

New year

The year is only a few months old, yet we seem to have had a very hectic time already, with members 'jetting' off to the inaugural AGM of the Irish Mining Society, numerous trips, plus interesting developments at the Old Wind, above Coalbrookdale, and the set-back of not finding the tunnel entrance lower down the hill despite knocking holes in the landowners wall!

This really is a bumper issue of 'Below', the largest issue to-date. So, I would like to thank all the contributors to this issue, and thank all the people who have made the activities recorded here possible, keep up the good work.

Prize Draw

All the correct entries to 'Below' Christmas puzzle were placed in the Editorial hat at the February Meeting and the winning entry, drawn by a prospective new member, was **Mike Worsfold**.

Kelvin

Burgam Mine Warning

There have been reports that the lower adits of Burgam Mine are being used by local youths for drug taking and that hypodermic needles have been found abandoned. The potential dangers of abandoned needles are obvious so members are warned to be careful if exploring these adits. There are plans by South Shropshire District Council to gate the adits in the near future and, if this happens, it will hopefully stop these abuses. Our Club will be given a key for continued access.

Mining Memories

Following the publication of "Mining in Shropshire", the Club was contacted by Harry Richardson who was a deputy at Ifton Colliery. Adrian Pearce asked him if he would be prepared to write down his memories and he has now done this. This will appear in next year's Annual Journal and it is hoped that several more of Harry's workmates might be prepared to do the same.

There must be several old miners around the county who can still remember working underground - now is the time to record their memories before it is too late. Is anyone interested in this? Areas that spring to mind are ex-miners of Granville, Highley, Rock, Shortwoods, etc.

Ifton Colliery

An article in the Shropshire Star says that money has been made available to develop the site of Ifton Colliery. There are still some surface buildings remaining, including the old pit baths. It is not yet known what "development" will entail but I am writing to Oswestry Borough Council to find out.

Adrian Pearce

New Members

Welcome to the following new members :-

Full	Richard Amies
Associate	Gordon Hillier Brian Jones Madeline Lucas Peter Scales

Insurance

The Club pays for all members except Associates to be covered by public liability insurance while engaged in underground and surface exploration, preservation, etc of mines (or even caves!). The cover is up to £2 million and covers you for anywhere in the world except USA and Canada (apparently the latter two are notorious for litigation). It is only intended for when you are engaged in voluntary activities, if you are doing something for a fee you are not covered. If you have any queries contact Adrian Pearce.

Ketley Hill Tunnels

A survey of these appeared in Annual Journal No.3. Roy Fellows believes that they may have been connected with a process for manufacturing sulphuric acid. He is currently carrying out research and will publish his findings in a future issue of 'Below'.

NAMHO Fieldmeet

27-29th September 1996

This will be hosted by Plymouth Caving Group who will be using Princetown as a base. Arrangements are being made for a range of underground and surface trips to suit all levels of experience. Accommodation is available, including limited bunk space and camping. For further information contact :-

Pia Benson, 7 Marchants Way, Meavy, Yelverton PL20 6PW
T. 01822-855263.



News Round-Up 1

by Ivor Brown

Oswestry Coal Pits

During a visit to the North Shropshire Coalfields it was noted that there are still interesting remains in the Oswestry Coalfield particularly at Trefonen and Trefarclowdd Collieries (well preserved mounds, gin circles and tramways).

Further north around St. Martins substantial buildings remain from the Ifton Colliery, now used as industrial units. The St. Martins/Ifton Miners Institute is still in use, but the small one in Weston Rhyn now seems to be offices. The site of the Quinta (coal, ironstone and clay mine) was not located.

Snailbeach

By the end of last year work on stabilisation and conservation at Snailbeach seemed to have come to a halt. Nearly all the 'listed' buildings at Snailbeach had been treated, including most recently the orehouse and powder magazine. Only the candle factory looks untouched - it is in private hands. The crusher house and offices are clearer than they have been for years - the view of the crusher engine site is now excellent.

Stiperstones Houses

The housing stock of the Stiperstones area is changing rapidly, there is a lot of new building and modernisation, only two (?) houses remain thatched, less than a dozen 'tin-roofed' houses, a diminishing number have Welsh slates (post 1850's) and more and more are being tiled (post 1950's). The character of the area is being changed - regular visitors might not be as aware of this as infrequent ones.

Mining Guides

A chapter in a book entitled 'Geological and Landscape Conservation' (published by Geological Society, London, 1994) written by P.Toghill covers "Involving landowners, local societies and statutory bodies in Shropshire's geological conservation".

It uses as examples the preparation of Guides for Mortimer Forest, the Onny

Valley, Wenlock Edge and Ercall Quarries. It also suggests that future work could cover Stiperstones/Shelve, Ironbridge area, Clee Hills and Coalfields of North West Shropshire.

Tankerville

Work is nearing completion on the first phase of stabilisation work at Tankerville, the base of the Cornish Engine House has been treated and work is nearly finished on the shaft.

Brewery Well Access

In 1981 the SCMC was given rights of access to Wellington Brewery Well, it is written in the conveyance/title deeds of a house in New Church Road (just off the Holyhead Road). IJB has not been able to get to the well recently so if an SCMC Member does not go soon it is likely the rights of access will be lost (see letter with Secretary and Club Journal 1978 for details).

T.Bertram

It seems likely that the "student" mining engineer, T.Bertram who reopened the old shaft on Titterstone Clee Hill (see 'Below' Autumn issue 95.4) was a relative, possibly son, of W.Bertram referred to in the article on Clee Hills Collieries in the Annual Journal 1995. The mine owners, who had interests in South Staffs, brought in W.Bertram in 1873 as manager. He was not in this position for many months. T.Bertram was based in Rugeley but had been employed to reopen the other shaft about 1880. He does not seem to have stayed long either.

35 Years on

The Club has now completed 35 years of publication. IJB's library contains 6 Yearbooks (1961-1967), 9 Journals (1971-80), 3 Annual Journals (1993-5), 25 issues of Accounts, including revisions etc. (1960-1995), 262 Newsletters (1964-1987) and 32 Quarterly Journals 'Below' (1988-present).

Approximate purchase cost - equivalent based on annual subs etc. £400. Any offers?

Name Change

The September 1996 AGM will be the Clubs 35th, it will also be the 20th Anniversary of its change of name Shropshire Mining Club (SMC) to Shropshire Caving and Mining Club (SCMC).

There are still some who call it the SMC in everyday speech - is this to do with age?

Navigable 'Cut'

The Shrewsbury Chronicle July 18, 1778 carries details of a contract to construct a "navigable cut" (underground canal) from near the Angel Inn (SO 572 760) through Farthing Bank to the Gutter Work Colliery (coal and ironstone). It was to be 6.5ft high and 4ft. wide.

Has any member investigated this Boat Level recently?

Deep Shaft

Cementation Mining have recently been awarded the contract to sink the worlds deepest single lift shaft at South Deep Mine, South Africa. Its final depth will be 2,765 metres (9,075ft. or nearly 1.72 miles). Rather deeper than Tankerville!

I.A. of Shropshire

Trinders "Industrial Archaeology of Shropshire" (see earlier issue of 'Below') is to be published by Philimore in April 1996 at a price of £30 (£17.50 to those already subscribed).

Wanted

Has anyone got or seen a copy of the following book believed to be based on the Pontesford Coalfield: "The Life of Richard Weaver - the converted collier" by R.C.Morgan, published by Morgan & Chase of High Holborn, London in MDCCCLXI (1856)?

Not to be confused with "Samuel Hughes, Miner of Snailbeach", which is a separate but apparently similar book.



The Old Wind Terminus of the Shropshire Canal

Canal Background

The Shropshire canal was considered one of the more ambitious canal schemes of its time, winning admiration from many people, including Thomas Telford¹. It was the first public canal company in the County (early canals had all been private undertakings) and amongst its 58 subscribers were most of the principal landowners and ironmasters of the Coalbrookdale Coalfield.

Although the idea of a canal linking Earl Gower's Donnington Wood Canal with the Severn had been under 'consideration' for some years, the route it would have to follow was considered difficult. In particular the very hilly ground around Oakengates, where there was insufficient water for locks and the steep drop down into the Severn Gorge seemed insurmountable.

Although Richard Reynolds was one of the leading promoters of the canal it was his son William Reynolds who was responsible for its design. William had been planning the canal since at least 1787 (when he surveyed the route), while he was building the Wombridge and Ketley canals and an underground canal at Coalport (which became a tramway tunnel, the Tar Tunnel, to Blists Hill mines after natural bitumen springs were discovered).

After William's successful experiments with the canal incline at Ketley, the construction of the Shropshire Canal seemed feasible (see page 13 for a general map of the route of the Shropshire Canal and its two main branches).

The original plans envisaged 5 incline planes (Wrockwardine Wood, Windmill Farm, Hay farm, Brierly Hill and Lincoln Hill) and 3 short branches to serve collieries or ironworks (1 to Horsehay, 2 off the main line between Old park and Hinkshay - perhaps the existing tramway tunnel under Hinkshay is a remnant of this!). In addition 3 tunnels were necessary (Snedshill, Hollinswood and Stirchley), with the canal splitting at Strichley to travel east to Blists Hill and west to

Coalbrookdale.

Although work started on parts of the canal in the autumn of 1788, the contract for the section from Stirchley to Coalbrookdale was not awarded until November 1789. In February 1790, William Reynolds changed the plans by sinking two 120' (37m) deep shafts from the canal at the top of Brierly Hill to meet tunnels driven into the hillside lower down to provide a direct link to the Coalbrookdale Works.

It was shortly after this that the idea of a canal route down Lincoln Hill to the side of the Severn (at the present day Dale End park) was abandoned and the canal terminated at Brierly Hill. The plans for three short colliery branches were also dropped in favour of tramway links. Only the Eastern branch of the Shropshire Canal to Blists Hill was completed as planned down to the Severn at Coalport (the terminal basin and incline are now preserved by the Ironbridge Gorge Museum).

Brierly Hill Shaft-Tunnel System

The system that was initially developed here was similar to that used at Hughs Bridge, Lilleshall on the Donnington Wood Canal. Ironically, just as the shafts and tunnels at Brierly Hill were being built (1790), those at Hughs Bridge (which can still, be seen today) were being replaced by an incline!

When the shafts were first opened (24th Jan. 1793) tub boats holding 4 iron containers about 5' (1.5m) square were brought alongside one of the shafts. A container was then lifted out by crane and hooked onto the rope from the headframe over the shaft.

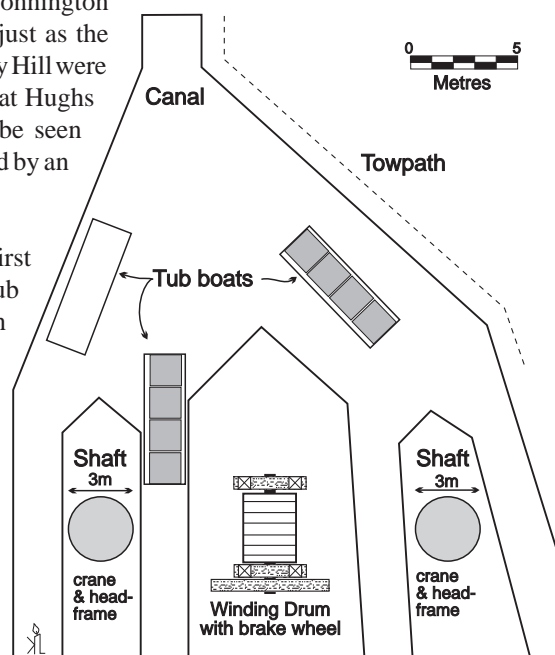
When a signal was received from the bottom of the other shaft the brake on the winding drum was released and the loaded container dropped down

the shaft onto a horse-drawn tramway wagon below. At the same time an empty or lighter load in the other shaft was pulled up (finished castings from the Coalbrookdale Works and other items were initially sent up the shafts).

After a couple of months of operation the 'up-hill' traffic stopped and by May 1793 the winding system was at a standstill, possibly due to a breakdown. At this point the Coalbrookdale Co. called in John Curr of Sheffield to advise them on improvements.

At the top of the shafts Curr's only suggestion was the re-positioning of two of the cranes (see top diagram on page 4). In the shaft, he suggested the use of platforms (cages) fitted with rails to allow two trucks to be carried side-by-side. While at the bottom of the shaft it was only necessary to alter the layout of the sidings.

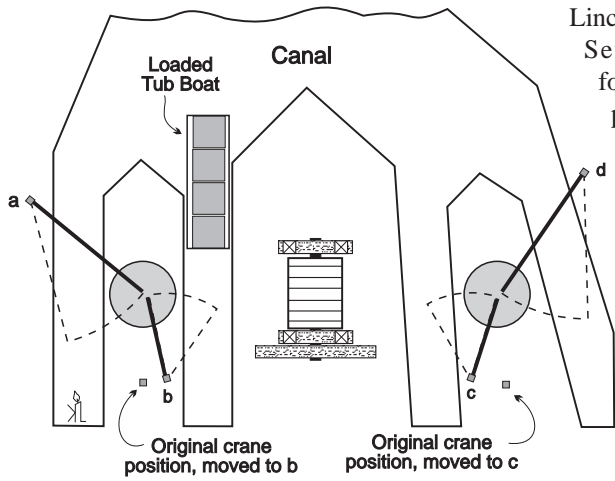
Containers arriving in boats were then lifted out onto small wagons and pushed into the cages (along rails). When the cages reached the bottom of the shafts the trucks and containers were pushed into sidings where they were made into trains of 6 wagons, which were then pulled out by horse. Empty or lightly



Old Wind Terminus of Shropshire Canal
Showing basins and 1792 shaft positions
(From a scale plan & other diagrams in William Reynolds' sketchbook)



The Old Wind Terminus of the Shropshire Canal continued



Lincoln Hill, down to the Severn (roughly following the original proposed canal route).

