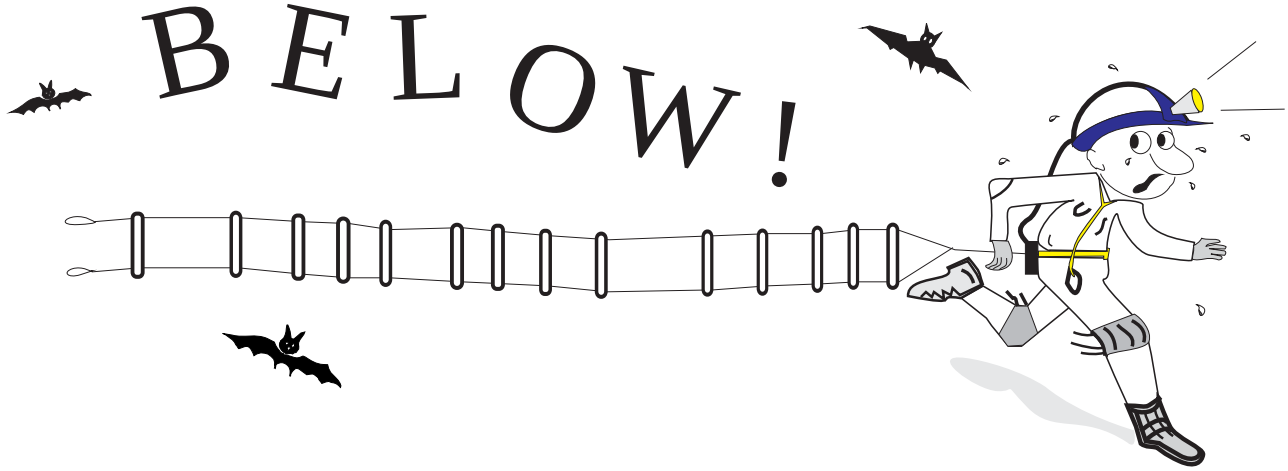
BELOW!



Quarterly Journal of the Shropshire Caving & Mining Club — Autumn Issue No: 96.3

The Nicola Dollimore Cave Rescue Fund

Most Members will have heard about the flood and major rescue operation that occurred in Goufre Berger at the beginning of the summer. Sadly Nicola Dollimore from Britain was one of those killed by the freak weather conditions.

Following discussions with the French Rescue Services Nicola's family have established a fund in her memory, to help re-equip the Berger and improve the rigging to make the cave safer.

If you would like to send a donation to the fund you can pay it directly into the following UK account:

Account No: 1326760
Sort Code: 30-93-74

Account name: The Nicola Dollimore Cave Rescue Fund
Bank: Lloyds Bank,
High Street Branch, Guildford.

Alternatively cheques, made payable to the fund can be sent to:

The Nicola Dollimore Cave Rescue Fund
Lloyds Bank
147 High Street
Guildford
GU1 3AG

Errors & Gremlins

The Gremlins seem to have been at work during the production of 'Below' Summer issue, 96.2, particularly in Ivor Browns articles where items not in the original scripts have apparently appeared from nowhere etc..

1. Page 2: The second paragraph under 'Wanted Book' should actually follow 'Disaster Talk' paragraph 2.

2. Page 14: Shropshire should not appear in the heading, the sand workings at Blakeshall are just outside the County.

3. Page 16: The sketch plan dates the electric winder as 1930, it should in fact be 1937.

4. Page 16: in para 3, the Blists Hill blowing engine house and engines was by Stevenson in 1873 and NOT 1973!.

5. Page 17: in para 6, it should read "killed in 1910 in the County's (not countries) last multi-fatality pit disaster".

6. Page 17: The article mentions that the writer could not find a photograph of the power house, yet two mysteriously appear in the text! The lower photo, the view form the working shafts, shows the window that became a memorial to the miners in the 1910 disaster (third from the left).

My apologies to Ivor for the mistakes - put it down to Editorial eagerness (or deadline panic!).

As for the photographs, I assumed it was referring to 'historic' views (although I suppose these pictures are now!) - the two pictures concerned were taken during an I.A.Recordings visit when Black & White prints, colour slides and a video recording were made of the remaining buildings.

The pictures used were actually taken straight from the b/w negatives. Unfortunately they have come out a little dark, I am still experimenting with the use of pictures and hope to improve them in future issues.

Kelvin

Clive Copper Mine

Clive Copper Mine access is now available, but will have to be organised differently, Neal Rushton is liasing with the Estate over this.

Perkins Level

The viewing platform in Perkins Level is now complete, the 1872 date stone has been located and can be returned at anytime. Mike Worsfold has advised members that visits to the Perkins Level stopes should stop in October, until March due to hibernating bats.

Rescue Course

The Club has agreed to underwrite an SRT rescue course at Whitehall, Derbyshire at a cost of £200 from the rescue fund. The course will be for 10 people only.

Cave Safe Videos

If you have these tapes please contact Alan Robinson ASAP.

News Round-Up 1
by Ivor Brown

New Plate

The 'Lilleshall' Mines Rescue Station is one of the 57 stations commemorated on a new souvenir plate, available at £18.50 from National Fuels (formerly part of British Coal).

Lea Quarry

Press reports say that Lea Limestone Quarry, Much Wenlock now uses an Ackerman Hydraulic Excavator with a rock breaker, which breaks down lumps of 1 metre in a quarter of the time taken by the two excavators it replaces.

It is also said to be much quieter and more flexible (until it breaks down, then the quarry will be left without an alternative machine!).

Cwm Colliery

Boots (and others) are selling photos from the Frith Collection, of "Cwm Colliery, Bicton, Shropshire" in 1955.

But there was no Cwm Colliery in Shropshire in 1955! There were however 3 NCB 'Cwm' Collieries and 5 private 'Cwm' collieries in Wales at this date.

Mrs. Davies

Mrs. Davies of the Bog has died, she remembered the mine working, the German prisoners building the ropeway (and its later dismantling).

She had an excellent photo of Potters Pit buildings and others (see page 10 for an account of a visit to her cottage).

Engine House Sale

Pontesford No.3 old engine house (the ruins) is up for sale (June '96).

Whixall Moss

Shropshire's fens and Whixall peat "mosses" have been designated a national nature reserve. They harbour more than 1,700 species of insects and are a candidate for becoming a "raised" bog of international importance. Some peat cutting continues however.

Salop Show Cave

Shropshire now has its own show-cave (or was it a mine or folly?). Hawkstone Park "with its concealed grottoes, hermits cave, and secret tunnels" is open to the public on a regular basis (£4.50 for adults).

Tar Tunnel Guide

The IGMT guide to the Tar Tunnel (Revised Edition 1979) has been reprinted (1996). The text written by I.J.Brown and B.S.trinder is unchanged, copies are available from the Ironbridge Gorge Museum outlets.

Minerals Plan

"Shropshire C.C. Minerals Local Plan 1996 to 2006 Deposit Draft April 1996" is available for public consultation (at all Shropshire Libraries, District Planning Offices and Shirehall or you can purchase copies for £11).

It contains much of mining interest. There is no mention of protection for industrial archaeological features, but there may be opportunities to "reclaim" derelict land.

Limestone

'The Underground Limestone Workings at Ironbridge' by I.J.Brown has been published in Bull. PDMHS Vol. 12 No.6, Winter 1995.

This is the sequel to the Club's Account No.13 - published elsewhere because the Club does not yet print 'old photos' in its Journals.

Surveys

The British Geological Survey, Keyworth NG12 5GG; are now advertising the availability of the following publications in their "Sand & Gravel Resources of the Country around ...." series:

(1) Wem
(2) Shrewsbury
(3) Welshampton
(4) Prees
(5) Whitechurch.

Point of Ayr

RJB announced the closure of Point of Ayr Colliery, North Wales (described in SCMC Annual Journal, 1995), in August 1996. It extracted coal from beneath the Dee estuary. RJB purchased two of their 'lease & licence' collieries in July/August; Rossington in Yorkshire and Calverton in Nottinghamshire.

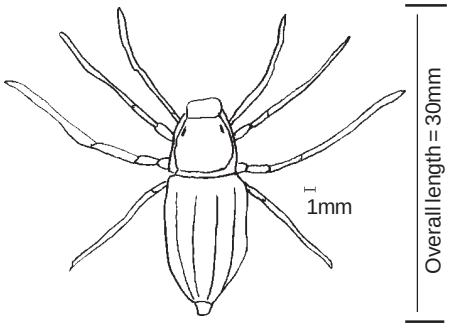
Lilleshall

Planning Magazine,(9th Aug. 1996) contains an item on the stabilisation of the Lilleshall Limestone Mines, 75 houses and 1 farm have been made safe on 25 acres of land. 1,400 holes were drilled and grouted, cost £4 million. It says that restrictions on development in the vacinity can now be lifted!

Fossil Revision

"Revision of the fossil ricinuleids" by P.A.Selden in Trans. of Royal Society of Edinburgh, Earth Sciences Vol.83 pp 595-634, 1992.

A very learned paper with excellent photos and drawings which reassess this 'family' of fossil insects, that contains some found in the Coalbrookdale Coalfield. One of these is named after the local mine owner William Anstice (see last issue of 'Below'). The Madeley fossils stand up well against those of the USA and elsewhere. An unusual feature is that this insect had two eyes on each side of its head (not visible in the sketch).



Fossil: Curculioides ansticci Buckland 1837. Rough sketch based on a paper by P.A.Seldon, Trans. Royal Soc. of Edinburgh; Earth Sciences 83, 1992

Club Trip Reports
June '96

Cwmystwyth:
Rosa Level, 23/6/96

Members present: Andy Harris, Steve Powell & Steve Holding

Before setting off for Rosa Level, we met Ivor Richards about to take a large party into some other part of the mine and he warned us that most of the in-situ tackle had been removed.

