - I bet it's hot down there!

A typical underground shift at the mine is made up of over 11,000 men!

Coal Cutting Record

If you thought modern technology makes the present day miner work harder then think again, on 19th September 1935, 5 miners at the Tsentralnaya-Irmino Mine, Donetsk Region, USSR cut 45.4 tonnes of coal (each) in 6 hours. I should think their backs ached after that!

Club Officers

President: Alan Taylor

**Tackle & Rescue Officer:
Neal Rushton**

**Chairman/NAMHO Rep:
Steve Holding**

**Training Officer:
Alan Robinson**

Vice Chair: Malcolm Newton

**Conservation Officer:
Nick Southwick**

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

Bat Officer: Mike Worsfold

Treasurer: Bob Taylor

**Membership Services:
Mike Moore**

'Below' Editor: Kelvin Lake
e-mail: scmc@factree.org.uk

Diary Dates '95

For organised Club trips please refer to Adrian's Monthly Meets lists.

Bank Holiday Sundays: OFDII Columns visits. 10.30am from South Wales C.C. Cottages.

5 March: Cambrian Caving Council AGM, 11am Gwesty Bach Inn, Brymawr, South Wales.

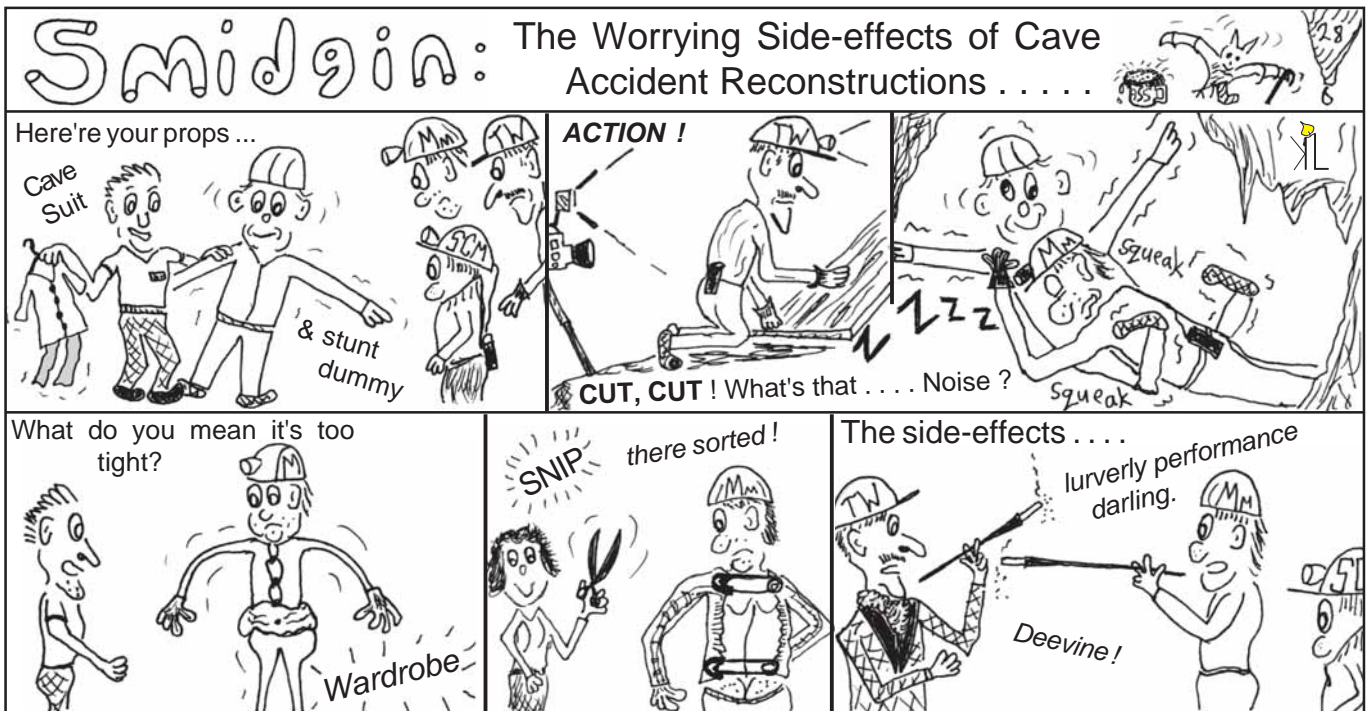
18 March: National Caving Association AGM 10.30am, venue to be arranged.

25 March: Subterranea Britannica Day Conference. 10am, Royal School of Mines, Imperial College, Prince Consort Road, London, SW7 2AZ. Cost: £7.50 Non-members. Kelvin has further details & booking form.

6 May: Council of Southern Caving Clubs AGM 10.30am, Hunters Lodge Inn, Priddy, Somerset.

15-16 July: NAMHO Conference, National Sports Centre, Lilleshall, Shropshire - hosted by US!

19-25 August: International Symposium on Souterrains, Maastricht, The Netherlands. Organised by the 'Study-Group Subterranean Limestone Quarries' & based on the Maastrichtien limestone outcrops, the symposium covers a range of man made underground structures. Cost ~£130.



Catch us on the World Wide Web. Club activities & the labyrinth: <http://www.shropshirecmc.org.uk/>