There are reports of over 100 new wagons being built for the incline and railway in May 1794. They were designed to carry the iron containers from the shafts. The last consignment of goods passed down the shafts in September 1794.

the same position as the winding drum for the shafts (ie: roughly where the present day gully is). However it seems likely that the incline was built to the side of the canal basin - otherwise how could the trucks be run off into sidings, and how could the change over from the shafts to incline be made so quickly?

3. Did the IGMT excavations in the 1980's actually locate both shafts, or just the one? If only the one was found could it be that the other is over near the caravan on the flat field?

Old Wind Terminus of Shropshire Canal
 Showing crane positions after John Curr's changes
 (From a scale plan & other diagrams in William Reynolds' sketchbook)

loaded containers on wagons were pushed onto the cage from another siding, ready for the journey up the shaft.

The terminus restarted on the 11th July 1793. There was considerable demand for its services, with coal travelling down the shaft and limestone, rails and even new tub boats travelling up.

Despite Curr's improvements, the bulk traffic stopped in October 1793 (although there was a 'mad' rush of goods in the few weeks before this - 700 tons of coal going down the shafts in 2 weeks of September alone). The shafts were kept open only for light 'sundries'. In December 1793 it was decided to replace the shafts with a railway incline and a railway around

When presumably the incline took over. Despite these changes, the branch canal to Briery Hill did not survive much longer, a railway which opened in early 1802 was built along the towpath, and this in turn was replaced by the Horsehay to Coalbrookdale plateway down the Lightmoor valley in the 1820's.

Questions

The changes mentioned above pose a few questions, which are not really answered by most written accounts:

1. If the iron containers were 5' square, how could Curr put them onto trucks, then wind 2 trucks at a time *side by side* in a 10' diameter shaft?
2. People seem to assume that the winding drum for the incline was in

References - Specific

1. Plymley's Agriculture of Shropshire, 1803
2. The Collieries and The Coal Trade, Author unidentified, pub. Whittaker, 1841
3. Ref. 2, p208-209.

References - General

Shropshire Magazine, East Shropshire Canals, W.H.Williams, 1954

William Reynolds Sketchbook

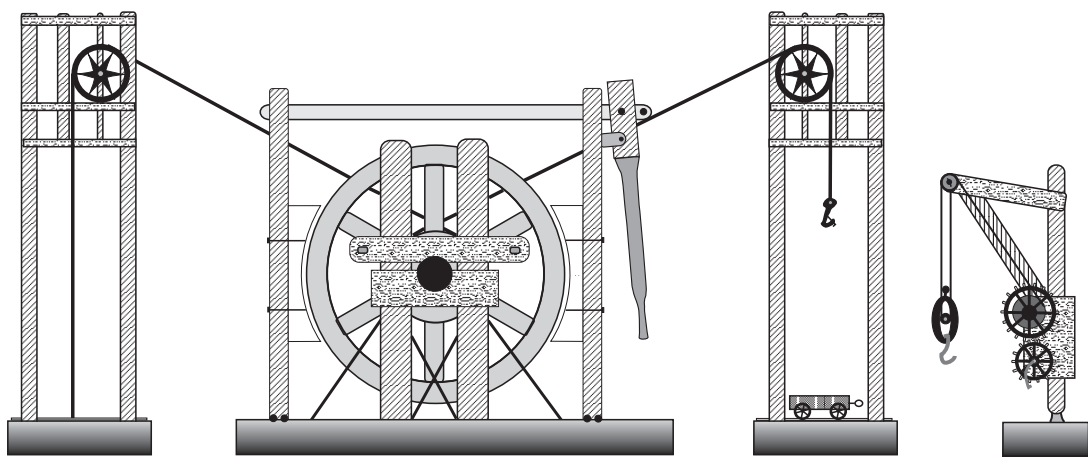
"Industrial Revolution in Shropshire", B.Trinder

"Dynasty of Founders", A.Raistrick

"Canals of the West Midlands", C.Hadfield

"John Curr, originator of Iron Tramroads", F.Bland, Trans. Newcomen Soc. Vol. XI, 1930, pp121-30

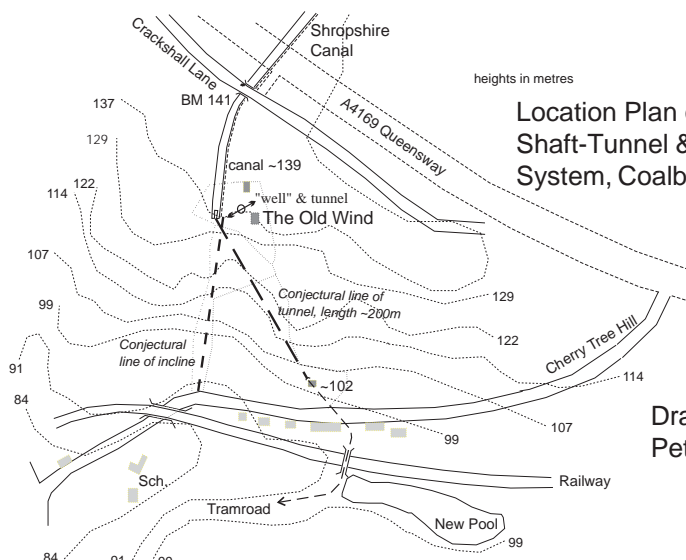
Kelvin Lake



Sketch of the Winding Gear at Briery Hill Shaft and Tunnel System
 Shropshire Canal, Coalbrookdale, circa 1793. Showing one of John Curr's Trucks
 (based on a drawing in William Reynolds Sketch Book. Not to scale)



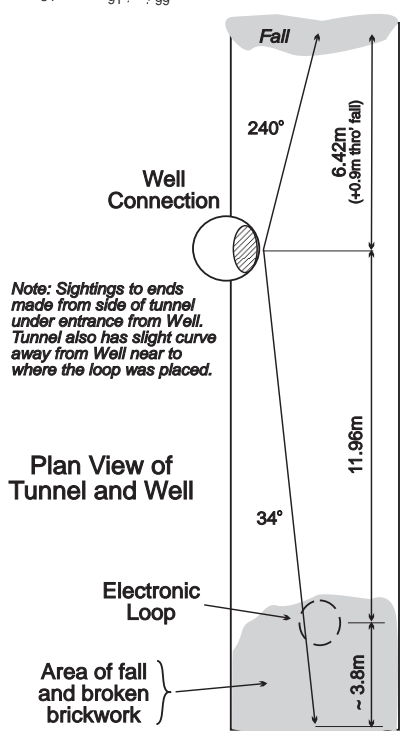
The Old Wind and the Club's Excavations



Drawing:
Peter Eggleston

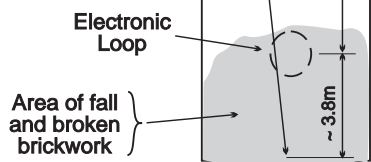
Luckily by adding a couple of metres we were able to move the 'dig' out of the garden under the apple tree.

At this point one of Mr. Boyce's neighbours excavated a large crater about 2m deep with the aid of a mechanical digger. At the guesstimated depth and position, the top of the tunnel brick arching was hit. By digging down the side of the collapsed arch a route into the tunnel was opened up. The discrepancy in the compass readings (see plan below) was then revealed as a slight curve in the tunnel near the excavated end. It would seem that this was a tramway tunnel, but whether it connected with the shaft system or the incline plane is hard to say.



Note: Sightings to ends made from side of tunnel under entrance from Well. Tunnel also has slight curve away from Well near to where the loop was placed.

Plan View of Tunnel and Well



Cross section at Well

Old Wind Tunnel,
Brierly Hill, Coalbrookdale
Survey: Eileen Bowen (Not to Scale)

Towards the end of 1995 several visits were made to the Old Wind, Coalbrookdale (see 'Below' 95.5, *Shropshire Project Log*, p5 for details). Following the discovery of a void in the well a further visit was made with the MineCam on 12th November. This was lowered through the narrow hole at the bottom of the well to reveal a brick lined tunnel at least 2m wide and 2m high. Ben 'Dyno-rod' Shaw, managed to wriggle down the hole to perform an initial survey. During this visit permission was also obtained to excavate the potential entrance to the tramway tunnel at the foot of the hill.

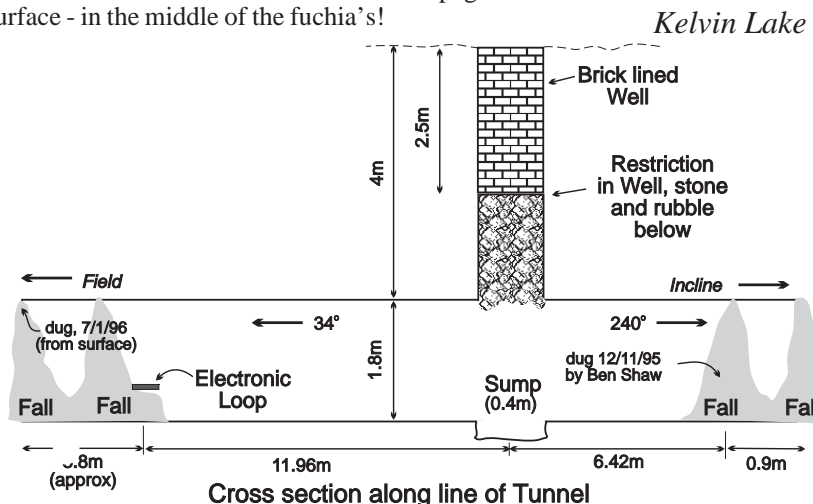
On 7th January 1996, Club Members reassembled at the Old Wind, armed with the electronic underground location device. This time Eileen Bowen managed to get into the tunnel to place the loop and perform a more accurate survey. The loop allowed us to locate the ends of the tunnel on the surface - in the middle of the fuchsia's!

On the 4th February, an attempt was made to open the tramway tunnel at the foot of the hill, but after Tom West had removed a few bricks it was apparent that the wall was merely a 'front' and the entrance was probably some distance back behind a clay fill. So the wall was rebuilt and the attempt called off.

Acknowledgments

Thanks to everyone involved in the various 'digs', in particular to Mr. & Mrs. Boyce for letting us dig holes in their garden (and providing gallons of tea) and Tony & his wife (at the foot of the hill) for letting us demolish their garden wall (and providing more tea).

Also thanks to Ivor Brown for supplying photocopies of pages from the William Reynolds sketch book for the drawings on pages 3 and 4.



Cross section along line of Tunnel



Scott Level

14th January 1996

The Scott Level is a small gated portal which runs under the main Snailbeach road, heading in the direction of Resting Hill and eventually towards Crowsnest Dingle. For many years this was considered to be a relatively insignificant level as there are no known records and the level was dammed some distance in.

There have been two dams; the closest to the entrance was a concrete dam to chest depth, approximately 100 feet from the entrance. This was used as a water supply by a number of properties around the entrance. However, there was a more substantial dam approximately 200 yards from the entrance; this dam consisted of large wooden sleepers arranged as a 'V' pointing into the level, backed by around 12" of clay, held in place by a wall of bricks. A 6" metal pipe leads from this dam to a shaft up to Resting Hill. It was suggested in the 1980's that Scott Level had been dammed to provide a water supply to the main Snailbeach surface workings.

The water travelled from the dam via

the metal tube up the shaft on Resting Hill, but part way up, the water pipe was taken out via another level and carried out on the surface round the hill to the mine processing plant.

The shaft on Resting Hill now has a grill covering it but the pipes are still in the shaft and the level to surface.

Club members breached an inner dam in the late 1980's but one of the party, Bob Lester, died of a heart attack during this work and there was a reluctance to pursue the investigation. Subsequently, both dams were completely breached by contractors on behalf of the County Council but full investigation of the level was limited by low oxygen levels.

The entrance of the level has been briefly visited to check for bats but the level has not been properly entered by club member since Bob's death. This period of restraint ended on 14th January when six club members ventured in as far as the oxygen level permitted.

Both dams have been breached and there is only shallow water until after the site of the second dam. Here accumulated mud is still retained and thigh/waist deep water is encountered for some distance.

It has now been established that the level is much longer than originally imagined and there is clear evidence of workings on the vein some distance in. The level is very straight, without any side passages for approximately 500 yards.

Around 20 feet before the end of this straight drive, there is a branch to the left; this has only been explored for about 100 feet before the low oxygen level prevented further exploration.

At the end of the main drive, the level turns left where it follows a vein which has been worked to some extent. This branch has been followed for approximately a further 300 yards before the low oxygen level again curtailed further progress. A short distance along this branch, there is a small cross-cut, to the right, to a flooded square shaft and there are further branches a bit further on again; which have yet to be explored.