After struggling up the hill with 460' of rope, bolting kit and quite a lot of rigging kit, we initially descended down to Mitchel's Level.

Pitch 1

The first 'pitch' is really a couple of short drops connected by a gentle slope but if rigged from the top, it is likely to be rough on ropes.

Pitch 2

The second pitch involves a gentle slope and then a near vertical section of around 120' which drops through a couple of false floors (one presenting a significant constriction).

At Mitchel's level, there was no traverse line, so this was rigged to access the main part of the level first. Subsequently the rope was recovered and used to descend the first two sections of the next series of pitches.

Up to this point, there were bolt points in place (some with hangers) but for the next section two fresh bolts were put in place. There was neither sufficient time or rope to continue and for a future trip a further bolt is required at the top of this last pitch down.

From the furthest point reached, the lower level was approximately 50' below and the ladder up to other workings was clearly visible.

Steve Holding

He just reached the end of the level, when his lamp ran out!

Cwmystwyth:
Level Fawr, 22/6/96

Members present: Andy Harris, Kathy Mills & Steve Holding

After having a good look round Level Fawr itself, we went up the long ladder, explored the upper stopes accessible via that route, crossed the blank and descended via the route to the ore-chute back on Level Fawr.

Near the ore-chute there is a compressor pipe and this was followed via a meadering and narrow route back up to the upper stopes and we eventually returned back down the ladder.

This is an interesting alternative to the more normal routes and gives a good prespective of the 3D relationship of this part of the mine.

Steve Holding

Boat Level, 19/6/96

Members present: Alan Robinson, Neal Rushton, Andy Yapp & Steve Holding

The main purpose of the trip was to check it out for later visits, to check on the current appearance of the main collapse and to obtain some video footage of the collapse in what was assumed to be wetter conditions than last summer.

After Andy had confirmed that it was O.K. for us to visit Boat Level, the four, fully fitted with wet suited braced ourselves for the initial ducks at the entrance. It was generally agreed that there was a bit less air space than the previous summer.

The long walk up to the main collapse uneventful and both the camcorder (in a Pelican Box) and the ancillary lighting battery (in an ammo box) appeared to have survived their inevitable duckings. The area of the collapse and back to the junction to Tankerville were filmed. The amount of water issuing through the fall was significantly greater than last summer but still did not appear to be under pressure.

This was the first time that Neal had seen the fall in around 10 years and he felt that the fall looked a lot different (flatter) and possibly with less water.

When returning to the ducks near the portal, the water seemed particularly cold and it was harder to exit without fully immersing the head (my face felt near frozen when I came out !). It had been intended to film Neal and Andy exiting the last duck but the camcorder had not survived the water as well on the way out and this had to be abandoned.

It was subsequently found that the Pelican Box and the camcorder had a fair soaking (the reason for the Pelican Box leaking is not certain but I suspect that it might be related to putting a hot light in the box which created a partial vacuum on cooling).

The video film was damaged but most of the footage has been recovered. Unfortunately the lighting was not very good and it probably a mistake to have someone else holding the light separately rather than mounting it on the camcorder but it is difficult to handle these things in deep water. The actual footage of the fall is reasonable and gives some record for future.

Steve Holding

Exploration of Gorn Mine
by Mike Worsfold

Little has been written about Gorn mine, near Llanidloes, but the size of the spoil heaps indicates a substantial production. A visit late in 1995 found a tiny stream emerging from a small hole buried by spoil under a bluff. The party on this and subsequent visits consisted of John Davies, Mike Moore, Nick and Rob Southwick, Eileen Bowen and myself.

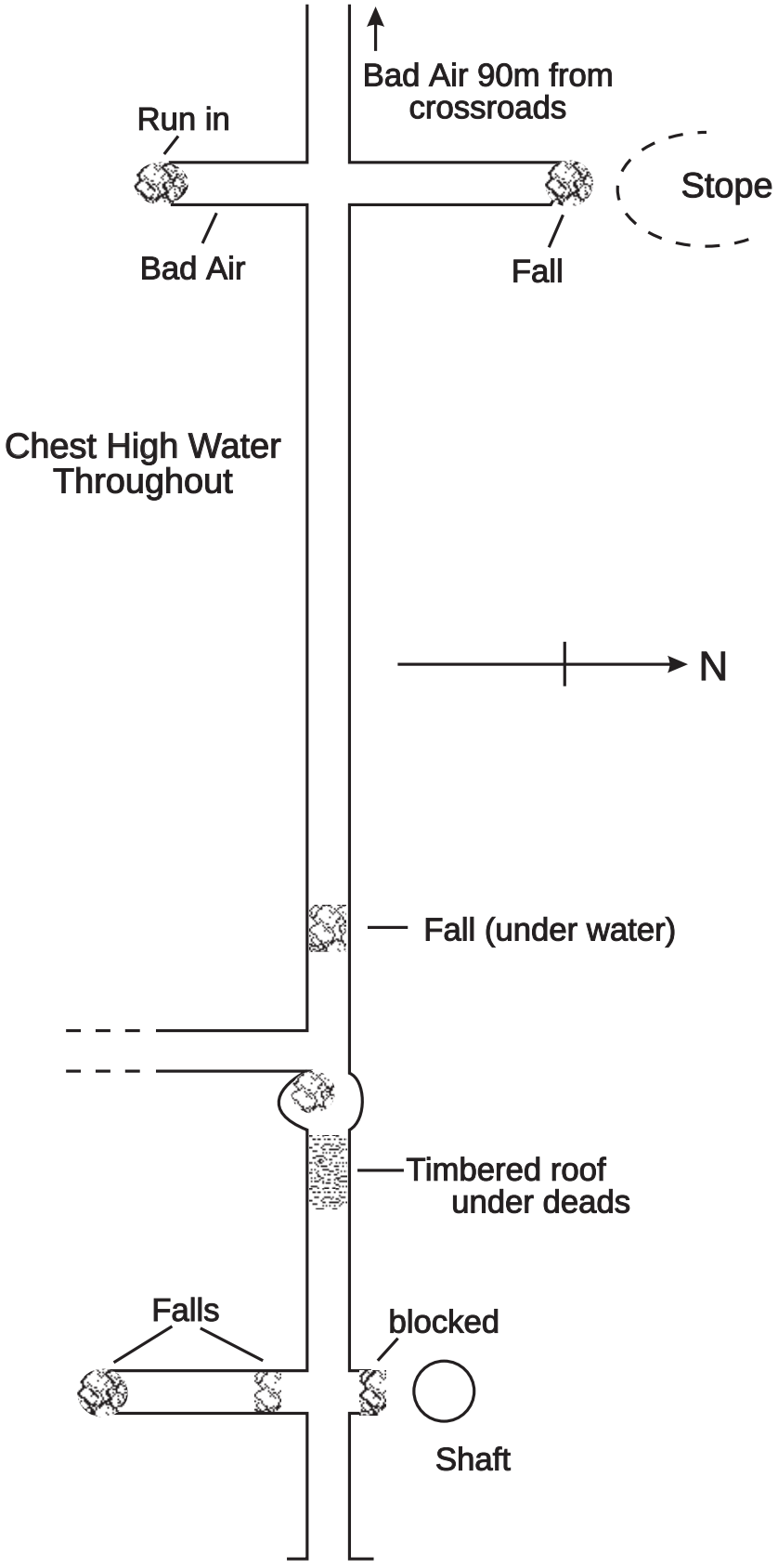
On a ledge halfway up the bluff a 3m wide shaft yawns in front of a small hole in the bank. The landowner, Mr Williams, told us that the shaft had appeared earlier that year, until then it had been possible to walk up to the hole and look in. The small hole is now inaccessible. Despite the small flow of water, the adit entrance below was completely under water, apparently to a depth of about 9 inches. Mr Williams was happy for a small recognised group of us to explore the workings and open the adit, upon receiving assurances that we would leave the site tidy and not damage it.

On our next visit, by arrangement with Mr. Williams, we started to lower the level of water in the adit, by the usual methods. It soon became apparent that what had seemed to be the lip of the level was simply a sloping face of the rock, and we had to lower the stream another couple of feet before air was admitted to the system. This was soon accompanied by eerie sounds from within as successive voids became dewatered below their respective roofs. The stream bed now occupied a narrow gorge incised into the spoil.

The Shaft

While the water was draining, we decided to have a look at the shaft. My 80 foot rope seemed to be too short at the first attempt, although it allowed me to have a better look and to do some gardening. The shaft clearly went below the level of the adit.

The next day, John's longer rope allowed me to abseil to the bottom - about 50 feet. The shaft now looked more like a stope, with no passage off. However, the side of the void opposite the adit seemed to be composed of



Gorn Top Adit, Plan View
(Not to Scale)
Sketched by M.Worsfold & E.Bowen, 5/5/96

Exploration of Gorn Mine continued...

loose material, in contrast with the solid rock of the other walls; but there was no obvious blocked inset.

By the time I struggled out of this hole, it was deemed that the adit was clear enough to admit a wet-suited body or two. A visit by Mr Williams and his family provided an excuse to put off the dreaded moment for an hour or so. As the diver of the party I was elected to lead the way with Nick's safety lamp, with John and Rob close behind.

The water was chest high, with about a foot and a half of air space. A few yards in, there was a walled-off passage on the right, in the direction of the shaft, with a bit of pipe sticking out of it. There was a passage on the left opposite. We waded on, unable to see more than about 3 yards because of a heavy mist over the water. Soon a vague white feature swam into vision, but to reach it we had to pass under a section of timbered roof through which one could see heaped deads of unknown extent. No one took very much time to examine this structure.

The white feature turned out to be a pile of deads encrusted with a white deposit, held up by disorganised heavy round timbers in what looked to me like a small stope, rising to about 20 feet. John later thought this was probably a collapsed fault, with which I concur.