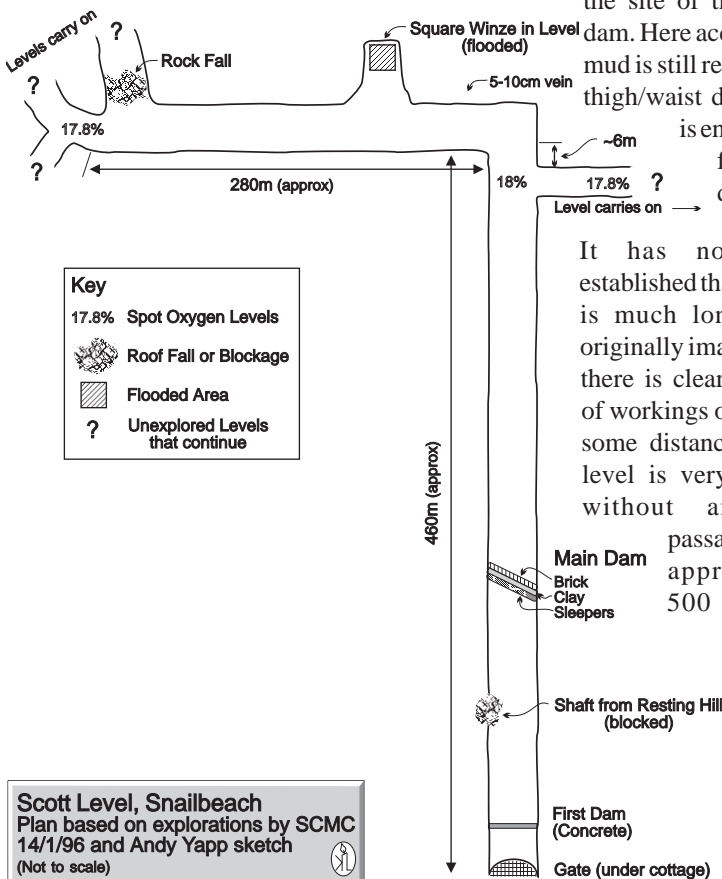
Now that it has been established that Scott Level is of considerable size with evidence of working and a shaft to a lower level, it is speculated that other shafts near the portal may be part of the same workings, rather than being simply air shafts for the Snailbeach drainage level.

This was one of the first occasions that the new Oxygen meter had been used. The alarm on the meter was set to go off at 18% and exploration was terminated at 17.8%. In an attempt to stop the alarm (and save the battery) I tried to re-set the alarm to a lower value but effectively re-calibrated the instrument and gave ourselves a fright by believing that there was a sudden drop in the oxygen.

The level should be re-visited during a time of rising air pressure when it should be able to explore further - there are at least three branches which have yet to be pushed to a conclusion. However, it is essential that proper precautions are taken to ensure that acceptable oxygen levels are kept to; although visited during a period of relatively low air pressure, the pressure was increasing and it is possible that the air quality does not improve upon that already experienced.

Members present: Eileen Bowen, Mike Worsford (there were no bats!), Alan & Vicky Robinson, Andy Yapp and myself.

Steve Holding



The Demise of Coal Mining in Shropshire

by Ivor Brown

Throughout the 19th Century the mines of coal, ironstone and clay of the four principal coalfields of Shropshire were important employers of labour, the number of workers at the mines exceeded 5,500 in 1854 and 8,000 in 1874 but had fallen to just over 4,000 in 1884. About 1,500 of this fall is accounted for by loss of jobs with the large scale closures of the ironstone mining industry.

Of the coalfields the Coalbrookdale Coalfield was by far the most important. In fact of the total number employed in the mines of Shropshire in 1908, (some 3,489 persons) only 673 were employed in the Forest of Wyre Coalfield (including Clee Hills) and 254 in the Shrewsbury Coalfield.

The fourth coalfield in the County, that around Oswestry, was really part of the Denbighshire Coalfield but has been a fairly important employer locally since the 19th century. During the 1860's at least 7 mines were at work north and south of Oswestry although by 1891 only 2 remained. This Century a large mine was developed around a shaft at Ifton which was connected with another shaft and workings in Wales. It became the largest mine ever to work in the County employing over 1,000 men. Although actually in the County the mine has always been regarded as being part of the North Wales Coalfield and is not considered further in this article. It was, however, nationalised in 1947 and eventually closed in November 1968.

The total number of coal mines in the County had been falling since the 1870's when many mines also worked other minerals particularly ironstone, pyrites and clay, but the production of ironstone and pyrites had fallen dramatically by 1890. Of the 95 mines working these minerals in 1891 only 69 survived to 1908 and from then the numbers fell more slowly. By 1926 the number had fallen to 57, by 1936 47 mines, and by the end of the Second World War only 24 mines survived.

The great majority of these mines employed less than 30 persons and so did not fall into the size demanded for

Nationalisation in 1947. However, for other reasons, particularly where the pits formed an integral group as with those of Princess End and Lawley, some were taken over. Because of this grouping, and the often short life of the smaller pits, it is difficult to quantify the number of mines at work at any one time but of the 27 mines at work in 1947 the valuers of the mines for Nationalisation showed an interest in 22. The remaining mines escaped because they were "mainly clay mines".

The five largest mines Alverley (Highley) 826 employees, Kemberton (Madeley Wood) 548 and the two Lilleshall Co. mines (Granville, 327 employees, and Grange 139 employees) could not escape nationalisation. Neither could the Princess End and Lawley mines (Wrekin Coal Company) with 81 employees and the Bayton (Hunthouse Farm) Mine near Cleobury Mortimer and just one mile outside the County boundary. This mine, with 76 employees was so remote from any other mining field that it was always regarded as being part of the Shropshire Mining area.

Other mines such as Old Park Mine seem to have been nationalised for reasons other than the number of men employed but all of these were closed down within a few months. This fate also awaited the Princess End and Lawley Mines which were considered too small to be worked efficiently by the new National Coal Board and both were closed in February 1950 but this area was reopened again privately, under licence, shortly afterwards.

The 1950's

By 1950, only 15 of the 27 mines working in 1947 remained. It was not only the nationalised mines that were closing but also many of the smaller private mines. There were several reasons for this, many had effectively been worked to exhaustion during the War and needed large amounts of capital spending on them, several had been opened up on a short term basis to supply the increasing demands of post-war winters. Machinery capable of moving large amounts of earth was

also becoming available and opencasting was taking place near to the mines and in some cases working over the sites of previous underground mines.

In 1950 the 15 operational mines included the four large nationalised mines, Highley, Kemberton, Granville and Grange and several small mines around Dawley; Farm, Brandlee, Doseley, Randle, Horsehay Common, Smalley Hill, Good Hope, Horsehay and Shortwoods. South of the Severn a few small, mainly clay mines, also remained including Gitchfield, Turners Yard and Viger Drift, one clay mine, The Rock, remained north of the Severn

Notable closures between 1947 and 1950 had been the Princess End/Lawley groups of mines; Shrubbery Mine (a fairly old small mine near Mossey Green), Harris' Old Park Pits, Plants Farm and the Huntington Collieries, the Swan Mine near Madeley and the Woodside Mine near Coalbrookdale. This mine worked from 1945 to September 1947 and was the first mine visited by the writer.

A short-lived trial at Castle Place, Longden Common, near Pontesbury in the Shrewsbury Coalfield, had been opened in 1946, producing 60 tons of coal and employed 2 persons, but was closed the following year. The remote Bayton or Hunthouse Farm Colliery nationalised in 1947 was closed in February 1950.

The period 1950 to 1955 saw the closure of four more mines; Turners Yard, Farm, Horsehay Common and Viger Drift but the loss in employment was very small (down to 2,187) mainly because one of the nationalised mining areas was reopened privately. This was the new Hunthouse Mine opened in 1954/5 by the aptly named 'Mole Mining Company' and this was soon employing 34 men. During this period too the larger mines were recruiting as they became modernised and as part of this reconstruction Granville and Grange were merged in 1952.

During the 1950's opencasting occurred on the sites of many of the smaller



The Demise of Coal Mining in Shropshire

(continued from page 7)

mines and they closed as the underground workings were opened up. By 1960 only Kemberton (Madeley Wood), Granville and the private mines at Shortwoods and the Rock remained in the Coalbrookdale Coalfield, no mines remained in the Shrewsbury Coalfield but two, Highley and Hunthouse remained in the Forest of Wyre.

The 1960's

The writer systematically visited all mine sites during 1960 and the notes made at the time make dismal reading. For example, at Turners yard, the headgear, cage and empty engine house remained but already in a ruinous condition. Gitchfield was now a pig farm and only the nearby powder house was immediately identifiable.

On Horsehay Common all was abandoned but there were 15 open shafts and two hand winches with 9" diameter

wood rollers about 7ft. long and rubber covered handles. Remains of wooden and steel trucks littered the site.

At Brandlee the now-derelict steam winding engine and boiler remained alongside the wooden headframe. Several steel trucks lay near the shaft together with the mine report book opened and signed on 20.4.1953. The mine was completely abandoned but nearby the same company's Shortwoods Mine was still very active, with 25 miners producing over 200 tons of coal per week from a fairly new drift mine (Shortwoods 9 & 10).

Of the surviving six mines in 1960, the Rock Mine was the next to close in December 1964. It was a victim of the falling value of fireclay and of the increasing efficiency of opencasting which had soon removed all evidence of the mine. The next mine to close was Madeley Wood or Kemberton Mine, a

century-old mine with only thin seams remaining and these were difficult to mechanise. This mine closed in July 1967.

The Forest of Wyre collieries at Highley (January 1969) and Hunthouse (1970) were the next to close with the Shortwoods Mine closing in February 1970. At this time the value of coal was falling and cheaper energy supplies could be obtained elsewhere although this situation was soon to change with the 'Fuel Crisis of the early 1970's. By 1970 the numbers of miners had shrunk to just over 500. The Hunthouse Mine did not go quietly however, for it was taken over by the miners themselves and worked for a time as a co-operative but by the end of 1972 had closed completely.

The 1970's

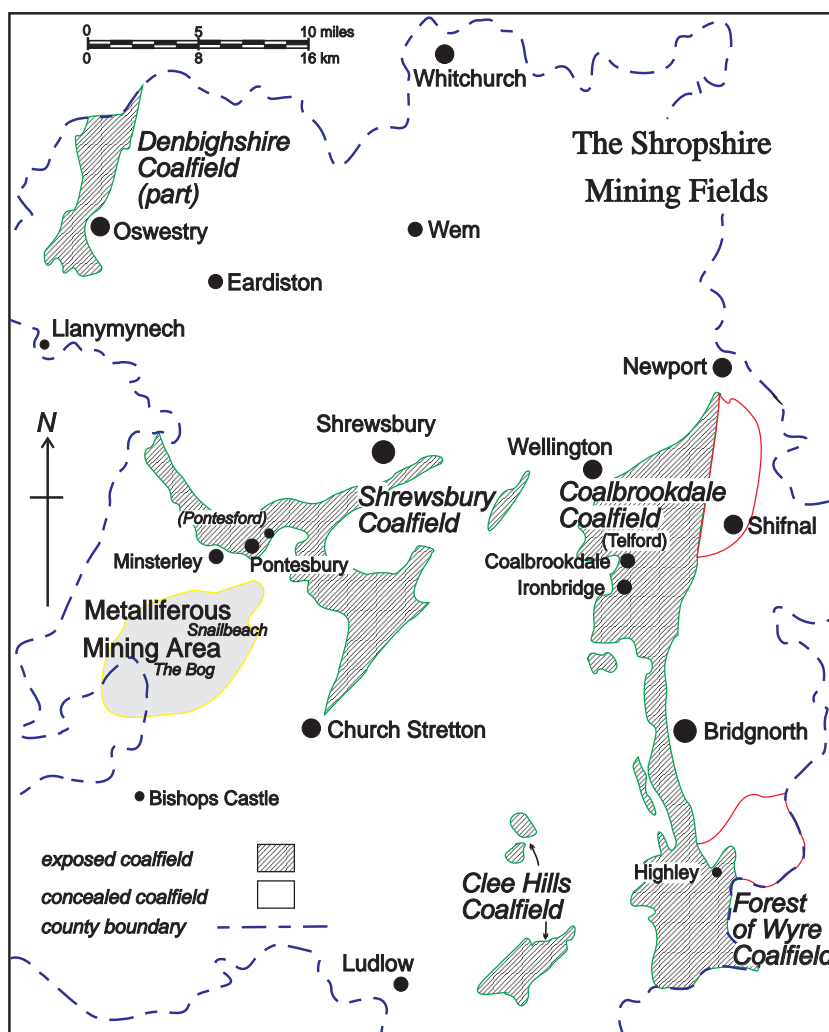
For the rest of the 1970's only one mine remained, the Granville. This mine, however, could not survive a further fall in the need for coal in the late 1970's and closed in August 1979.

The end of underground mining in Shropshire had come - or had it?

The 1980's and 1990's

In 1981 and 1982 planning applications for a new private coal mine at the Nabb, Oakengates, were submitted to Shropshire County Council and came near to success. However, there were practical difficulties and the project has not yet commenced.

By this time both the coal and clay industries were at a low ebb, indeed for a few years in the early 1980's no coal was produced by either underground or deep mining methods. Some opencasting of clay did continue. The fortunes of opencasting revived during the late 1980's with several opencast coal mines opening up in the New Dale, Lawley and Clee Hill areas and some coal is being produced even as this is being written in the 1990's.



Demise of Coal (continued)

The legacy of mining in its history, its memories and the impact on the landscape remains but the days when it had a major impact on the lives of the residents of the villages of the Shropshire Coalfield have long gone. They are most unlikely to return.

During its time mining has not only supported many families but its produce has supported the families of many others. These were employed in local ironworks, potteries and the brick and tile making industries. Without the miners there would have been none of these and without them Shropshire would not have played such an important part in the Industrial Revolution.

References

1. Coalfields of the Midland Region - Regional Survey Report. 1945.
2. Report on the Value of Coal Industry Assets; Shropshire by G.Price 1946.
3. Annual Reports HM Inspector of Mines & Quarries. H.M.S.O. (includes for some years List of Mines in operation).
4. Guide to the Coalfield published annually by Colliery Guardian 1947 to present.
5. The Mines of Shropshire by I.J.Brown pub. Moorland 1976.
6. Mineral Resources of the Coalbrookdale Coalfield by R.Hamblin, I.J.Brown and J.Ellwood, pub. by Mercian Geologist 1989 (Vol.12 no 1 pp9-27).
7. Industries of the Mordale Valley by R.D.Thomas, 1939 (SCC Reprint).
8. The North Wales Coalfield by I.Kelly 1990 (for information on Ifton Colliery).
9. Bayton Colliery and Ropeway by K.Beddoes, SCMC Journal 1978.
10. Mineral Working in the Clee Hills by G.Price, Birmingham Enterprise Club 1967.