We edged our way gingerly around the unstable-looking pile into the main adit again, noting a passage off to the left, through hanging death, which we did not fancy. Contrary to expectation, the roof soon became lower, so that the lamp would not pass dry. We decided to call it a day, and blocked up the entrance before tidying up.

The Lower Adit

Meanwhile we looked at the lower adit, which we found down by the main stream about 200 yards away.

The entrance is run in but passable. We dropped straight into chest-high water, and followed the single level for about 150 yards. It was much as described in Bick's account, swinging round to the left (SW), so that one was almost surprised that it didn't resurface by the stream. Not worth getting wet for, if you are not already very wet.

We returned about a month later, and a few hours' work lowered the water a precious few inches more. The water was still flowing strongly, so we agreed to leave the big push until the next day. The stream by then had shrunk to a trickle, and four of us went in with a couple of candles to test the air. The water was a foot lower, and we soon passed the stope/fault and made steady progress along the adit.

We came to a crossroads after about 70 yards. The left branch ended in a fall at about 20 yards, with the candle failing. Rob's attempts to light other candles were foiled by the refusal of his matches to burn, so we pulled out of there and continued along the main adit. About 100 yards later the candle flame shrank to a small blue cone and we retreated without delay to the crossroads, pacing out the distance as we went.

The other branch was now explored, and this was blocked by large deads, with substantial stoping visible beyond. It was judged that a little labour would open the way through, but we agreed to content ourselves with a tape survey of the outbye sections for the present.

We were probably lucky with the air, in that much of it had recently been sucked in as the water ran out. In the future the air might well be much worse, especially considering the presence of rotting timbers. These timbers will now rot more quickly with exposure to the air after long submergence. An oxygen meter would be needed for future exploration.

It is unlikely that the mile and more of level which is presumed to lead to the shafts over the hill will ever be explored without breathing apparatus. These shafts are now purposely blocked, after a history of dumping of all kinds of unspeakable waste.

We would also ask anyone wishing to visit this mine to first seek permission from Mr. Williams, who was very kind to us and it would be a considerable discourtesy to abuse this. Mike Moore or Nick can furnish details.

Letters to the Editor

Re: Copper and Silver in Shropshire

Reference Peter Claughton's enquiry in 'Below', Issue 96.2.

The workings you are interested in may well be those situated at Haytons Bent, some 4 miles NE of Ludlow at NGR: 517 810. These are reputed to have been worked for copper in medieval times, by the monks from Wenlock Abbey.

The workings are in Devonian rocks, in the Downton Red Sandstone series. They are marked on Murchisons map of the area which led me to the site some 25 years ago.

Then the visible signs were a few small spoil heaps and depressions in a coppice to the left of the road going up the Bent opposite the derelict chapel. A local ploughman reported that water diviners working for him on the hillside above the likely adit entrances had reported large cavities under his fields.

At the bottom of the Bent on the road side is the Mine cottage. This was reputed, by an aged local to have an 80ft. shaft in the garden, sunk during the World War (1st. or 2nd, probably the latter) but with little apparent success.

Looking the site over, there is little trace of copper in the spoil and no local record of any find of import.

T.J.Davies

Mining Characters

David Christopher Davies of Oswestry, Mining Engineer & Geologist

D.C.Davies is probably best known for his very detailed mining books "Slate & Slate Quarrying" (1877), "Metalliferous Minerals & Mining" (1881),and "Earthy and Other Minerals and Mining" (?).

He had a wealth of experience behind him, Bick (see 'Main Reference' below) says that DC was "born on 13 September 1827 in humble and obscure circumstances". He was orphaned before he was 12 and became apprenticed to a Mr. Minchall, ironmonger of Oswestry. He seems to have later acquired the business and sometime after 1856 moved it from Leg Street to Salop Road, Oswestry.

From an early age DC studied geology and mining, by the age of thirty he was publishing technical papers. Later he published in journals like the Colliery Guardian, various Geological society transactions and the Mining Journal, for whom he was the North Wales correspondent in the 1870's.

He also acted as guide on Society and Private tours for eminent geologists, and his reports of these have often aggravated the writer. On them he stops for lunch in some unnamed Shropshire pub, he then describes a quick trip to some nearby mine, again unnamed, of coal, lead or even slate (in Shropshire?) and then points out other interesting, but unnamed features!

By 1870 the ironmongers shop was taking a backseat and mining was rapidly taking over from geology as his interest. In 1872 DC took on the task of opening up mines of phosphate ore in the Berwyns near Llangynog. He had also become involved in several quarry and mining enterprises and was appointed manager of Ifton Colliery, nearer home in Shropshire.

By 1875 he was the Ifton Company's 'agent' and involved with the sinking of their No.3 shaft (This seems to have come to a stop at 176yards at that date when "the limit of the power of the engine was reached" - but it was later reopened and further sinking took place to eventually produce Shropshire's largest mine (see SCMC Journal 1995).

A coalfield south of the Mendips also took his interest and in 1874 he gave up his shop and moved his family to Ebnal Lodge near Gobowen. He was reporting on collieries in North-East England and also South Wales, looking after the phosphate operations near Bala, and spending much time at the Ifton sinking's, which he hoped would provide for his and his family's future - but the Ifton Company collapsed in 1876. This was solely for the want of capital - presumably the money to buy a bigger, new steam winding engine.

At this time DC was putting the finishing touches to a large book on "The Geology of the North Wales Borders". He could not obtain enough advanced subscriptions (orders) for it, so it was not published and even the manuscript seems now to be lost.

From this time DC, together with his son Edward Henry (EH) became involved in many mining activities at home and abroad: slate quarries in Carmarthenshire, copper, lead and silver in Norway and Sweden and quarries in France and Germany.

DC's wife died in 1884 and he himself died the following year, aged only 58, on a ship returning from Christiansund. His Memorial stone is in Oswestry Cemetery. There had also been other interests in his life, his geological collection (which finished up in Oswestry Library), as a town councillor and perhaps above all, his church, as a local preacher and writer of religious books and papers.

E.Henry Davies followed in his father's footsteps as a mining man, mainly abroad, but he did produce an important book "Machinery for Metalliferous Mines" in 1884 and produced many of the illustrations in his fathers books. It is disappointing to find so few references to local mining in EH's book, there are a few references to Welsh mines and in the chapter on "Electricity at Mines" there is a very early photo of a mining tramway of 2ft. gauge with trolley-wire locomotive* built by a Wolverhampton Company. No clue is given however to the tramways whereabouts or the mineral carried.

Main Reference

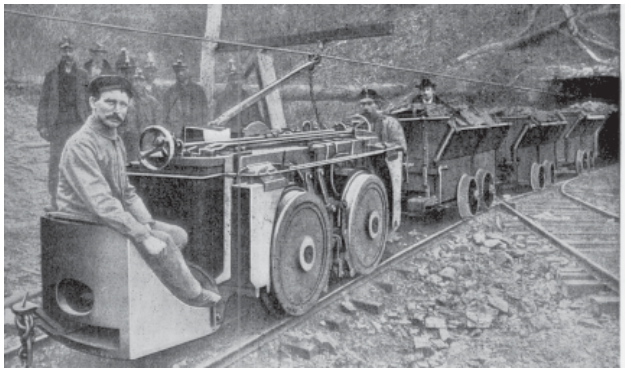
David Bick in his book "The Old Copper Mines of Snowdonia" published in 1982, gives a whole chapter to the life of DC Davies and this provides much more detailed information than above. The writer of this note has drawn heavily on the chapter for details and to David he is extremely grateful.

Ivor Brown

* Trolley-wire loco's

There are not many pictures of trolley-wire loco's in use in mines, but there is one that I have come across.

Figure 331. from Practical Coal Mining, Vol.3 page 15, (1912)



The photograph is by the *Morgan-Gardner Electric Co.* and it may have been taken at a foreign mine (German?), the gauge looks to be quite wide (ie at least 4 foot).

Kelvin

Project Up-dates
by Nick Southwick

Shropshire Project

14 April 1996

Haytons Bent Copper Mine
Members present: Sue Brueton and Steve Southwick.

Surface walk.

14 April 1996

Downton Hall
Members present: Eileen Bowen, John Davies, Adrian Pearce, Julie Pearce, Mike Moore, Catherine Mills, Nick Southwick, Rob Southwick and Mike Worsfold.

Limestone mines and lime kilns explored and surveyed.

12 May 1996

Haytons Bent Copper Mine
Members present: Eileen Bowen, Sue Brueton, John Davies, Steve Holding, Adrian Pearce, Julie Pearce, Nick Southwick, Rob Southwick, Steve Southwick and Mike Worsfold.

Walk over surface remains with local farmer and warden - surface survey completed.

7 July 1996

Potters Pit
Members present: Eileen Bowen, Steve Holding, Neal Rushton, Mike Worsfold and Andy Yapp.

Underground survey carried out.

Snailbeach Project

13 April 1996

Members present: Eileen Bowen, John Davies, Adrian Pearce, Rob Southwick and Mike Worsfold.

Drystone wall building in Roberts Level, to cover infill dams (Barytes Stope).

11 May 1996

Members present: Colin Armfield, Liz, John Davies, Steve Holding, Mike Moore, Adrian Pearce, Julie Pearce, Nick Southwick, Rob Southwick, Stuart Tomlins and Mike Worsfold.

Excavation of winding engine foundations at Lords Hill. Building of corrugated support tunnel under "Hanging Death".

8 June 1996

Members present: John Davies, Steve Holding, Catherine Mills, Mike Moore, Malcom Newton, Adrian Pearce, Julie Pearce, Nick Southwick, Rob Southwick and Stuart Tomlins.

Excavation of Lords Hill winder wheel pit continued and corrugated iron support channelling under "Hanging Death" bolted.

9 June 1996

Members present: John Davies, Steve Holding, Catherine Mills, Mike Moore, Adrian Pearce, Julie Pearce, Nick Southwick and Rob Southwick.

Filling in behind corrugated iron support channelling under "Hanging Death" and levelling ground (viewing platform) in Barytes Stopes.

6 July 1996

Members present: Cara Allison, Eileen Bowen, John Davies, Adrian Pearce, Nick Southwick, Rob Southwick and Mike Worsfold.

Viewing platform completed and infilling behind sheeting continued.

World Heritage Sites

The 1996 List of UNESCO World Heritage Sites includes the following mining related locations:
Kutna Hora (Czech Republic), Royal Saltworks at Arc et Senens (France), Rammelsberg Mine, Volkingen Ironworks and a fossil-rich quarry at Darmstadt (Germany), Guanajuato Mines (Mexico), Roros Mines (Norway), Wieliczka Salt Mine (Poland), Engelsberg Ironworks (Sweden), Potosi Mines (Bolivia) and the Ironbridge Gorge (UK). Some 11 out of the 469 listed sites of "outstanding universal value". Cornwall is known to be making a bid, the South Shropshire Lead Mines should also be put forward.

Could we all get together and consider this sometime.

Ivor Brown

Anstice Info

Further information has come to light on the Anstices (see last issue of 'Below'). At least two fossil species seem to have been named after the Anstices - both from fossils found in Shropshire.

1. Conchifera Unio Ansticei (an oyster type shell found in Pennystone)
2. Curculioides ansticii Buckland (as shown in the last issue & p2 here).

The second one had in fact two (not one as shown in the sketch) eyes on each side of the head - must have been confusing!

For more information see Trans. Royal Society of Edinburgh - Earth Sciences Vol.83 pages 595-634, 1992 and Geology of Coalbrookdale by J.Prestwich 1840.

RSG 'Siren'

I have recently received the RSG (Royal Signals Group?) newsletter "Siren" - they are a The Cold War Research Study Group a specialist study group within Subterranea Britannica.

The current newsletter mainly covers bomb dumps and other Civil Defence matters, if you think we should continue to receive the newsletter let me know and I'll return the request, otherwise it will save Sub. Brit. some money by not having to send us one!

Kelvin

Towards a History of The Brown Clee Coalfield?

By David Poyner

Coal has been mined in Shropshire in the Coalbrookdale Coalfield, the Shrewsbury Coalfield, the Oswestry Coalfield, the Wyre Forest Coalfield and the Clee Hill Coalfield. Interest in coalmining history is strong, and all these areas are the subject of current research. However, some of these coalfields are made up of a collections of physically distinct basins. This is true of the Clee Hill area, which consists of two quite separate fields located on the Titterstone and Brown Clee Hills.

The Titterstone has been studied by a variety of workers; by contrast little has been published about the Brown Clee. This is partly due to the fact that coal working on the Brown Clee had almost finished by the mid Nineteenth Century; while deep mining on the Titterstone Clee continued into the 1920's. However, there is no doubt that mining on the Brown Clee has a long and interesting history, and merits a closer examination.

From a cursory survey of the existing literature, it seems that although coal was first obtained from the Brown Clee in the thirteenth Century, intensive mining for ironstone became important in the Seventeenth Century. At this date the Hill supported blast furnaces at Bouldon, Abdon and Charlecotte.

Although Charlecotte continued well into the Eighteenth Century, the other were abandoned earlier, and it is likely that the local ironstone deposits were largely worked out by this date. Coal mining must now have assumed greater importance.

The mines were described in some detail by the famous geologist Sir Roderick Murchisson, writing in about 1830. They were hand wound, very simple, and frequently their working was interrupted by the weather, particularly the wind. The mines were cut off from anything other than the most local of markets, and with the inevitable exhaustion of coal, it seems that most had finished by about 1870. By this time, the chief mineral worked on the hill was lime, and at Cleobury North, Abdon and Ditton Priors there were important limeworks. The last phase of extractive industry began in the first decade of this century with basalt quarrying on the very summits of the hill. This was associated with the Ditton Priors and Cleobury Mortimer Light Railway (DPCMLR). However all quarrying had finished by the outbreak of World War 2.

Within the last year or so, a small museum has opened at the Old Shires Tearoom in Ditton Priors, which includes an interesting collection of photographs and momentoes from the quarries and the DPCMLR. This also contains a press cutting from a 1938 edition of the Bridgnorth Journal which potentially has important implications for the history of coal mining. It refers to a 94 year old Thomas Bell as being formerly involved with the only mine on the hill to employ steam power. This is the first reference to such a mine on the hill that I know about. Bell was a miller at nearby Middleton Priors from the turn of the century. Given his age, it seems unlikely that the mine could have worked much before the 1870's, and indeed the Bell family do not appear in local trade directories until the 1880s.

The semi-official "List of Coal Mines", an annual Government Publication, makes no mention that I can find of any candidate mine, although it is not a particularly reliable source until the end of the century, It does refer to an Abdon Slope, probably a drift mine, which "worked" for a month in October 1911 in conjunction with the quarry, but I suspect that this was too nebulous a venture to be the mine with which Bell was associated.

Leaving aside Thomas Bell's mine, I suspect that much useful work remains to be done on the Brown Clee coalfield, both in the archive and on the ground. I am not aware of any good survey of the extensive mining remains. Given the extent of limestone working, it is possible that there may be remains underground; Murchisson speaks of these extending 20 feet into the hill; could later miners have extended these further?

Although the basalt top of the hill was removed by quarrying, large areas of ground appear undisturbed. This could be fertile ground for new fieldwork. The Brown Clee Coalfield is certainly an area in need of a historian!

Further reading:

N.Mutton, "Charlecotte Furnace", Bull. His. Metalul. Group, (1966), 6, 8-42

R.T.Rowley, "The Shropshire Landscape", Hodder & Stoughton, (1972).

W.Smith & K.Beddoes "The Cleobury Mortimer and Ditton Priors Light Railway", Oxford Publishing, (1980).

Snailbeach Miners - *Help*

I am extremely interested in tracing members of my family (Davies) who worked at the Snailbeach Mines, I believe around the turn of the Century.

The Family names are: William Davies, whose father or brother was John. John's sons Alan and Frank definitely worked there.

The family has connections with Pontesbury, where they used to live in Station Road.

If you can help me in my research could you please write to me:

Pat Davies
2, Kyneston Crescent
Codsall

Thank you.

Alternatively, you can send any material to me and I will pass it on.

Kelvin

Access to Nenthead Mines

Cumbria County Council have been buying land in the Nent Valley to secure the conservation of the important mining remains and to make them available to the public in a controlled fashion.

Since 1992, negotiations have been taking place with the North Pennines Heritage Trust to achieve these aims. In 1993 the Rampgill Workshops were acquired. These are now leased by the Trust which has converted them into workshops for local businesses and a heritage centre, which opened to the public on 24 June 1996. The Heritage Centre tells the story of the people of Nenthead and their activity on the site.

In addition:
1. The whole site is now a Scheduled Ancient Monument.

2. Parts of the site are now scheduled as a geological SSSI. This includes Carrs Level and Smallcleugh Mine, both the surface and the interior.

3. The site is now the subject of a management plan approved by English Heritage and a programme of conservation of the surface remains is now being prepared.

Due to these developments access to the site is now regulated. The only right of access on foot is over existing footpaths and there is no vehicular right of access except for quarry and agricultural purposes. Admission away from the footpaths is therefore by permission and the public will in future be paying for access to the Heritage Centre and the waymarked trails which are being set up. Groups from outdoor activity centres will in future pay to use the site by prior arrangement.

Mining and geological groups who are members of NAHMO may continue to use the site within the following framework:

1. Vehicles will no longer be able to park along the Priorsdale track, but will be required to park in the enlarged car park at the old Rampgill workshops.

2. Groups and individuals who feel willing and able to help with the conservation of the surface remains will be very welcome. They should let the Centre Manager know so that any work is carried out with Scheduled Monument Consent and in accordance with the Management Plan.

Neither the County Council nor the Trust wishes to prevent access to the mines by bona-fide mine exploration and survey groups. Indeed the Trust would welcome co-operation with them in extending our knowledge of the Nenthead Mines as a whole.

In future what we seek is your co-operation in:

a) Parking in the Heritage Centre car park.

b) Notifying the Centre Manager before you go down a mine - either by calling at the Centre during opening hours or leaving a note in the Trust letter box, outside that time.

c) Helping us to prevent activities which damage the fabric of the mines or involve the extraction of minerals.

Note

The Trust cannot be held responsible for any damage, injury or loss by parties from mining history groups while visiting the site.

We would be very pleased to know if your club has a particular research interest in any part of the site above or below ground. We are attempting to build up a comprehensive record of the whole site and if your organisation has carried out surveys or produced written material we would welcome a copy for our archive.

Jill Fenwick, Centre Manager
North Pennines Heritage Trust
Rampgill Visitor Centre
Nenthead, Alston
Cumbria CA9 3PD
(01434) 382037

Puzzle Spot

When the Shell "Guide to Shropshire" was published in 1952 it contained a sketch of an old engine house 'at Dawley' believed to have been drawn in 1938 . Since then much consideration has been given to 'which engine house'?

Mr. K.Jones of Little Wenlock now believes that it was the engine house at Ganey Pit on the track leading from Gravel Leasows (Doseley) to Lightmoor. The cottages to the right were in The Finney and the chimney stack could be at Shutfield Tile Works.

Does anything remain of it?

At Dawley

Memories of The Bog Area in the early 20th Century, as told to Ivor J. Brown

On Sunday evening March 5th 1995 ny car was stopped by the snow and ice on the unmade track approaching the Pennerley Chapel. The lady from the nearby cottage came out and informed me that I need not go on as the evening service had be cancelled, the chapel was snowbound. I commented on the fact that I had chatted to a Mr. Davies here over 30 years ago. The lady said that she was Mrs. Davies and invited me in to her home for a warm and a chat.