Club Activities Round-Up by Adrian Pearce

Winch Driving

In view of problems at Snailbeach, it was decided that all Club members would have to undergo training before they could operate the winch in future.

As a result, after Christmas Stuart Tomlins offered the use of his yard for people to try operating it on the surface.

It was so cold first thing that Stuart had to put his welding gear on the padlock before being able to open the gate! It stayed cold all day and we made use of his space heater in the garage at regular intervals. Stuart extended one of his cranes and a pulley attached to the jib allowed us to run the winch cage up and down.

We didn't want to risk another person during training so we put a load of batteries in. During the day most people had at least two goes at raising and lowering the winch and getting used to where all the controls were.

Science Museum Store

On 13/1/96, about 35 members and friends boarded a coach at Shrewsbury and headed south to the Science Museum large artefact store near Swindon. We spent a long time inspecting the contents of three large hangers containing all types of vehicle, engines, planes, etc. Of especial interest was the complete remains of a 40" pumping engine which we will hopefully bring back to Shropshire one day to fit into Tankerville engine house. Thanks go to Stuart Tomlins who organised the transport and access to the museum.



(above) Bob Taylor driving the Club winch during its first run at Chapel Shaft

Pontesford Coal Mines

The day after the winch practice, Colin Armfield led a surface tour around the remains at Pontesford. We started at the Nags Head pub and walked past several spoil mounds to see the remains of an engine house north of the road. This is still in reasonably good condition but needs some urgent restoration to stay that way. We decided to do some work on it later in the year. The shaft is filled but the brick top can still be seen.

Across the road were the remains of the Snailbeach and Stiperstones lead smelters, both converted to secondary use. Further along the road were the foundations of the chimney for the latter. Heading north again, we followed a track past some houses to where there is another engine house incorporated into two cottages. Further north still were some remains of what could be a horizontal winding engine and a capped shaft.



Watson's Shaft, Tankerville nearing completion in January 1996 (above)
The winch headframe and cage at Chapel shaft, Nov. 1995 (below)



A Treasure Map at Yorton 3rd December 1995

Some members may have heard about a copper mine in the village of Yorton near Clive. There is a reference to it in the Memoirs of the Geological Survey and this is quite intriguing "... *another occurrence of copper ores along a north and south fault was formerly worked at Yorton Bank, about a mile west of the Grinshill Mines [Clive Mine]. The shaft is said to be 50 yards deep*".

A 150ft shaft indicates that there might have been substantial underground workings. There was another rumour that surface water from the adjacent road had been diverted down the shaft and that the shaft top was covered by a manhole cover next to the road. It had been roughly placed as being along the road leading west out of Yorton towards Myddle.

At the beginning of 1995, several members tried to find the shaft but there were no obvious signs at surface. The field south of the road was ploughed over and there was no sign of tips or a depression. It was presumed that any tips had been either pushed down the shaft or landscaped and ploughed over. The shaft top might, however, have been capped with gritstone slabs before

being covered with soil. There were a number of manholes along the road and it was not possible to determine which, if any, was the right one.

Further north, however, a small building was found (SJ499241) which contained a pump. Next to this was a covered well which was surrounded by a very ornate iron fence. Could this have been a shaft on the mine?

In September 1995, our member Geoff Warrington (who works for the British Geological Survey) sent a map with more precise details of where the manhole in the road was. So it was that on 3/12/95 a number of members set out along the road from Yorton armed with a measuring tape and compass. Our instructions were quite precise "200ft west of benchmark 331.2 and 280ft east of field boundary on south side of road". We couldn't find the first benchmark but measured the distance east from the field boundary. This corresponded nicely with a split iron manhole (SJ499238) that was about 3ft out from the side of the road. It hadn't been lifted for some time since the tarmac still covered the edges. The problem was that the road was

fairly busy and we had no tools for lifting the cover. We decided to seek permission from the County Council to cone off part of the road and lift the cover.

After contacting the Council, we were told that we could lift the manhole after asking prior permission but they sent us an aerial photograph. This showed an obvious disturbance feature in the field close to the road and it looks as if the shaft has been capped and covered with soil. It now seems likely that the manhole would only lead to a culvert which directed surface water into the shaft via a pipe. The next step is to seek permission from the landowner to excavate in the field to uncover the shaft.

Edwin Thorpe has subsequently claimed that the feature in the field is a fishpond and the shaft was in the road, although it wasn't found when a water pipe was being laid down the road. He also believes that there were further entrances in a small quarry near Broughton Farm and in a copse to the north called The Drumble. These have yet to be checked.

Adrian Pearce

A Day on Bulthy Hill

On 23/12/95 Stuart Tomlins and Adrian Pearce had a walk over Bulthy Hill to identify mining features. This was as a result of a long talk Stuart had with an ex-miner who used to work there in 1918-20.

The Main Adit has collapsed just inside the entrance but four short trial levels to the north-west are open. Full wagons of barytes from Main Adit followed a spur line which curved round the hillside to the top of a gravity incline. This lowered two trucks at a time down the hillside to where it was carted away to the railway station. Deep Adit below the road was driven to prove the reserves at depth and there were two shafts on the line, both now filled.

To the west in Middletown proper was another mine which extracted calcite (the old miners called it *limespar*). The

shaft to this has been filled and recent landscaping has made it difficult to interpret. There was an access tunnel adjacent to this which led into a small quarry and the far end of this is still open. This has not yet been explored but Mike please note - it looks eminently **batty**. There are other levels on the hill above, which are being quarried away. These extracted a white clay which was sold to the pottery industry. Stuart tape recorded his conversation with the old miner and will be summarising it in the next Journal.

Is this the only example of a gravity incline at a mine in Shropshire (strictly speaking it is just over the border in Powys but it has always been regarded as part of our orefield)?

Adrian Pearce

Access Arrangements for Devon mines

Plymouth Caving Group have asked us to point out the following access arrangements which are currently in force. Please comply with these or you may cause the landowner to withdraw access.

1. **Devon Great Consols** - visitors must be accompanied by a Plymouth Caving Group member and notice must be given in advance to the landowner. This also covers sites such as Ding Dong, Wheal Russell, William & Mary.
2. **Bedford United** - visitors must be accompanied by a PCG member.

All queries about access to the above and requests for leaders should be made to:

Pia Benson (T. 01822-855263)



Shropshire Mines Trust by Adrian Pearce

This is the name of the new Trust that is being set up to acquire and preserve the site of Tankerville Mine and, hopefully, others in the future. It will work in partnership with the Shropshire County Council and South Shropshire District Council, both of whom will have nominees as trustees. The proposed initial trustees are Colin Armfield, John Davies, David Jellicoe (SSDC), Steve Holding (SCC), Paul Humphreys (SSDC), Mike Moore, Adrian Pearce, Neal Rushton, Nick Southwick, Rob Southwick, Edwin Thorpe, Stuart Tomlins, Mike Worsfold, Andy Yapp.

The first thing to do is to get the Trust officially constituted and a council solicitor is working on this. One problem seems to be that a trust has to have unlimited liability so there may have to be a separate limited company to actually own the sites. It is hoped to have all this sorted out by mid-February. Once this has been done, the site has to be officially transferred from the owner Mr Davies.

The current plan is to acquire the Watsons Engine Shaft (with engine house and chimney), Old Engine Shaft (with Ovenpipe engine house and chimney) and an area of land stretching to the road, where it is hoped to have a layby for parking and public access.

The Trust and the councils will be applying for grant aid for preserving the buildings but will need to raise a percentage of the cost locally. The Trust will thus be looking at various ways of fundraising.

One exciting prospect is that a 40" pumping engine (the same size as was originally fitted) is held by the Science Museum and they may be willing to release this if there are satisfactory plans and finance to fit it into a re-roofed Watsons engine house. This could be an expensive option and the Trust needs to check feasibility and costings. We have just learned that English Heritage are willing to fund 60% of the cost of installing the engine.

Some members have been concerned that the Trust will set up in opposition

to the Club and will draw off SCMC members. We can assure you that this is not the case and never will be. At a recent officers meeting, the relationship between the Trust and the Club was discussed and the following was agreed :-

1. Club members are welcome to attend meetings of the Trustees although they won't be able to vote.
2. Trustees who are also Club members will not vote on any Club proposal where there is a financial interest to the Trust, e.g. grants from the Club to the Trust. They can, however, speak on the matter. Club members who are only ordinary members of the Trust will be able to vote.

3. The Trust will not be set up as a separate caving/mining club. It will be concerned only with acquisition and preservation of mining remains and in the near future it is unlikely to be doing anything other than at Tankerville Mine.

Thus those with dual membership will be working at Tankerville in a similar way to the Snailbeach or Shropshire Projects. All their other activities will be carried out within the Club.

4. Club members who wish to help with preservation work at Tankerville will be welcome to do so even if they don't want to join the Trust.
5. All future Club publications will be produced and sold solely on behalf of the Club. If the Club wishes to make a donation to the Trust, it will do so out of its funds (whatever the source of income).
6. Ordinary members of the Trust may join for various reasons, e.g. maintenance of the steam engine, and may not have an interest in mining. If they are interested in the Club they will be welcome to join us but will not receive any of our publications as a result of being a

Trust member.

7. If the Trust wishes to buy Club publications for sale to its own members or others, it will be entitled to buy them at normal trade prices.
8. If a Trust member who is not a Club member wishes to buy a Club publication directly from us, they will be charged the normal non-member rate.
9. The Club will encourage and support the aims of the Trust but will not be directly linked to it in any way. Club members who are also Trustees will perform that function as private individuals and not as official Club representatives.

Tankerville Mine

Members are asked to keep away from the site until further notice. Stabilisation work is being carried out and it is still private property until the site has been transferred to the new trust. Problems are being experienced with one particular neighbour and it may prejudice negotiations if visitors turn up in the interim. Please be patient and wait.

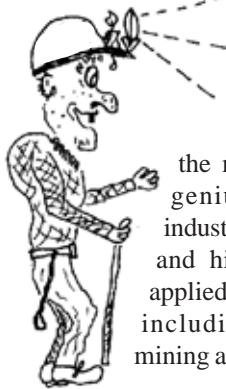
The contractors, South West Mining, are continuing the work at Tankerville Mine and it is hoped that work on the first phase will be finished by mid-February. This will involve large concrete rings being inserted in Watsons Engine Shaft from rockhead up to surface level and backfilled behind. A concrete cap will then be placed over the top with a lockable access lid. Another horizontal access will be fitted from the bobpit. The foundations of the engine house have been stabilised and the building pinned to prevent further deterioration.

It is hoped that the Tankerville Estate, who own the mineral rights, will cap Old Engine Shaft by the end of the year. It will be necessary to test drill first to ascertain the boundaries of the shaft since it has been filled up with farm slurry.



Mining Characters No. 5

Richard & William Reynolds (father & son) and their Tunnels



William Reynolds (1758-1803) has been called "one of the most inventive geniuses of the industrial revolution" and his genius was applied in many fields including geology, mining and tunnelling.

Unfortunately William is nearly always overshadowed by his father, Richard Reynolds (1735-1816) who outlived him by 13 years.

The reason WR never achieved fame could, in part, be due to the way he freely shared his findings and skills and he never published anything under his own name, but helped others eg; Townson (1799) and Plymley (1803).

The father Richard married Hannah, daughter of Abraham Darby II, in 1757 and immediately took one-third share of Ketley Furnaces and mines. From 1763-1768 he managed the Coalbrookdale Company until Abraham Darby III was old enough to take over himself.

During this time he produced the first iron rails. RR continued to develop his own and the Dale Company's interests in iron and mining until 1780 when he handed over his shares to his sons William and Joseph. JR was, however, more interested in financial rather than technical aspects of the business.

The Reynolds' interests at Ketley and Madeley Wood were finally separated from those of the Dale Company in 1796.

William is known to have started a collection of rocks, minerals and fossils by the age of eighteen (in 1776) and from this time he was paying local miners to collect interesting specimens for him. In the 1790's his collection was seen by many important visitors, Joshua Gilpin, for example recorded seeing his 'laboratory' and collection at Ketley Bank House.

Ketley Experiments

Much of William's experimentation, which included the use of kilns in tar and coke production, was carried out in the Ketley area where a number of unusual features attributed to him can still be seen today. The actual use or purpose if these features has not yet been determined, but they are of very unusual shapes. To add to the difficulties the features are found on the estate of two large houses both of which have been lived in by father and son. William was born in 1758 and lived at Ketley Bank House with his father for some years before the family moved to Ketley Hall, which in 1789, William took over from his father. Features on the estate of either house could be the work of father or son.

Anstice Connection

In 1789 William married Hannah Ball, the sister of Susannah Ball, the wife of Robert Anstice of Bridgwater, (Torrens has shown, that WR and RA's wives were also cousins), these relationships were to lead to the Anstice involvement and eventual take-over of the complete madeley Wood concern. This would include Beldam and Blists Hill Furnaces, Tar Tunnel and the mines of ironstone, coal, clay and limestone in Madeley and Ironbridge. This is however another story.

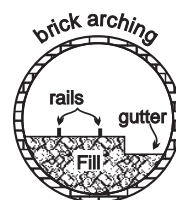
After taking over operational control in 1780, WR began moving parts of Ketley Works to Madeley Wood (including engines - some of the writer's ancestors helped look after them). William Reynolds then began to develop the new town of Coalport. There was a low level canal alongside the river which it was intended to connect to the high level Shropshire Canal by a tunnel and shaft system (similar to those at Hugh's Bridge and Brierley Hill), however the discovery of tar in the tunnel stopped this and an incline was used when the canal opened.