Mrs. Davies has recently died and the cottage is now in the possession of others, but on that night 12 months ago Mrs. D's memories brought back vividly life as it must have been in the Bog area in the early years of the century.

The cottage was a simple stone-built one, two rooms up, two rooms down, with electricity but no other services. The furnishings were typical early 1900's, with the easy chairs monopolised by a number of cats, who were obviously in control. The heavy timber door was fitted with an old style latch and cloth covered all the woodwork of the table. An old open, black iron fireplace contained a wood fire, it was, I was told, 77 years old because Mrs. Davies remembered it being put in. On that day as a young child she played in a heap of sand under the table because it was wet outside. Unfortunately the water boiler on the left-side had been damaged, so now contained drying sticks not water, but the oven on the right was OK.

To the right of the entrance to the living room was an old photo (see sketch on p11), framed and about shoulder height. It showed Mrs. Davies' grandparents and her mother aged 17, in the 1890's, leaning on a low wall in front of a thatched cottage - this cottage. The thatched roof was replaced by 'slate' earlier this century. Behind the cottage was a similar building slightly higher up the hill, but with no windows or chimneys, only a long low vent on top of the roof. This was apparently Potters Pit 'Engine' House. It contained "some engines and other equipment", but the winding engine here was usually a "portable".

When the mine closed the engine house was given to Mrs. D's grandfather in lieu of rent owing, as the Company had no money. Behind this building, Mrs. D said, there was the ruins of another building - a pub called the Crown, long closed and abandoned.

As a child in the First World War, Mrs. D went to Bog School, she remembered the German prisoners working on the overhead 'railway', the buckets passed in front of the school, the children watches them with amazement. She also remembered the overhead ropeway being removed in the 1920's.

"The electric lights at Bog were the brightest things seen around here, people came from miles away since the Bog was the first to have such lights" - said Mrs. D. The "engines" were all very noisy, but she never actually saw them.

She remembered that the Men's Club or Institute was also the Mine Office, it had four separate large rooms, two up and two down. They used to hold dances there!

She never remembered the School being used as a Church, Chapel or Mission Room, but they always held a C. of E. Children's Anniversary and Harvest Festival right until it closed. She had heard that the parson complained of the journey, it was 6 miles from his Rectory door (Wentnor?), one of the largest parishes around here.

The 'Stiperstones' were very important to the locals. Mrs. D used to pick her own bilberries (whinberries) until 2 years ago during July/August. These were for herself but previously they were sold to merchants (higglers) for about 1½d per quart (1½lb.). These were then used mainly for making dyes, a purplish blue.

She also pickled cranberries (cowberries) in August/September, they were red, made good pies or could be preserved in cold water. They had a rather 'tart' taste but were ideal when mixed with whinberries.

Mrs. Davies had been a worshipper all her life (like her parents and grandparents before her) at the 'new' chapel behind her house. She had been organist for 48 years and caretaker for 38 years, now she couldn't manage these but was still picked up and taken to the services. The 'new' chapel was built in the 1860's to replace one further up the hill. She remembered when they had 4 services each Sunday, until the last War. There was morning school and 'church', afternoon school and 'church', a boys class, 30 in the choir and over 40 children in the school.

The chapel still has a School Anniversary and a Harvest Festival once a year, but the evening service had been put back to "6.30 start" to help farmers with their milking. Mrs. D said the chapel was still an original "Primitive" one and was one of the last to hold Camp Meetings (The 'days of prayer etc.' in the open air that caused the split with the Wesleyans, early last century - the Museum of Primitive Methodism, Englesen Brooke, has informed the writer that Pennerley is the last former Primitive Methodist Church to hold these meetings).

Mrs. Davies remembered the last War, because they lit fires on the hills to deceive the bombers. The bombs would fall here rather than on Birmingham, but she couldn't remember any person or sheep being hurt on the "hill".

Mrs. D seemed to live for her cottage, her cats, her chapel, her weekly visits by bus to see her sister (near Minsterley) and the good friends she had who lived in the remote cottages around her. Later that evening I was able to return to tarmac roads, but the visit certainly left me thinking.

Note:

No dates etc. have been checked with known facts, they are just "as told", I thought it would spoil everything to do this.

The University of Birmingham Training Mine
by Ivor J.Brown

In the 1940's and 50's a scruffy old, semi-literate Shropshire collier might well come out proudly with the expression - "When I was at University .....", others would gaze in surprise and awe. In those times a University trained person of any calling in the Coalbrookdale Coalfield was a very rare animal indeed. However, what the old miners was referring too was not a degree course, but a one or two day training course, usually in "Mines Rescue", in the training galleries beneath the University, to which he had been sent by the mine management.

Birmingham University was probably unique in England in having its own 'Experimental Mine' on, or more precisely under the premises. It is believed to be still accessible.

The mine (Centre of Fan House at NGR: SP 04985 83370) is fully described in the Transactions of the Institution of Mining Engineers, Vol.28 (1904-1905) and Vol. 44 (1912-1913). It consisted essentially of two shafts, about 6ft. diameter, bricklined, about 12ft. deep to invert, a fan drift, a fan house - large enough to hold three different types of fan, an ancillary power house for electric equipment and an electric pump.

The underground workings which were constructed in 1904, "are for the greater part built of concrete, the roof being strengthened by steel girders inserted in the concrete". The 1912/13 description continues:

> " The workings, the area of which covers about one acre, are ventilated by a single-inlet Capell Fan, 5½ft. in diameter .... half cased, and driven at 500 rpm by a 20 hp electric motor. The mine is drained by a small electric pump placed at the bottom of the down-cast shaft".

The underground workings were set out to illustrate both pillar and stall workings and longwall working with a stepped face as was common before the advent of conveyors. Also present were tub roadways through the goaf, stone-packed gob, timbering, brick arching, brattices and air-crossings as well as other typical mining features.

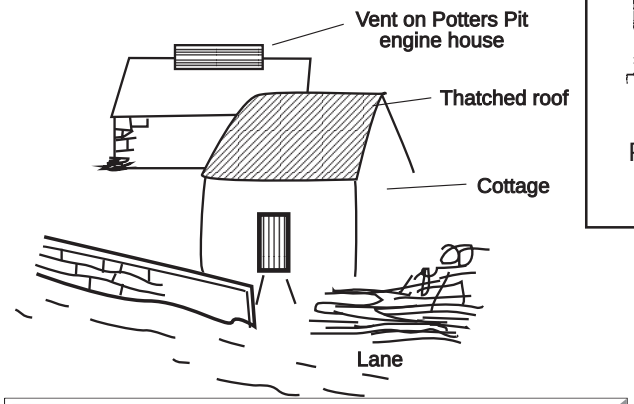
The fan House is of brick with Welsh slated ridged roof.

The 1904-05 drawing of the site shows Block C, about 140yds. West of the mine as the Mining & Metallurgy Dept.. At that time it contained a full range of 19th Century mining equipment, buddle, jigs, crushers etc., a library and a museum. The present situation as regards to this building and its contents is unknown, but Members of the Friends of the Black Country Museum have recently visited the mine itself. They found the pillar and stall area accessible, but suspected that the longwall workings had been lost in road construction.

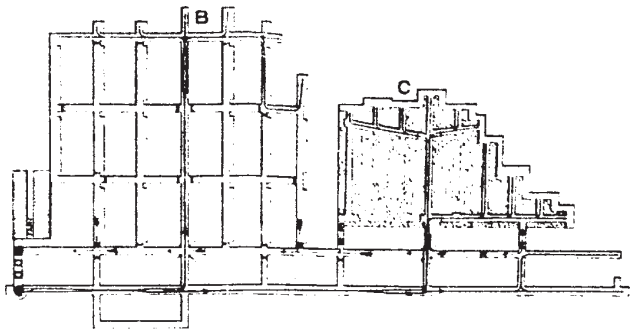
The Museum has removed the Capell fan and at present it is under restoration at the museums workshops.

If the whole complex has survived (underground and surface) it would make a fine mining museum.

The assistance of Mr. George Price in the preparation of the above is gratefully acknowledged.

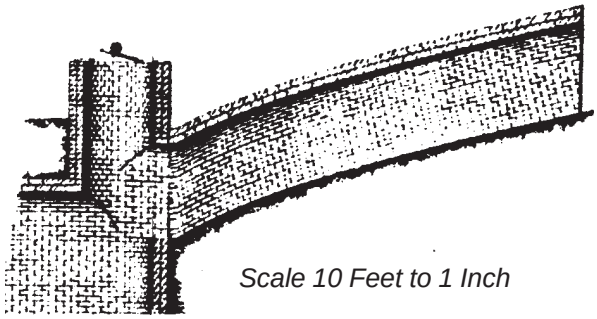


General Layout of Photograph in Mrs. Davies Cottage, Pennerley
(From a sketch by Ivor Brown, 5/3/95)



Plan of the Experimental Coal Mine, Birmingham

Side-elevation of Upcast-Shaft and Fan-Drift



Scale 10 Feet to 1 Inch

Trip Survey Sketch Re-prints

Following requests from various members, who claimed that one or two of the survey sketches which accompanied past trip reports in 'Below' were a little *small* and difficult to read I have decided to re-print a couple of them.

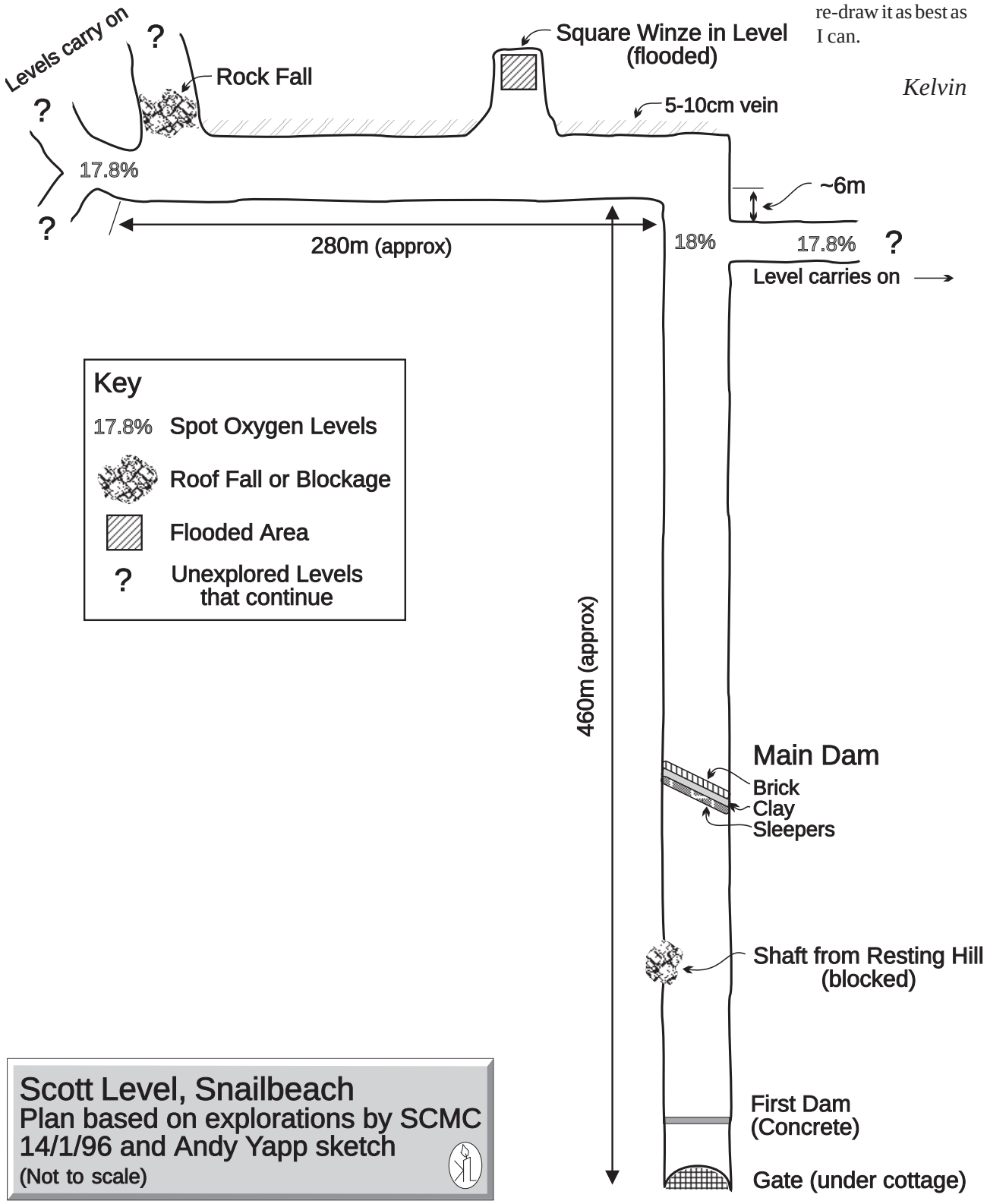
On this page is the sketch of Scott Level based Club explorations, back in January of this year.

While on the opposite page is a larger version of the Reynold's "1800" Tunnel, explored in November last year.

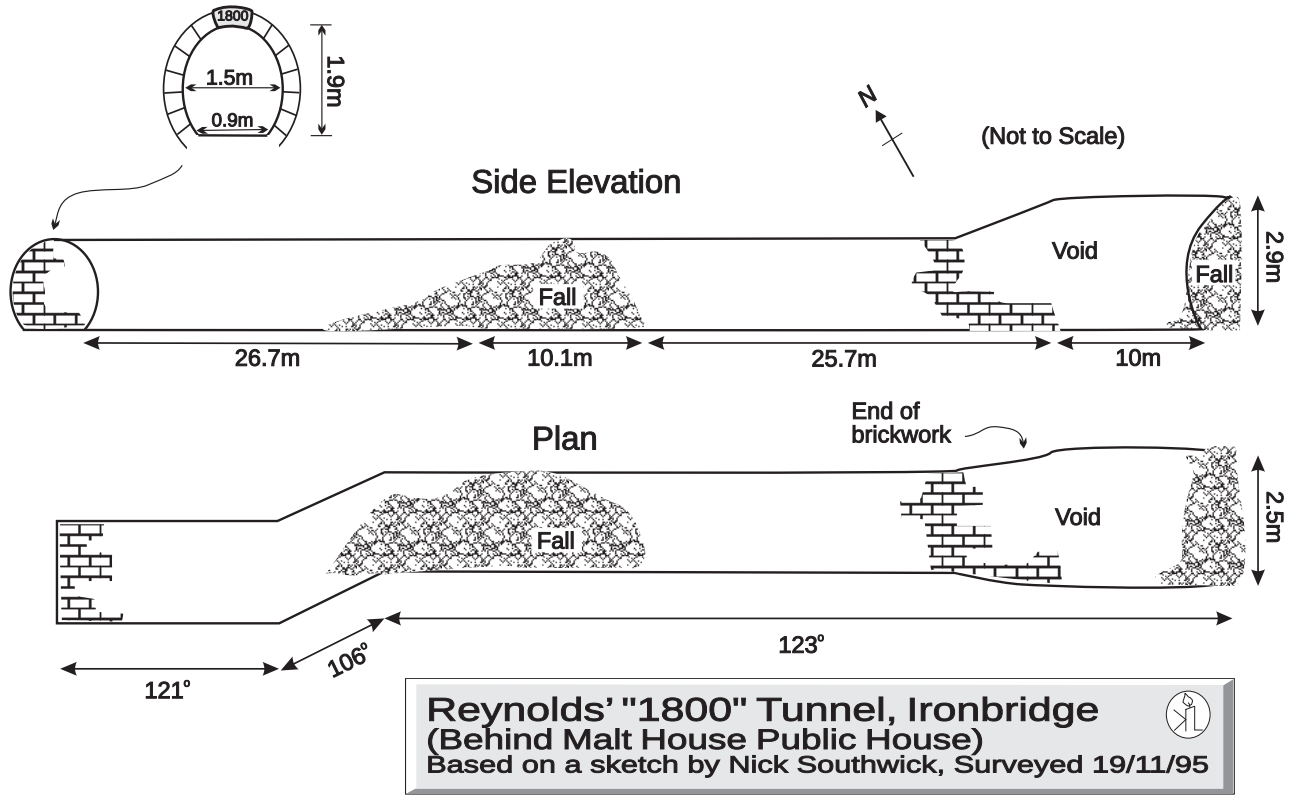
If space permits I will try to make sketch plans as large as possible- as on page 4 of this issue, with Mike Worsfold's diagram of Gorn Mine.

If you have, even a rough sketch of a mine, tunnel or even cave (!) which you think would be of interest to other members, please send it in and I'll try to re-draw it as best as I can.

Kelvin



Scott Level, Snailbeach
Plan based on explorations by SCMC 14/1/96 and Andy Yapp sketch
(Not to scale)



Queries Answered

In response to queries in the Summer issue of 'Below':

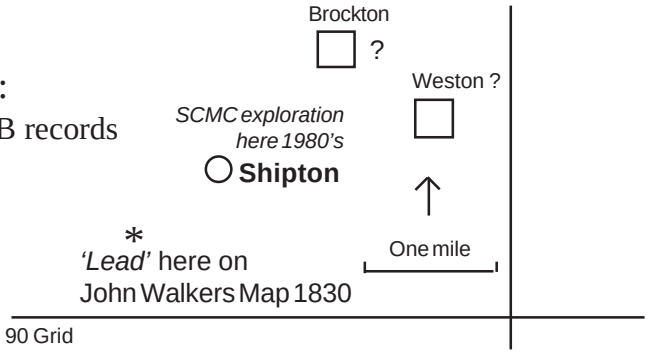
There are several other references to mines on the Wenlock Abbey Estate, see "Elizabethan Copper" by M.B.Donald, but what was the full extent of the estate. Shropshire is splattered with "possible copper mines" and copper was recently found even in secondary deposits at Woodside, Madeley - a most unlikely place!

Odd references to metal mines occur in the Shipton area and one was investigated by the Club in the 1980's. This, another odd reference for 'lead' shown on an 1830 map, and two locations identified in the c1963 NCB - "area of known old workings" map is were shown on the sketch map above.

The NCB's map also shows other copper mines eg: Grinshill, Pimhill etc. so this compiler obviously had some sources of information available not easily accessible to others.

Ivor Brown

Sketch Map:
From NCB/IJB records
OS Grid shown



Help Required

Mr. Michael Kneebone is researching his ancestors. His Great, Great, Grandfather John was a Mine Agent in Cornwall from 1851 to 1856, then went to Mid-Wales and finally appears in the 1861 Census for Wentnor as being Mine Agent living at The Bog.

One son and two sons-in-law are also shown as lead miners there and another son was a lead miner living at The Gravells, at Hope. Another son, Michael's Great Grandfather, hasn't yet been found.

By the 1871 Census, most of the family had moved on except for a son Thomas, yet another lead miner, who then lived at White Grit. The family story is that in 1874 Thomas was "lost in a storm" and later presumed dead. Has anyone any information about miners named Kneebone in Shropshire?

IJB has only been able to determine that the Great, Great, Grandfather John was 'consultant' to the unsuccessful Ritton Castle Mine in 1860, urging owners to carry on. He then became Agent at South Lisburne Mine (Cards.) 1861-65 and died in 1867. Where did his sons and sons-in-law go in the 1860's?