Tunnel Vision

Like his father WR was heavily involved in mining and transport systems using tramroads, canals and

connections between them involving tunnel-shaft systems, inclines, gravity power, steam power and water power. They were keen tunnel builders but the function and economic advantage of some of these structures is inexplicable today, for this they have been disparagingly called 'tunnel-mad'. It is sometimes difficult to decide which tunnel was the work of father or son but undoubtedly most are the son's work.

Unlike mine tunnels (which are not included in the following list) Reynolds' tunnels were often in softer measures and so they adopted the 'circular tunnel' but, for geotechnical reasons, these often appear horse-shoe shaped when found today.



The Tar Tunnel as built
(based on Gilpin 1796)
and after side pressure
(based on Brown 1974)

A list of some of the tunnels attributed to the Reynolds' follows (*see map, opposite for some of the locations*).

1. The buried kiln at Ketley Bank House (survey by SCMC, 1970's).
2. The 1800 tunnel at Ironbridge (survey by SCMC, 1960's).
3. The Blists Hill tunnel-shaft system (survey by SCMC in 1960's).
4. The lead-trials at Shipton (survey by SCMC in 1970's).
5. Brierley Hill tunnel-shaft system (now under investigation).
6. At least one tunnel on Ketley canal system (18.29m long)
7. Three tunnels on Shropshire Canal system (255m, 257m & about 60m).
8. Wombridge Canal tunnel (55m long).
9. Wrockwardine Wood Glasshouse Tunnel (under the canal).
10. The Derbyshire Sough (Old Park to Ketley, 2.4km long).
11. A short road tunnel on Willey Estate.



Richard & William Reynolds (continued)

12. The Madeley Green tramway tunnels (now under investigation).
13. The Deep Level tunnel into Lincoln Hill (recently rediscovered).
14. Probably the Donnington Wood (or Wrockwardine Wood) Navigable Tunnels.

There is also a folly, a tunnel-vaulted corridor on the first-floor level at Ketley Hall!

The actual mining activities of each of the Reynolds' can be summarised as follows: Richard; around Ketley, Wrockwardine Wood and Lincoln Hill, Joseph; around Ketley, and William; around Donnington Wood, Wenlock Edge and Madeley/Ironbridge area. Of course, their non-mining interests meant that their working areas overlapped.

In 1800 William Reynolds took up residence at The Tuckies near Coalport and died there in 1803. At his death the

larger Ketley Works passed wholly to Joseph who later put them in the hands of managers, eventually they were sold.

The Madeley Wood works passed to William, son of Robert Anstice, who had served time as William Reynolds' assistant, and for the next century or so they then remained in Anstice family control.

William's mineral and fossil collection still survives in part after a chequered history. It passed to his former assistant, William Anstice, in 1803 then in the 1850's parts were sold by the Anstices

but some went to the London Geological Museum and some to the Coalbrookdale Institute (a technical school).

Soon after 1925 the Coalbrookdale Collection was transferred to the Walker Technical College and remained there, in the Mining Department until 1952 when it was transferred to Shrewsbury Museum.

The writer remembers the clearing out of the drawers in the geological cabinet to make space for technical drawing exercises done by both IJB and other students). Some of the Shrewsbury Collection has since been sent to the British Museum and some to the University of Keele (see 'The Reynolds-Anstice Geological Collection 1776-1981' by N.S. Torrens in the Archives of Natural History Vol. 10 pt.3, 1982).

Reynolds also ordered his shaft-sinkers to make geological sections of any new mines and copies of these can be found in published works. He was the earliest known user of systematic opencast for coal and ironstone in the Coalbrookdale Coalfield (and possibly the UK).

References

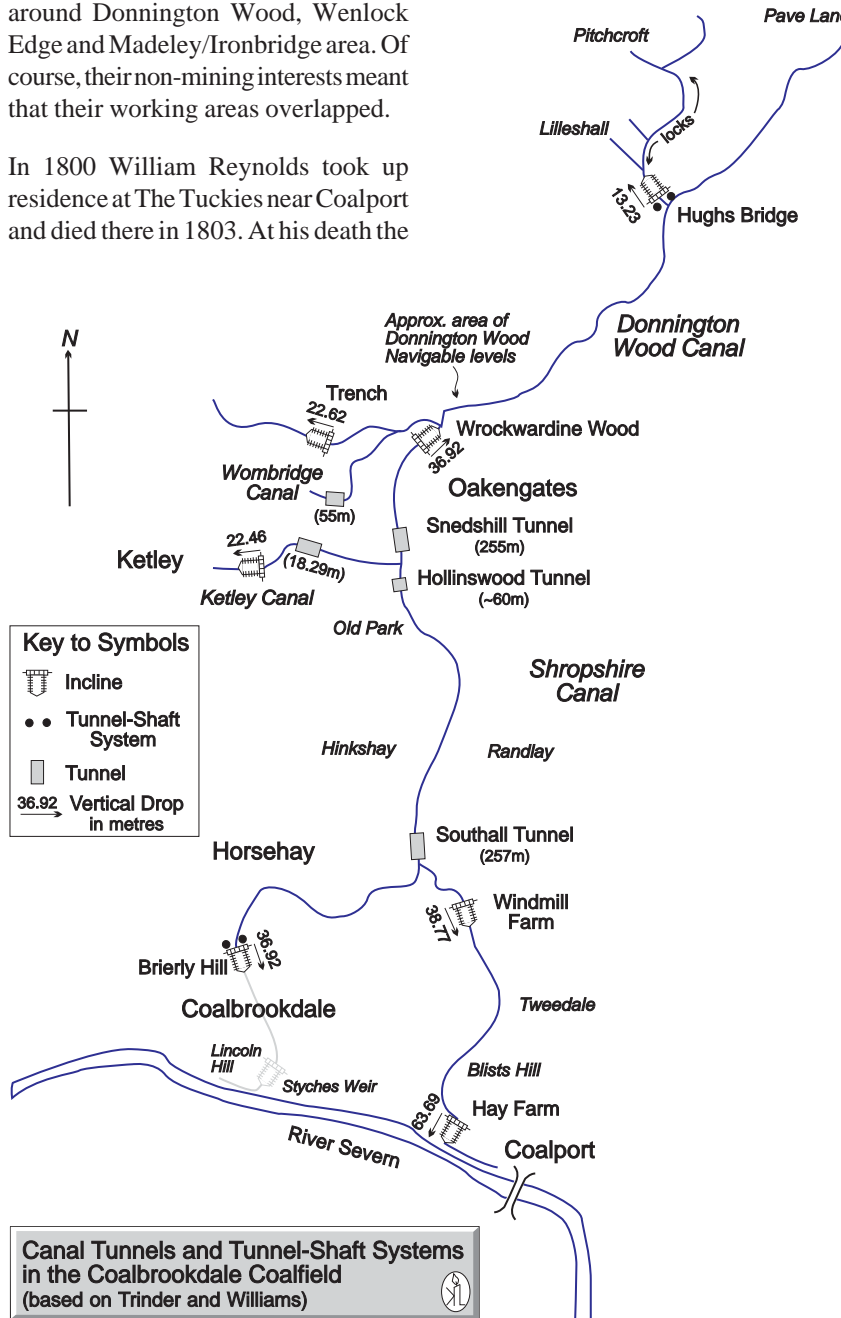
The Reynolds' do not yet have a biographer but much biographical detail is given in Torren's paper mentioned above, also in Randall's 'History of Madeley' 1880 and Trinder's 'The Industrial Revolution in Shropshire' 1973.

Details of the tunnels etc. referred to are in the Club Collection (No.1-4) and the writer's collection (No.1-13).

Background information on Reynolds' enterprises and the Madeley Wood Company can be found in the writer's paper 'The Lloyds - Aspects of a Nineteenth Century Mining Community', Industrial Arch. Review Vol. 14 No.1, 1991.

A short general biography of Richard Reynolds is given in 'Shropshire History Makers' by D.P.H. Wren published in 1975.

Ivor Brown



Training Schemes by Adrian Pearce

Local Cave/Mine Leadership Assessment (LCMLA)

This is a National Caving Association qualification that can be obtained by leaders taking parties into caves or disused mines. The Mines & Quarries legislation and the new proposals for control of outdoor activity centres has added additional stimulus to acquiring this qualification since such centres will not be able to take parties underground without it. It is not meant for Club activities, where novices are trained in-house, but more for commercial type activities. Some schools and youth organisations are also finding that their leaders are being required to hold it.

It is divided into modules and anyone wishing to acquire the qualification for use in disused mines in the Shropshire or North/Mid Wales area would normally proceed as follows:

1. **Mine Core Skills** - Everyone does this. The candidate is assessed in their general knowledge of equipment, mine hazards, access procedures, law, conservation, ability to move around, etc.

This is assessed in a mine that has no vertical descents (although there may be scrambles) and this type of mine is called **Level 1**.

2. **Vertical Skills** - This is only done if the candidate wishes to use mines with vertical descents (**Level 2**).

They are assessed on their ability to rig and lifeline ladders and traverses, as well as dealing with emergencies. If required, they can extend this to include abseiling.

3. **Led Day** - In this, they are assessed on their ability to control an actual group underground. The site depends on whether they wish to use **Level 1** or **2** mines.

Mine Core Skills and **Level 1 Led Day** modules are assessed by a NCA-approved Mine Assessor. For this area these are Adrian Pearce and Neal Rushton.

Vertical Skills and **Level 2 Led Day** modules are assessed by a NCA-approved Cave Instructor Certificate holder.

If you are interested in learning more about the scheme, ask Adrian or Neal. For those who wish to take more advanced training, the Cave Instructors Certificate (CIC) is available.

Caving Club Training & Assessment Scheme

A new scheme has also been introduced by the Derbyshire Caving Association Training Officer, Nigel Atkins.

Novices in clubs are usually trained in-house and the standard of training is very variable. Most club members do not want to go through formal LCMLA or CIC training and thus this is an alternative.

There are 6 modules, each with varying levels from novice caver to cave leader. The modules are Basic Caving, Vertical (non-SRT), Vertical (SRT), Pitch Rigging, Cave Rescue and Club Coaching.

A Club first has to register with the scheme but there is no charge for this.

The Club training officer(s) then attend training sessions for which there is a subsidised charge. They then train their own novices who can be assessed by approved instructors for a charge.

Clubs who join this scheme will be able to ensure that their novices (and perhaps some of the old hands as well!) will be properly trained to a common standard. The question of SCMC novice training

was discussed at a recent Officers Meeting. The current system relies on the new member contacting our Training Officer, Alan Robinson, to arrange whatever training they feel they need. It is possible, and this actually happens, for an inexperienced new member to turn up on a trip and expect to be coached through use of ladders or SRT in situ. This not only holds up the trip for other members but it is a bad environment to learn in since there is pressure to hurry up.

One suggestion was that new members might have to attend a series of training sessions before they are allowed on trips, eg Level 1 basic equipment and techniques, Level 2 ladders, Level 3 SRT, Level 4 pitch rigging.

All trips could be graded and new members would only be allowed on trips for which they had received the right training.

What do members think?

Give your comments to Alan Robinson.

Cwmystwyth Mine

The local council is making plans to cap shafts and gate adits north of the road. A number of people have written to object and it is not known what access arrangements would be if the work went ahead.

If you want more information or want to object, write to :-

J Bowen Esq
Director of Planning
Cyngor Dosbarth Ceredigion
Aberaeron
Dyfed SA46 0PA.

Clive Mine

In case you are not aware, safety work is being carried out at Clive Mine at the moment and you should keep away until further notice.

The two shafts closest to the sand slope have been dug out and the area between will have shuttering installed and backfilled.

The Well Shaft is no longer to be used for access due to worries over pollution of the water supply.



Information on Mining Head Protection

We have had a request from Professor Donald Simpson, a neurosurgeon of Adelaide University, for information on miners' helmets into which he is researching. He thinks that Cornwall was ahead of other parts of the world in introducing protective miners' helmets, even if only rather primitive. Derbyshire also used helmets (the Bradder Hat) and he would like to know when these were introduced.

He believes that the coal industry were late in bringing in helmets but would like to know if this is so. The earliest reference he has to the use of helmets is 1877 but he thinks they were in use before this.

He is also interested in the construction of the helmets. He has references to felt hardened with resin or shellac but one Australian design appears to be papier mache [*compressed fibre?*].

Finally, does anyone have any information on head injuries in both helmeted and unhelmeted miners, past and present. He is willing to pay any reasonable sum for search or photocopying. Contact :-

Professor Donald Simpson, NHMRC Road Accident Research Unit, University of Adelaide, Australia 5005. Tel +61 (8) 303 5997 Fax +61 (8) 232 4995 E-Mail unit@raru.adelaide.edu.au.

Shrewsbury C.C.?

I was wondering if you had any knowledge of the Shrewsbury Caving Club, is it still in existence?

I knew many of the SCMC members in the early days and have fond memories of the Club meets.

Has anything more been done with Ogof Dydd Bynaf (Cave of the Longest Day), upon the moors at Minera, not far from the Shrewsbury Caving Clubs original headquarters at the old White Lion pub?

Dave Adams is sure to remember it he stayed there often enough. The cave is accessed down a 90ft. lead mine shaft and then a 40ft. stope about 18" wide, through an old boulder choke and into the cave proper.

The last time I was there we were stabilising the shaft entrance. I no longer go caving or mining as the closest is on Vancouver Island 400 miles away.

I would appreciate any information on the above.