If you can help you can contact Michael Kneebone at 27, St. Christopher's Close, Isleworth, Middlesex, TW7 4NP.

Shropshire Mining 100 years ago
Notes from the Mines Inspectors Report 1896

Coal Mines etc.

82 mines employing:
males 14 and over;

underground:	2863
surface:	754
plus one boy in age range 12/13 years	
females on surface:	174
Total:	**3,791**

Production

720,130	tons coal
12,959	ton fireclay
40,063	ton ironstone
170	ton pyrites
57,439	ton red clay

Fatal Accidents

6 deaths (plus 6 more not required to be included, eg: men dying over 1 year after injury was received, visitors to sites etc.)

The 6 "statutory" deaths were:
Exleys Rock Clay Mine - man fell off tub when riding in shaft, 32yd. deep
Woodhouse - man run over by tub
Woodhouse - 1 killed by fall of roof
Grange - 1 killed by fall of roof
Granville - 1 killed by fall of roof
Highley - 1 crushed by tub on surface.

Two explosions of firedamp both in mines not considered to be 'explosive'; *Billingsley*, near Bridgnorth and *Tuckies Red Clay Mine* near Broseley. Both were ignited by candles used for lighting.

Prosecutions

Owner of *Benthall Fireclay Mine* fined £1 with 9 shillings cost for failing to keep a mine plan and a similar amount for failing to provide a second means of egress.

Four men (Lilleshall Co.) and five men (Stirchley Co.) for various offences eg: carrying contraband, interfering with lamps, making unauthorised signals.

Abandonment Plans

These were presented for:
Asterley (Pontesford), Coneybury (Broseley), Coreley (Ludlow), Woodfins (Ketley), Shaws (Madeley, Old Park (Dawley), Wallers (Broseley).

Exemptions granted from the use of guides in shaft at Tuckies.

Note:

Full reports are given of the incidents at Billingsley, Tuckies and Snailbeach. Copies available from the writer.

Ivor Brown

Quarries

90 quarries employing:
1,250 persons plus 34 seasonal etc.

Production

49,433	ton clay and shale
2,687	ton gravel and sand
127,855	ton limestone
29,368	ton sandstone
190,979	ton basalt
40,000	ton slag (from old blast furnaces, used for road metal)

[This was the last year that slag was to be included in the list, they had won a court case against the Inspectorate which freed them from restrictions].

Accidents

One fatal accident at *Hollinswood, Ballast Hill* (old furnace slag tip), labourer crushed between a cage and the loading spout of a hopper.

Metal Mines

10 mines employing:
males;

underground:	156
surface:	1,010
females on surface:	3
Total:	**260**

Production

3,992 ton barytes
1,250 ton lead
485 ton zinc
3,956 ton stone (mainly limestone or calcspar)

Fatal Accidents

None, but one youth killed at Snailbeach riding on the beam of the pumping engine, not included because he was not an employee.

Reportable Injuries

Two at Snailbeach, an arm broken by trapping between a wagon and the cage, second was an engineman who slipped when getting out of a hopper underground and fell onto the tippler.

Inspectors Comments

If light railways were constructed in some parts of the County it might resuscitate the mining industry. The names of the individual metal mines, their manpower and mineral production figures are also given (see also Burt et al 1990).

Cyfarthfa Culverts

A system of culverts built to serve the Cyfarthfa Ironworks, Merthyr Tydfil was discovered in 1995 during the planning stages of a new road.

The route of the road was found to pass over a stone-lined chamber, with two culvert entrances inside, near to the river Taff.

Of the two culverts extending from the chamber, one is over 450m long and ends at the ironworks site. While the other is 14m long to a blockage, but it is thought to have continued to join the Glamorganshire Canal, but has been blocked by modern house building.

It is believed that the culvert system is contemporary with the canal (built 1790-2) and was used to power waterwheels on the lower ironworks site.

The culverts have been explored and surveyed by the Ironbridge Gorge Museum Trust Archaeology Unit, but no decision has been taken on how to preserve the system yet, although the new road will only affect part of the culvert system.

News Round-Up 2

NCA:

Tangles with the Web

The NCA has been given free internet access by the Service Provider UK On-line. The free access includes e-mail accounts and web space. In addition to this UK On-line have promised to donate £5 for every member who decided to become a personal subscriber to UK On-line's family service and £1 for every year they subscribe thereafter.

The NCA is planning to use the donations to further the work of the UK Cave Conservation Emergency Fund, which makes grants and loans to clubs and individuals for emergency conservation work.

If you want to try out UK On-line ring 0645-000011 and quote the reference "charity NCA". This will ensure that the donation is received when you subscribe.

The web address of the NCA is:
http://web.ukonline.co.uk/nca

Journals Received

Latest Journals received for the Library include:

Speleosouth - Journal of the Southsea Spelaeological Soc.

SpeleoScene (NCA) - No.23

North Wales Caving Club - Newsletters 223 to 226

Plymouth Caving Group - Newsletter & Journal

Journal of the Great Orme Exploration Soc.

Industrial Heritage - Vol.14.3

Royal Forest of Dean Caving Club - Newsletter No.118

Mining History Soc. of Ireland - Newsletters 1 & 2

Caves & Caving (BCRA) - Issues 72 & 73

Cave Science (BCRA) - Indexes

Mineral Spot

Pyrite - Iron Sulphide.

Most abundant and wide spread sulphide. Sometimes known as 'brass' or 'brazil' to the old miners, mainly known as 'Fools Gold' as it is often mistaken for gold, even though it is harder, more brittle and can be ground into a dull brown powder.

It occurs in all types of rocks and veins, crystallizes in cubic, pyritohedra and octahedra forms. Same chemical formula as **marcasite**, although pyrite is yellower and has a different structure.

Many fossils, particularly in shales consist of pyrite and were formed when hydrogen sulphide from decaying organic material acted on iron.

In damp conditions pyrite is very prone to oxidation (museum fossil collections can be destroyed by *pyrite rot*), fresh specimens must be kept totally dry or treated to prevent oxidation.

Pyrite decays into sulphuric acid and iron sulphate. Its chief use is in the production of sulphuric acid, but it can also be used industrially as a source of iron, but only large deposits overseas have been used for this purpose.

The name pyrite translates into 'fire mineral' - due to the fact that it gives off sparks when struck.

The minerals Pyrite, Hauerite, Sperrylite, Penroseite and Laurite form the Pyrite group of minerals and are amongst the hardest sulphides.

Major deposits of pyrite occur in the USA including: Arizona, Utah, California, Illinois, Virginia and Tennessee.

Chemical formula: FeS_2

Field Meeting

The Autumn field meeting of the BCRA Cave Radio Group and the BCRA Cave Surveying Group will be held in the Yorkshire Dales from Friday 25th October to Sunday 27th October.

A full programme of experiments, demonstrations and talks is planned for the meeting for example:

Cave Surveying talks and demos by the Cave Surveying Group.
Cave photography sessions by the Underground Photography team.

plus a comrephensive Cave Radio and Electronics section.
Further details from:

Richard Rushton (CREG Field Meet),
77 Hirstwood Road, Shipley,
West Yorkshire, BD18 4BU

New Radio Band

A new low frequency (LF) amateur radio band has recently been licensed by the government for use by Radio Amateurs. The band at 71.6 to 74.4kHz (christened the 73kHz band).

So what's all this to do with underground?

At these low frequencies the radio signal should propagate some distance through rock (the Cave Radio Electronics Group already have an interest in this part of the spectrum), the propagation path is also quite stable (this is why a lot of the standard time and frequency stations work on frequencies in this region).

The snag:

Class A licence holders can use the frequencies with the following conditions: 0dBW ERP, all modes *except* fast scan TV, **no** mobile (bang goes the cave radio idea!) or maritime mobile operation.

To use the frequencies you must apply for a Notice of Variation (NoV) to your licence via the RSGB. If you want more details I can let you have a photocopy of the NoV requirements.

Kelvin

The 'Lilleshall' Mines Rescue Station
by Ivor Brown

The earliest Rescue Stations were little more than a room set aside at a colliery for the use of persons helping in an accident. The first proper station with breathing equipment however, was at Tankersley, Yorkshire in 1902. This and the subject generally, was studied by the 1906 Royal Commission on Mines and their deliberations led to "Central Rescue Stations" being made compulsory in the Coal Mines Act of 1911.

Between 1906 and 1911 other stations were built but the Special Regulations of 1913 and 1914 tightened up the organisation considerably, so that between 1911 and 1918, 35 Central Mines Rescue Stations came into operation. It seems that the Lilleshall Station was one of these.

All collieries had to be covered by a Rescue Station which was no more than 10 miles away, although there must have been many exceptions even in Shropshire, for the miners of Hanwood, the Clee and elsewhere do not seem to fall into this category.

The Lilleshall Company was the largest employer of miners and operated the highest number of medium-size mines in the Coalbrookdale Coalfield so appear to have taken on the rescue responsibility. The name 'Lilleshall' therefore, seems to have been part of the sponsoring company, rather than the location of the Station, but the exact whereabouts of the building are not yet known to the writer.

It seems likely too, that the other colliery owning companies would have had to have contributed to its cost, perhaps on the present-day basis of so much per year, per ton of coal produced (in 1996 it is **11p**).

The Rescue Station had to be of a certain standard and to contain:

1. Telephonic communication to all collieries within 10 miles.

2. To either have a permanent brigade on site or to have an instructor with one or two assistants, to train part-time rescue men in brigades, who would come in once per quarter for training (Shropshire seems always to have worked this way using part-timers - including the writer 1958 to 1962).

3. Each station had to have 20 complete sets of portable breathing apparatus.

4. A motor car capable of getting to any colliery within 10 miles in 30 to 40 minutes.

5. Other accessories including oxygen revivers, canaries, safety lamps etc..

Each colliery also had to keep some basic equipment on site, including a 'fire-pump'. There was a manually hauled, hand-pump on the surface at Kemberton pit even in the 1950's. This was stored under the Power house - a former steam winding engine house which was demolished in the late 1980's.

The brigade from Kemberton pit (Madeley Wood Colliery) seems to have been trained at the 'Lilleshall' Station, although special training was obtained from Birmingham University (see article on page 11).

Several photos survive of them in the 1913-14 period, each showing 5 or 6 men in full breathing equipment, a stretcher and other basic items about them. By the 1960's each large colliery had two such brigades, equally proud but by then trained at Dudley Rescue Station.

The mileage restriction had been relaxed as 'cars' became more reliable, so Lilleshall had been closed, but the exact date of this is not known.

Shropshire Brigades

The Shropshire Brigades were often in action, but rarely in Shropshire. Usually they were on stand-by duties at Staffordshire pits because they were more 'fiery'. However, a Shropshire man did die on duty. A fire had occurred underground at Kemberton Pit in April 1909 and the District had to be sealed off to starve the fire of oxygen.

Two years later in 1911 an attempt was made to reopen it, but the fire was still burning. Some months later another District's workings was approaching the sealed off area and this was being affected by fumes. It was decided to investigate the position behind the stopping and a brigade was sent in with breathing apparatus.

After a while one of the Rescuemen, F.Ward, was seen to falter, he then fell and became unconscious, by this time the mouse they carried had died and the safety lamps had been extinguished indicating very poor air. Rescueman Ward, unconscious but still breathing, is thought to have drawn air in at the corners of his mouth by wrinkling his cheeks in an effort to stay alive.

His colleagues did all they could to save him, even opening the by-pass valve of his breathing apparatus, but it was to no avail. At the inquest the experts were undecided as to the cause of death, some argued that he must have drawn in poisonous air before he fell, while others that he had been affected by a previous illness.

During the last 90 years the Rescue Stations have played a very important part in rescue work generally. They have even been involved in some cave rescues, Superintendent J. Craner of Dudley provided a short course for the Club in the 1960's.

Souvenir Plate

To commemorate the work of the Stations a 'plate' has been produced with a list of all 57 known stations (including Lilleshall) around its rim. The service has now been 'privatised' and only about 6 stations remain, although a new one, staffed by ex-British Coal Rescuemen has been opened to provide a service at the Channel Tunnel entrance.

The writer would be pleased to receive information on the location and period of use of the Lilleshall Central Mines Rescue Station.

Books, Videos, Places & Events

The Industrial Archaeology of Shropshire

by B.S.Trinder, published by Phillimore, 1996, price £25

A hard-back book of nearly 300 pages, including 125 clear and detailed photos, maps and diagrams. Three of the eight chapters are of particular interest to mining historians, No.4 on the Coalfields, No.6 on the metal mines and No.7 on the transport systems. Nearly 60 pages are devoted to the coalfields and there is some new information and aspects discussed.

There are a few mistakes eg: p 122; Halesfield Colliery never sent coal to the power station (Kemberton Pit or Madeley Wood Colliery did), and p109; the headframes of Grange Pit survive not Granville. In proportion to the facts given however, these are very small in number. The author does claim that the Pontesford (No.2) Engine House is the only surviving steam engine house in that coalfield, but this is certainly not so.

The metal mines are covered in 13 pages and again a new slant is put on the area. From a study of the census statistics eg: in 1881 Llanymynech was home to 7 lead miners and 2 copper miners!

However some of the information is unfortunately dated, at least two of the engine houses referred to have now gone and Oven Pipe pumping house can hardly be described as "substantial" in the same terms as Watsons.

There is a wealth of background material in this book and it is well worth having.

Note

The old S.M.Club gets several mentions in the text re: Tar Tunnel and its HQ, but the SCMC is not listed under "Organisations concerned with Industrial Archaeology" in the County!

Ivor Brown

'Violet' in Steam

'Violet' built in 1886, is a 350 HP Pollit and Wigzell Horizontal Tandem Compound mill engine, she has a 5ft stroke, a 14ft - 18 ton flywheel and gear drive to the Mill Shaft.

After driving Nortonthorpe Mills for over 76 years, she was finally stopped on completion of electrification of the mills, where she lay derelict for more than 30 years.

Now thanks to her present owners and two dedicated volunteers, she has been fully restored to her original working condition. The engine is a superb example of Victorian steam engineering, and can now be seen working under steam on open days at Nortonthorpe Mills, Scissett, Huddersfield.

The next steam days are: **2/3rd November 1996** and **26/27th April 1997**. The engine will be in steam from 12 to 5pm.

If you are interested in going the mill is at Scissett, on the A636 Denby Dale to Wakefield Road, about 6 miles from junction 39 of the M1 (follow signs for Denby Dale). The Mill engine house is about 500 yards from the village church and the Pine Factory Shop.

Sygun Copper Mine

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.

Bookings/inquiries to:
Sygun Copper Mine,
Beddgelert,
Caernarfon,
Gwynedd, LL55 4NE
Telephone: 076686 585
24 Hour infoline: 076686 564

You can now visit the mine in 'virtual reality' if you have a web browser:
http://ourworld.compuserve.com/homepages/SnowdoniaMine

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 dodgey).

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
C.29: SCMC in Cornwall, £16.45

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

Club Officers

President: Alan Taylor

Chairman: Neal Rushton

Vice Chair: Malcolm Newton

Secretary: Adrian Pearce
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Treasurer: Bob Taylor

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Tackle & Rescue Officer: Steve Holding

Training Officer: Alan Robinson

Conservation Officer: Nick Southwick

Bat Officer: Mike Worsfold

NAMHO Rep: Colin Armfield

CCC/CNCC Rep: Ben Shaw

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

Diary Dates '96

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

5 October: Annual Dinner, Snailbeach Village Hall. Speaker: Roy Starkey (Mineralogist).

7 October: Talk; Lincoln Hill Limestone Mines - Recent work" by Ivor Brown. B.C.Geological Soc., Ward Arms Hotel, Dudley, 7.30pm.

12-19 October: Southern Ireland, Berehaven Mines, Kilarney with the Irish Mines Society, plus Mines of West Carberry.

19 October: Nenthead (Long weekend!), Steve Holding.

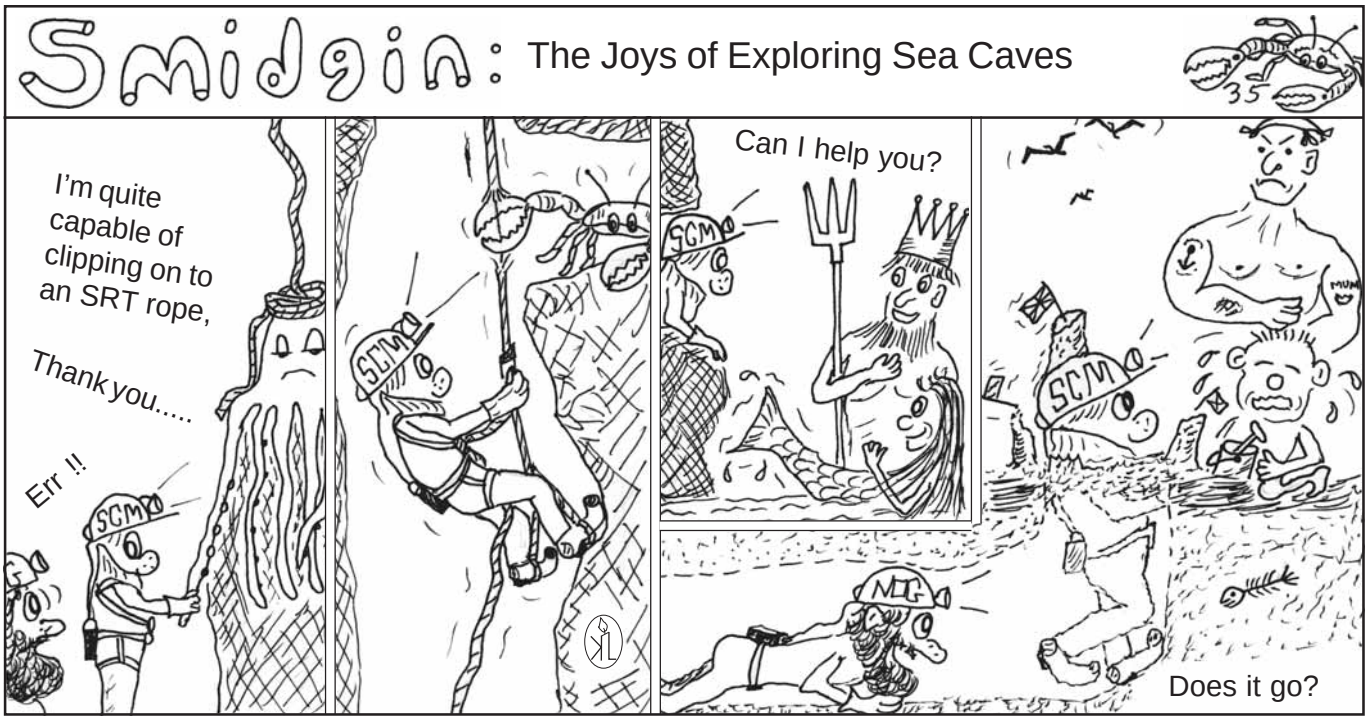
25-27 October: BCRA/CREG Autumn Field Meeting, Yorkshire.

23-24 November: DCA/NCA Cavers Workshop, Whitehall Centre, Derbyshire. If you are interested contact Nigel Atkins (01283-216507)

1997

15 March: BCRA Cave Science Symposium, University of Huddersfield

14-17 July: NAMHO Conference '97, Darley Dale, Matlock. Hosts: Peak District Mines Historical Society.



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