Did your Club ever manage to retrieve all the equipment from Glyn Ceriog?

It was great to find your net site as well as the SWCC one. Keep up the good work. I'll be sure to log on to your site

to keep up with SCMC activities.

Regards

Des Edwards

(ex-member of the Shrewsbury Caving Club and Chairman of the Cave Rescue Group)

Dave Adams Replies:

ODB (Cave of the Longest Day) was named because it was discovered on the longest day of the year. The entrance was in a quarry, and the quarry operators got a bit concerned that the cave would prevent them from expanding so they put a lid on the shaft in the 70's and stopped people from visiting, as a result interest waned.

The equipment from Glyn Ceriog referred to was a large ships winch, which had been used as a haulage engine underground. It weighed about 5 tons. We managed to split it into 3 sections (2 drums and the main steam part). One drum and the steam section were eventually recovered up the very steep entrance incline, but the last drum defeated us. When we eventually went back to finish the job someone had pushed it off the incline down into some marshy ground. A road was later driven through the area and we think the road builders removed the first drum and steam part for scrap.

Stiperstones Miners

Poems

Having read the poem submitted to the last issue of 'Below' - I checked the Methodist Plan (Programme of Meetings) for 1895. Sixteen years later all the churches were still operational except one - Tankerville, but there is a new one at Wotherton.

Where was the Tankerville Church, none is shown on the 1882 OS map published 3 years after Brians list?

The 1895 Plan has a poem in memory of the three local preachers killed in the mine disaster at Snailbeach. It is by J.Cope, Minister, and the first of three verses reads:

*"Both Andrew, George and Joseph
are to pilgrim's city gone
With faces bright and robes most white,
they are shining like the sun,
Their arduous toil is over and they lean
upon the breast
Of Him, who died to lead them to
Canaan, and to rest."*

The remainder of the poem is in the same style - this makes three poems of this type in my collection - how many more poems or ballads are there?

Ivor Brown

P.S. In 1994, Nine of the sixteen churches listed were still operational.

Info. on Irish Mines

Members of the new Mining History Society of Ireland have been carrying on research for a number of years and it is obvious that a lot of the work was carried out by companies based in Britain, especially Cornwall. It seems likely that information and records relating to Irish mines are sitting in local record offices, etc unknown to the researchers in Ireland.

They would be very grateful if researchers in Britain could let them know if they come across any references to Irish mines in collections based in the UK. The contact is :-

Des Cowman, Knockane, Annewstown, County Waterford, Ireland
T. 00-353-51-396157



SCMC Club Equipment New Organisation

Few club members will have much appreciation of the equipment owned by the club. This ranges from regularly used ropes, ladders and rigging equipment to specially set aside rescue tackle and wide assortment of occasionally used items, such as a gas powered pump, multiple lamp charger and digging equipment.

Most of the club equipment is normally held in two locations:

1. The store room at the Last Inn, Church Aston.
2. A store at Stuart Tomlins house, Halfway House.

The store at the Last Inn is mainly used for regular caving tackle and rescue equipment, while Stuart's store is mainly for the larger items of less frequently used tackle. Keys for the stores are held by a number of club members but anyone wanting equipment is requested to try and organise this via myself, Neal Rushton or Alan Robinson (currently Alan is working just down the road from the Last Inn).

I have decided to re-organise large parts of the club equipment and will use 'Below' to update members on the current situation and changes. The first part of the re-organisation is to be the regularly used ropes, ladders and general rigging equipment.

In re-organising the regularly used equipment, I am acknowledging that the most frequent approach is now to use single rope technique (SRT) and a lot of the equipment is being arranged in 'easy to grab', 'easy to carry' complete packages which can be supplemented as required.

SRT Ropes & Rigging

The 11mm SRT ropes are stored in five red and yellow "Gold Flash" tackle bags. In addition to ropes, each tackle bag will contain a small green rigging bag. The individual rigging bags will each contain the following items:

Rigging Equipment

- 5 x 10 mm maillon rapides,
- 2 x lengths of 11 mm dynamic

- rope (approx. 12' each),
 - 2 x large karabiners*,
 - 1 x nylon sling*,
 - 1 x small adjustable spanner*
- and**
- 1 x tube type rope protector*.

* not yet available in all packs.

The five Gold Flash rope bags are numbered 1 to 5 and the ropes assigned to each bag are as follows:

11mm SRT Ropes

- Bag 1: 2 x approx. 140'
- Bag 2: 1 x 168'
- Bag 3: 1 x 197' + 1 x 110';
- Bag 4: 1 x 216'
- Bag 5: 1 x 150m.

The "Rescue Rope", a 200 m x 11 mm static rope will normally be kept at my home.

10mm SRT Ropes

There are some 10mm ropes to be exclusively used for caving but there are some other miscellaneous 10mm SRT ropes yet to be sorted out. These ropes will be in the White Tackle bags.

General

The contents of the individual bags should be summarised on an index card, kept in (the inside pocket of) each bag. However, it is the responsibility of an individual member to check on the contents of each bag before use.

I want to try and log the use of ropes (to get a better indication of when to retire them) and it would help if the ropes are not switched between bags and if members made a note of use (and date) on the reverse of the record card.

It is envisaged that the rope in **Bag 5** will only be used on exceptional occasions. Please try and let me know if this is removed from the store. The rigging equipment from this bag can be used if required to supplement the other bags in use (*please return A.S.A.P.*).

Ladders, Dynamic Ropes & Belays

Ladders

The ladders will normally be kept individually coiled in the store at the Last Inn. Those in the store should all

be in good condition but remember that there is a mixture of lengths (25' and 30') and of rung spacing (10" and 12"). Also some of our ladders require the use of small maillon rapides to link them.

Dynamic Ropes

The clubs 50 m x 11 mm dynamic ropes and are stored in various bags (other than the red/yellow Gold Flash or White SRT bags).

In addition there is a single 50m x 9mm dynamic rope, useful for initial exploratory trips and when taking novices on simple trips, not normally requiring tackle. This rope is stored in a medium sized "Going Underground" tackle bag, together with a couple of krabs and rope slings.

Belays and Other Tackle

The various wire tethers and 'spare' metal rigging is kept in one of the large 'Ammunition' boxes.

General

I would appreciate receiving comments on the above aspects of organising the equipment but ask that you note my main intention has been that members can quickly grab tackle appropriate for them to carry to the mine/cave without re-packing (rather than just filling the car boot with too much equipment to carry).

While the changes are being organised, I would appreciate being kept well informed about equipment being borrowed and particularly of any deficiencies. If possible, I would like equipment to be returned to me rather than the store (but return it to the store if I cannot be easily contacted).

I have an answerphone on 01952 417483, which is checked at least every second day but I can often be contacted more directly on 01952 660087. My mobile 0850 492036 can also be used (it acts as an answerphone which I normally check around 6.00pm) but this is expensive before 7.00 pm.

*Steve Holding
Rescue & Tackle Officer*



Highlights of the Club Year 30 years ago (1966)

From Club Newsletters No.16 - No.27

Major expedition areas were Brasgyll Gorge, Corwen Slate Mine, Ogof Ffynon Dhu, South Shropshire including Clee Hills, usually about 8 reports per month. Several finds were made, explosives in Ogof Dydd Bynaf and grenades and mortar-bombs in an un-named shaft.

Tunnels were explored at Eardington, Berwick Wharf (Shrewsbury Canal), Tar Tunnel (Coalport), Dudley Canal Tunnel and Halkyn Drainage Tunnel (with permission).

D.Stevenson lost part of his beard in a fire in OFD. The Club was called to a rescue at a slate mine near Friog.

Annual expedition in September was to Cornwall.

About 5 letters per month were reported

at meetings usually persons requiring assistance or information, displays at meetings etc..

The Headmaster of Hope Valley School informed the Club that he was writing a social history of the miners in the area and offered to help the South Shropshire Survey with information (did he ever put pen to paper?).

Many exchanges of publications and help to Cave Rescue Groups. Dave Adams reported that he had sorted out the Club files and had purchased a new folder. A presentation was made to Blogg and his wife following the birth of a daughter.

At the AGM it was announced that the Club turnover had been £194, sales of publications was £28. There was much discussion on changing the Club name from 'Shropshire Mining Club' to 'Shropshire Mining and Caving Club'

(deferred) and charging everyone an annual subscription of £1.25 (defeated). The Club house fee was raised from 12½p to 15p per night. The Annual Dinner was expensive at £1 per head, an extension was to be applied for by the Victoria Hotel, Newport. The Dinner and Entertainment was to be followed by a trip down ODB [see letters page] the following day.

The Club published 2 accounts: North Wales Caves and Limestone Mines, and a Yearbook, and sponsored 2 other publications. Others were ready for printing.

Each newsletter also contained a list of additions to the library [which is now stored and maintained by Adrian Pearce at his home address] and a book review by (guess who!).

Ivor Brown

Request for a Write-In

You will remember that members were asked to write in to South Shropshire District Council early last year about Tankerville Mine. The successful result of this was that the Council found funds to initiate the work of stabilising the engine house and capping the shaft.

The council are facing financial restrictions like all other authorities and it is not certain that they will help with financing the next phase of work. It is urgent that they do this and it may help if they realise the public interest in this.

As a result, I would like to ask all members to please take a little time out to write a letter to the Council and perhaps help the preservation work to continue. I know it is tempting to think that there will be plenty of others who will be writing but what if everyone thought that way?

It takes very little of your time and you will be part of a worthwhile effort.

Phrase the letter in your own words but cover the following points :-

1. Be sure to thank the council for its excellent work so far in stabilising Watsons engine house and capping the shaft.
2. Remind them how important the site is both to Shropshire and nationally.
3. Thank them for initiating the transfer of the site to the new Shropshire Mines Trust.
4. Ask them to continue to financially support the work at Tankerville and other mine sites in South Shropshire.

Address the letters to :-

G C Biggs Esq,
Chief Executive,
South Shropshire District Council,
Stone House,
Corve St,
Ludlow,
Shropshire
SY8 1DG.

Letters Continued

Dr William Eddowes

I have received a letter from David Eddowes of the Isle of Wight who bought "Mines of Shropshire". He says that his great grandfather, Dr William Eddowes, had lots of miners who were his patients during 1835-77.

He still has a testimonial dated 1877 when the doctor retired, with some 240 subscribers. The following mines are mentioned where donations were made by miners and agents :-

Snailbeach	£8. 5.0d
Perkinsbeach	£0. 5.0d
Bog	£0. 1.0d
Wotherton	£0. 5.0d
Pennerley	£1. 4.3d
Tankerville	£3.18.0d
Roman Gravels	£2. 7.0d.

I seem to remember seeing the name Eddowes somewhere in connection with a mine. Was there another Eddowes who was an owner or agent?

Adrian Pearce

[I have seen references to *Eddowes Salopian Journal*, dating to the 1790's I don't know if there is any family connection. *Kelvin*]



Survey of Steam Engines in the Coalbrookdale Coalfield, 1967

In preparation for a visit of the Newcomen Society the writer, with assistance from Mr. J.H.Denton, carried out a survey of steam engines on their working sites in 1967. This was appropriate because the last of the engines were about to be shut-down (that of Donnington Brickworks in June 1967), but new ones were about to start (if turbines are counted as such) at Ironbridge 'B' Power Station.

The engines (for details see Shrops. Arch. Soc. Newsletter No.35 (1968), No.36 (1969)) were:

Priorslee Furnaces, Lilleshall Co. Ltd.
1 & 2. Beam Engines (2) "David & Sampson" built 1851 by Murdock & Aitkin of Glasgow. Last used 13 July 1952. Moved to Blists Hill, now turned by electric motor.

3 & 4. Steeple Engines (2) built 1880 to work with the above.

5 & 6. Inverted Vertical Blowing Engines (2) built 1900 by the Lilleshall Co. One of them was moved to Blists Hill and is 'preserved' in the blowing engine

house by the blast furnace remains.
7 & 8. Turbo-blowers (2) built 1921 by Frazers & Chalmers.

9. Barring Engine - generally considered as part of the blowing engines.

10. Tuyere Engine - to operate a pump to circulate cooling water.

Snedshill Brickworks, Lilleshall Co.

11 & 12. Horizontal engines (2). One built by Marshalls, the other by Lilleshall Co. Date of manufacture unknown.

Donnington Brickworks, Messers Blockleys

13. Horizontal engine, built late 19th Century, used in paddle steamer, then laundry before being moved to brickworks. Ceased operation June 1967.

Milburgh Tileries, Messers Liptons

14 & 15. Horizontal single cylinder engines (2), late 19th Century construction, maker unknown - possibly local. One used to drive tile making plant, the other as a

winding engine. They ceased operating in 1940 and both engines have subsequently been moved to Blists Hill, where the winder is still in daily operation.

There were also several fine steam turbines (built 1932) operating at Ironbridge 'A' Power Station (sadly demolished in the early 1980's), but even without these a score of 15 engines still on site was quite remarkable. It is understood that none of the 15 remain in place today.

Note

The last mine steam engine to work in Shropshire was at Brandlee, Dawley. It was last used in 1956 and scrapped 1962. There was also one at Farm Mine, Lawley which was stopped at about the same time (its headframe is now at Blists Hill Museum).

The last large mine steam engine in Shropshire ceased work at Grange Colliery, Donnington in 1951. This was also the last flat rope winder to be used in the UK.

Ivor Brown

European Mining Museum Organisation

An organisation is trying to set itself up to tap into EEC funding. It has had two meetings in France and Wales and hopes to attract mining museums and similar organisations who interpret mining history to the public.

Organisations from France, Spain and Portugal have expressed interest, as well as UK ones such as Geevor Tin Mine and Llechwedd Slate Cavern.

An administration cost will be charged to participating organisations and it is not known how grants will be distributed.

The European Regional Development Fund has three programmes under Article 10 and one of these is for inter-regional cooperation and regional economic innovation.

It is hoped that, if a network of mining sites can be set up, it would qualify for grant aid under this heading.

The organisation's aims are :-

- sharing ideas on what exists; opening up the underground world of mining to tourism
- making use of the imagination for cultural and artistic approaches to the underground world
- taking an initiative in collaboration with the visually impaired.

Anyone interested in learning more can perhaps contact:

Ivor Jones of Llechwedd Slate Caverns
or

Ian Martin of Geevor Tin Mine, both of whom attended the first meeting.

Just in case there is a chance of obtaining grant aid for funding mining history interpretation from this source, the NAMHO Secretary has written to the EEC for details.

Cave Works Home Page

The CaveWorks Interpretive Centre Home page is now up and running. It can be found at:

<http://www.peg.apc.org/~cwork/>

CaveWorks is a centre aimed at providing information and education to visitors to the reserves of Augusta Margaret River area of Western Australia.

High levels of visitation have put extreme pressure on the cave resources in the Leeuwin Naturaliste Ridge and CaveWorks will provide a valuable asset to the preservation of caves and karst.

The project budget, at 1.2 million dollars, will commence at the end of February 1996 and will open in September 1996.



Well Deaths

A plumber and two men, who went down a 20 foot well to rescue him, died after being overcome by fumes.

Emergency services were called to an isolated farm at Ballymoney, Co. Antrim, Northern Ireland after a plumber became ill while clearing a blocked water supply. He tried to climb to safety but fell off the ladder.

A part-time fireman was lowered into the well to help, but collapsed after attaching a lifeline to the plumber. Next a paramedic member of the ambulance crew went down the well to help both men, but he was also overcome by fumes.

Efforts by rescuers to get the men to the surface took an hour. Despite being given cardiac massage in the ambulance enroute to hospital, all three men died.

The well is the main water supply to the farm and the plumber was called in to carry-out work after the water levels fell low.

Wenlock Copper

A rich vein of copper ores etc. (Chalcopyrite, Malachite, Azurite, Polytelite and galena) has been found in Wenlock Limestone at Dolyhir near Kington (Herefords?). Maybe the copper mines of Wenlock Edge were rich after all. (Report in Welsh Mines Society Newsletter No.33)

T.E. Vaughan

A former researcher into mining history of Shropshire and former associate of the Club has died. Tom did some work in the Shropshire area in the 1950's and 60's. He was also an expert on D.C. Davies, the mining writer, manager and entrepreneur from Oswestry in the last century.

North Salop Coal

Gordon Hillier (SCMC Associate) has recently given talks on the North Shropshire Coalfield. He has a large amount of material which he has made available to the Club in response to the requests in the Journal.

Pigeon Summer

Did anyone record 'Pigeon Summer', a film broadcast on 30th December 1995, based on a book by Ann Turnbull about life "in the Thirties Depression in a Shropshire Mining Town".

Apparently "times were hard, Mary was looking after her fathers pigeon's while he was away seeking work and the mother was ??".

IJB missed it but would like to know more.

Ivor Brown

Welsh Slate Mining

The Welsh slate industry almost died out when faced with competition from clay tiles earlier this century. It tottered on in a much reduced state until the last few years when there has been a recovery due to the use of slate by architects for roofs and walls of new buildings. It now appears, however, that they are facing competition from an unlikely source - Canada.

Canadian slates are being imported cheaper than the home grown ones can be produced (does this sound familiar?) and builders facing lean times are obviously buying the Canadian ones.

It is not yet known how badly this will affect the industry but there may be closures of slate quarries and especially mines where costs are higher. It is now rumoured that the proposal to open cast Rhoysydd Mine has been changed to restrict excavation to mining only. Could this be a reflection of the new competition so that the whole operation there has been scaled down?

Let us hope that it means the artefacts at Rhoysydd will be saved after all.

Adrian Pearce

Kingsdale Survey

Due to the high demand for copies of the long out of print survey of the West Kingsdale System a limited reprint of the originals has been produced.

They are available in Dales caving shops now, but are selling fast.

Pit Canaries

The use of canaries in coal mines to test for gas has now ceased - according to Official sources. The last birds were finally 'pensioned off' on January 1st. Amongst the mass of new laws and regulations that came into effect at the start of 1996, was an act repealing the use of "two small, caged birds" (introduced in the 1911 Coal Mines Act).

Miners will now have to rely on more sophisticated multi-gas analysis equipment. Many younger miners treat the canaries as a bit of a joke and a thing of the past, with no place in modern mining. But for older miners they play a more symbolic role, and more reliable. Batteries in meters can fail, but a canary does not.

Canaries were not just used in pits, they have also played their part in war. When tunnels and mines were being dug under enemy lines during the First World War, the birds were taken underground to test for enemy gas attacks. In the Gulf War, Lt-Col. Norman Walker, a British Army doctor from the 205 Field Hospital in Saudi Arabia bought a canary as a gas detector. Code-named Elvis (Early Liquid Vapour Indicator System), the bird returned from the Gulf a war hero.

In 1995 following the Tokyo gas attacks, Japanese troops in chemical warfare gear could be seen on news reports holding cages of canaries as they stormed the home of the Aum Shinri Kyo cult's 'Sixth Santium', where they thought the gas was being made.

Originally miners took any bird, or even a mouse, down the mine to test for carbon monoxide. The canary proved more reliable than a mouse, which tended to curl up in a corner and go to sleep. If the bird started to sway drunkenly on its perch, the miner would make a rapid retreat with the cage. Once in clean air the birds revived or, if seriously affected could be placed in Haldane's Humane cage, an air-tight compartment with a small cylinder of oxygen, for resuscitation.



The Snailbeach Company, the Pontesford Colliery and other matters

Colin Armfield's contribution to issue 95.5 of 'Below!' presents some fascinating documents concerning the Snailbeach Mine Company for study. Some information I have does seem to gel with these papers, and in part of the following discussion I attempt to pull them all together and make some sense of what was happening at Pontesford in the 1860's. Thinking about this and some of Colin's opening comments led me on to the related subject of the move of smelting to Snailbeach, and I continue with this topic and pose some questions which some members might care to answer.

I open with a brief account of the working relationship of Longueville & Co. with the Snailbeach Company, and I hope it makes clear why so much historical material on the Company has come from the Longueville office.

As a tailpiece I have noted down some other troubles the Snailbeach Co. had with their Pontesford interests. It should be noted that the spelling of the lessor's name without the 'e', as it is given in Colin's papers, is incorrect, although I suppose there is no other way to pronounce it than 'Highway'. Presumably these are spelling errors in the originals which Colin has reproduced exactly.

The Snailbeach Company's Legal Representatives

The Longueville Jones & Williams partnership represented the Snailbeach Mine Company, the Snailbeach Mine Company Ltd. and the Snailbeach Lead Mining Company Ltd. continuously from (at the latest) the early decades of the 19th Century until 10th December 1912 when it was resolved that the latter Company should be wound up¹. The partnership still exists today under the Longueville name².

Various of the Longueville partners held shares in the three companies. The Company's legal address or Registered Office was always at Longueville's in Upper Brook Street, Oswestry for as long as they were the Company's

Solicitors. The Company Secretary was always a Longueville partner or an employee of theirs. This was sensible because Company Secretaries are always in charge of legal matters. All formal business, internal and external, was handled at some stage or other by the Longueville office. The Company Secretary was not a Director, but nevertheless had a vital role to play³.

Discussion of Walter Eddy's report 'Pontesford Colliery Dec. 1861'

Eddy appears to be reviewing the cost implications of maintaining the lease of the Colliery, and as Colin suggests, it does seem to have been an onerous one. Eddy says in his penultimate paragraph "... here the royalty is double the average other districts and the lessees are bound to work or pay for all coals in the land." If eddy is correct and this is a true interpretation of the lease, the landlord would be in a position firstly to try and argue that termination of the lease before the coal was exhausted was a breach of its conditions, and secondly that he could expect royalties on all the unworked coal before the expiry of the lease. In the previous paragraphs, Eddy estimates a reasonable value for all the coal he believes to be left in the seams and the royalty payable. There is no mention of opportunities to limit the output and royalties, and in fact his rate of royalty payment is based on a doubling of the recent winnings simply to clean out the reserves. Everything in Eddy's memorandum is concerned with showing the Snailbeach Company the cost they can expect to bear under such difficult conditions as he sums up in the quoted sentence. Walter Eddy and Charles Bromley produced another valuation in March 1862⁴, and the Company's bankers, Croxon & Co., wrote at least one letter to the board about the dispute, in October 1863⁵ (I have not examined these in detail).

At the time of Eddy's first valuation the Company was already building the Snailbeach Smelt Works⁶ on the Marquis of Bath's land⁷, and they had no need for any other smelters after its

opening, although the old lease remained in force for some years⁸.

I have a suspicion that both the Colliery and the Smelt Works at Pontesford were on the same lease⁹, and that the onerous conditions cited by Walter Eddy may have been to blame for the Company continuing their possession of both properties. I would be interested to hear of any more papers directly tying up with these which would substantiate or otherwise, what I have suggested. In particular, is there a copy of the Colliery lease?

Any further discussion, comment or constructive criticism from other members would also be useful.

Finally on this particular subject, I detect a cautionary tone in Eddy's comment "In the absence of proof to the contrary I have no doubt Miss Highway's [sic] value will change ALL". He is implying that the landlord will lean to an overestimate if it suits her, and provided she cannot be proved to be an out-and-out liar. Some things never change. How can you prove the worth of a coalfield without digging it up?

The Cost of Coal & the Viability of Smelting

The Shrewsbury & Welshpool Railway Company was incorporated under its Act of Parliament on 29th July 1856, and the Minsterley branch was first opened for traffic on 14th February 1861¹¹. Eddy's report post-dates the railway opening but, to repeat, Captain Harrison was already building the Snailbeach Smelter in 1860. However, the plans for the railway being in existence and made public from at least 1856 may very well have influenced the Snailbeach Company early on in their plans to close the Pontesford operation.

There are known examples¹² of the Snailbeach Co. buying parcels of ore from other mining companies in the south-west Shropshire orefield. The usual course of events was that the seller would send samples to a number



The Snailbeach Company, the Pontesford Colliery etc. continued

of potential customers for analysis and inviting tenders for the parcel. The Snailbeach Company did not always win, even when smelting was moved to Snailbeach and a little nearer to all the other mines. Among those known to have sold ore to the Snailbeach Co. were Samuel Morris Ridge (one-time owner of Perkins Beach Mine¹³) and the Roman Gravels Mining Co. Ltd.¹⁴. It was preferred that the vendor delivered the parcel at the smelt Works, with the agreed price including the cost of cartage¹⁵, so that the buyer's profit would not be eroded.

The cost of transporting coal clearly must have influenced the positioning of the Company's smelt works greatly, but this cannot have been the only factor in persuading them to switch to Snailbeach.

it also seems that the effect of transport costs on whether or not a lead smelting company was successful in purchasing ore was marginal, since the Snailbeach Co. did not always successfully undercut other buyers even though in later years it was easily the nearest to all the Shropshire lead mines.

I would welcome some discussion, firstly on what may have influenced the move other than lower transport costs of coal and a better choice, and secondly on what factors are considered to have been important in determining the success or failure of the Snailbeach Company in competitive tenders for lead ore.

Other disputes with the Heighway Family

Other headaches suffered by the Snailbeach Company at the hands of the Heighways included a dispute (date unknown) which appeared to centre around exactly which plots of land were leased to the Company for the Smelting Works¹⁶, and another in 1825 concerning coal taken by William Heighway from the Colliery¹⁷. After the Company opened the new Snailbeach Smelt Works, they were faced with correspondence and action for breach of leasehold conditions on

the Nag's Head Works, which the Heighways claimed had fallen into disrepair¹⁸.

References

SRRC 5982 uncatalogued collection in 2 sets of temporary boxes numbered 1-15/15 and 1-10/10

1, 3 Many references
12 Various boxes, bundles of accounts

2 Longueville Gittins, 39/41 Church Street, Oswestry. (Information courtesy Peter Francis).

4 SRRC 5982 13/15. Valuation of unworked coals, Pontesford Colliery by Walter Eddy and Charles Bromley, 12th March 1862.

5 SRRC 5982 10/10. Letter 10th Oct. 1863 R.J.Croxon to Edward Williams (Co. Sec.) regarding dispute over royalties etc. on the abandonment of Pontesford Collieries.

6 'Below!' issue 95.5, p2 'Harrison Notebooks, I.J.Brown SCMC.

SRRC 5983 2/15 Snailbeach Lead Mining Co. Ltd. Minute Book.

7 7th May 1897. correspondence with Tucker Lake & Lyon (Bath's solicitors) concerning work being done at the Smelting Works, leasehold conditions and royalties.

15 6th Dec. 1886. Two examples of tenders (1) To offer £8-10-0 per ton for 50 tons of Roman Gravels ore. (2) To offer £8-2-6 per ton for "...about 6 tons of Lead Ore from Perkins Beach Mine ... lead to be delivered at Smelting works".

8(1) Snailbeach Mine Estate Act (1867). Schedule 1 (existing leases) includes a "Leasehold Smelting House and certain Lands thereto belonging held under Elizabeth Heighway and others".

8(2) SRRC 5982 9/15 Snailbeach Mine Co. Ltd. Minute Book. 9th Oct. 1877, Discussion with Lazarus & Son of their various proposals for smelting at Pontesford. there was a possibility that "...they would take the old Works for the remainder of the Company's Lease".

9(1), 18 SRRC 5982 3/5. Paper received 22nd Mar. 1883 re: Dilapidation's and repairs required at Pontesford (smelt works); part of premises under Lease of 24th Mar. 1784 between Samuel Heighway and Thomas Lovett.

9(2) SRRC 5982 9/10. Paper including abstract of lease 1784 concerning case of Jones v Samuel Heighway c.1828 Pontesford Colliery etc.

10 'Railway Magazine' Nov.-Dec. 1944. "The Snailbeach District Railways", H.F.G.Dalston. Editor's footnote.

11 "A Gazetteer of the Railway Contractors and Engineers of Wales and The Borders 1830-1914" L.Popplewell, Melledgen Press 1984. Source: Public Record Office, RAIL 404/1 3rd No.1865.

13, 14 "The Mines of Shropshire & Montgomeryshire (etc.)" R.Burt, P.Waite & R.Burnley, University of Exeter Press/ Northern Mine Research Society 1990. Source: Official Mineral Statistics.

SRRC 5983 9/10

16 2 memoranda (undated) regarding Mr. Heighway's land and colliery. Examination of Sarah Underwood (undated) regarding Samuel Heighway's farm and its occupants.

17 Papers, John Jones v William Heighway 1825, concerning the taking of coals from Pontesford Colliery. Prosecution declaration at The King's Bench.

Andy Cuckson



BCRA Photo Group

Efforts are being made to create a Photographic Special Interest Group (SIG) within the BCRA.

Dave Gibson has produced the initial publication of *Underground Photographer* to generate interest in such a group. If you are interested at all in Cave Photography, then why not buy a copy!. It is reasonably priced (£4.00) and the quality of reproduction is not too bad.

There are some useful reference articles on a wide range of photographic subjects. As an added incentive to get hold of a copy there is an article by Peter Eggleston on his MineCam, 'Borg' and ResCam. The only disappointment with the article is that a low resolution screen has been used for Pete's pictures so they appear 'dotty' compared to the rest of the pictures in the magazine.

Anyone interested in helping with the SIG or contributing to the next issue of the magazine can contact Dave Gibson *e-mail*:

gibson@mcsolv.demon.co.uk

Snail-mail:

BCRA-CREG, 12 Well House Drive,
LEEDS, LS8 4BX

Make cheques payable to:

BCRA-CREG.

A brief newsletter will be sent out in March with details on how the group is progressing.

Vehicle Fires

The latest trend in the Stoney Middleton area (Derbyshire) is for thieves to 'torch' cavers cars. It seems to particularly affect cars parked near to Carleswark Cavern.

Anyone visiting the area are recommended to park in public places (ie: in a lay-by on the A623 (near the Lovers Leap Cafe) and not in the quarry above the electricity sub-station in Eyam Dale), or leave an adult with the vehicle (with the keys so they can drive off if necessary). Any suspicious activity should be reported to Buxton Police 01298-72100, or 999 in an emergency.

King Edward Mine

The Trevithick Trust continues to develop King Edward Mine with the contents of the Lizard Museum and surplus items from Helston Folk Museum being moved there.

A sub-lease for the Mine, from the University of Exeter has also been agreed. A 'Single Regeneration bid' has been successful, while several individuals have made contributions towards developments at the site

English Heritage have also accepted that King Edward Mine requires a condition survey, and they will provide the appropriate funding.

Trevithick Trust Newsletter
No.8

Hopewell Free Mine

Situated next to the B4226, about 1½ miles east of Coleford in the Forest of Dean (NGR: SO 60351140) this colliery in the has recently closed and there are plans to turn it into a mining museum.

The main feature will be an underground 'cap-lamp' tour along New Road Adit to a worked seam, returning to surface via an 1800's drainage adit, driven by Mushet. The surface buildings are being converted into tearooms and an exhibition area.

If work progresses well, it is hoped to open for visitors in April 1996.

Sygun Web Pages

Sygun Copper Mine now has its own web page which can be visited at:

<http://ourworld.compuserve.com/homepages/SnowdoniaMine>

I.A.Recordings Too

Also taking advantage of Compuserve's new Web page facility I.A.Recordings are now online with a series of web pages covering their videos and Industrial Archaeology, you can visit them at:

<http://ourworld.compuserve.com/homepages/IARecordings>

Monica Maurice

Monica Maurice recently died at the age of 87. She was known in Sheffield as "the Lady of the Lamp" because of her involvement with the family business, the Wolf Safety Lamp Company.

She was an expert on explosive gasses and mine safety and was encouraged in her early life by her father to take an active part in the running and development of the business. She was an inventive engineer and sound business woman, working in the firm until her 80th birthday.

She revolutionised underground lighting in South Yorkshire pits in the 1930's and later developed Wolf's expertise in safety lamps for the oil and gas industry.

Monica Maurice progressed from the research department of the Company to become Chairman and Managing Director in 1951. She stayed in charge of the company for about 30 years.

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Mine Tours 1996

Atalaya Tours are running their Mining Interest Study Tours once again during 1996. Tours to the Iberian Peninsular, India and Britain are planned.

If you are interested, further details are available from:

Atalaya Tours Ltd. Ceinionfa, Capel Dewi, Aberystwyth, SY23 3HR
Tel: 01970-828989

Privatisation Success

Richard Page, junior industry minister with responsibility for the coal industry, hailed the first year of privatisation as a success.

On January 8th, he told the Coal Industry Society in London that deep-mine production was up by around 13%, sales were 18% higher while imports of steam coal have dropped by 16%.



A query for your members, following discussions in the field after the recent Mining History Society of Ireland meeting in Dublin.

A piece of Wales in the Irish hills

In the Winter 95 issue of 'Below,' p. 6, 'Guinness Tour of Ireland,' Mike Moore referred to the Cornish crusher rolls, manufactured by the Mills Foundry in Llanidloes, on the dressing floors at the Glendalough Mine (INGR T090962) in co. Wicklow.

Comprising a set of plain crushing rolls (23" dia) of later design, with spring loaded idler roll. They are not in their original location but have been mounted on a low concrete loading, and the loadings for an adjacent engine are still visible, during 20th century reworking of the dumps.

Originally they were probably installed in the crusher house at Baravore Mine (INGR T063942), in Glenmalur. That house still stands, intact but minus its woodwork - surely the best example of a late type (no lever opening) structure - but dating its construction is a problem.

Can those members with mid Wales interests tell me what records survive for the Mills Foundry, and at what date the foundry started manufacturing the spring loaded rolls ?

It was good to see SCMC members supporting the formation of the Irish society - their surveying skills could be put to good use in co. Wicklow where there is excellent survival of mining features at sites like Baravore, Luanure, Van Diemen's Land and Glendalough.

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John Curr

A little background to John Curr, the 'expert' called in to recommend improvements to the Old Wind at Brierly Hill, Coalbrookdale might be of interest to members:

John Curr worked at the Duke of Norfolk's Collieries in Sheffield and claimed "the making and use of iron railroads" in 1776 as one of his "inventions"². However there is definite evidence that Richard Reynolds had 6 tons of iron rails cast at Coalbrookdale as early as 1767. Curr may have been aware of the experiments at Coalbrookdale and adapted them to the mines in Sheffield, using the word "inventions" in a different sense to which we take it today.

Curr is credited with inventing shaft guides or "conductors" for use with a square corve or wagon. The *conductors* were '2 or 3 upright rods of deal 4"x3 braggd on opposite sides of the pit forming mortices or channels by which the corves are conducted being suspended on cross-bars with rollers at their ends which run in the mortices'³.

In some pits the conductors were iron rods, bolted to massive beams at the bottom of the shaft and connected to the headframe by strong screws, which kept them tight and in their vertical positions. Wagons were placed in a sort of frame or chair on the outside of which were friction wheels on the conductors or sliding rings on the iron rods.

Kelvin

Florence Mine Heritage Centre

Due to open for its first season on April 1st is this new Heritage Centre on the site of Florence Mine, Egremont, Cumbria (the last deep working iron ore mine in Europe).

The Centre has been created by the West Cumbria Mines Research Group and will be open 10am to 4pm every day, 1st April to 1st October with underground tours of the still working Ullcoats Mine at 10.30 and 13.30 each Saturday and Sunday and Bank Holidays.

There is plenty of kidney ore and specularite to be seen on the tour. Old clothes are a must for the underground trip - be prepared for everything to turn bright red.

Tours are available all year round, including weekdays while the mine is working by prior arrangement.

The mine is situated on the A595, just south of Egremont at the Wilton turning.

Address:

Florence Mine Heritage Centre,
Egremont,
Cumbria,
CA22 2NR
Tel: 01946-820683

View along the newly discovered brick tunnel, at the Old Wind, Brierly Hill, Coalbrookdale. Taken on 4th February 1996:



Miners Top Earners

Hundreds of miners are now in the £35,000-£40,000 a year bracket since privatisation, RJB Mining, the biggest coal producer, recently disclosed.

Earnings have risen by around 10% since privatisation and productivity-linked performance incentives mean coalface workers can earn 100% bonuses. March figures just released show average earnings for the group's 10,000 strong workforce, covering underground as well as surface and administrative staff, are running at £23,000 a year.

RJB is pushing ahead with plans for its employees to take over the work of 4,000 contractors to continue the drive to raise productivity and reduce costs.

Production at RJB mines and opencast sites is now running at around 41m

tonnes a year compared with a forecast of 39m tonnes made in last year's prospectus tied to the £810m purchase of the former British Coal assets. Analysts feel the company is now poised to pay back another large slice of the debt ahead of schedule.

The company has benefited from increased coal purchases in the important power station market because of problems with the turbines in the new gas-fired generating plant operated by National Power and PowerGen.

Gas-fired plants have so far reduced coal demand by 20m tonnes and the total is forecast to double by the end of the century but RJB is confident it can maintain its 27m tonne-a-year business with the electricity generators after current contracts expire in 1998.

Coal Investments

On the other side of the privatisation coin, Coal Investments were forced to call in an Administrator, on the 6th February by one of their backers the Swiss UBS Bank. This move puts 1,500 miners jobs at risk.

The mining group which was set-up three years ago by former British Coal marketing boss Malcolm Edwards runs pits in South Wales, the Midlands, and South Yorkshire. It owes various banks about £30 million and was seeking a rescue package of £20m to develop several new seams.

However it was refused planning permission at Stoke-on-Trent for a new development and this is thought to have prompted the banks action. Fifty contractors at Hem Heath have already been laid-off, and workers moved to other pits.

As an interesting development, the Director of the firm which supplied Coal Investments with their winding ropes was arrested on the 9th February, when he arrived at Hem Heath with 2 low-loaders and a mobile crane and tried to recover over £25,000 worth of ropes for which he had not been paid.

He was released later with-out charge. The Administrator has subsequently promised to pay the money or return the ropes if the firm's claim is valid.

Geevor Mine Closes

Following reports by the Cornwall County Surveyor's department the Geevor Tin Mine has been closed to the public. The site, which was re-opened two years ago as a tourist attraction, after mining ceased, by the Trevithick Trust and local miners, has successfully operated for two seasons, although on a very tight budget.

The surveyor's felt that many of the mine buildings were unsafe. The main problem is that during high winds it is possible for roof sheets to be torn loose. Large amounts of money will eventually have to be spent on repairing roofs and removing redundant buildings from the site.

Carmel Woods Saved

Following an out of court settlement between Wimpey Minerals and a local resident should mean that Carmel Woods are safe. Wimpey had hoped to exercise mineral extraction rights granted to them in 1948, under an Interim Development Order, to quarry in Carmel Woods. This action would have destroyed an SSSI created in 1986. However they will now confine their

operations to the existing working quarry at Cilyrychen.

As the action was settled out of court it means that the validity of Interim Development Orders (these were granted during and after World War II to safeguard the Country's mineral supplies), has still not been tested in the High Court.



Advance Notice



1996 Annual Dinner

to be held at:

Snailbeach Village Hall

5 October 1996

Accommodation has been reserved at the Stiperstones Inn.

If you wish to stay, please advise Mike Moore *before* May 1st, 1996.

Menus and other details will be sent out at a later date



Places to Visit

Snibston Discovery Park

Based at the former Snibston Colliery, this is now claimed to be Leicestershire's largest attraction. It provides a unique mix of Science, history and the environment.

The site comprises a science and industry museum with a 'hands on' theme, guided colliery tours, country park, site railway, exhibition area, indoor and outdoor Science Discovery Centres, plus conference and catering facilities.

Ten minutes from junction 22 of the M1. Open daily 10am-5pm (6pm April to October). Admission: Adults £4.00, Concessions £2.75, Family Ticket £10.00, group rates available on request.

Address: Leicestershire County Council, Snibston Discovery Park, Ashby Road, Coalville, Leicestershire, LE67 3LN
Tel: 01530-813256 / 01530-510851

Valley Heritage Centre & Museum

The Museum of Cannock Chase

The surrounding lands, once owned by the Marquis of Anglesey, were leased by him to the Cannock and Rugeley Colliery Company. In 1874 a mineshaft was sunk; with extraction of coal continuing until 1962. The site remained the home of the local Mines Rescue Service until 1991.

The Museum, which opened in 1989, collects and exhibits artefacts. It has a collection of objects, photographs and research, all of which can be used by prior appointment. A new permanent gallery illustrating the history of the local coal mining industry was opened in May last year.

Open Monday to Friday 11am-4pm. From Easter to October, open 7 days a week, 11am-5pm. Admission free.

Address:

The Valley Heritage Centre and Museum, Valley Road, Hednesford, Cannock, Staffordshire WS12 5QX
Tel: 01543-877666

Minera Lead Mine & Country Park

In all of Wales no lead mine has been more celebrated or profitable than the mine of Minera (?). Sensitive restoration has created a glimpse of the site during its peak years of the 1870's within the setting of a new country park.

The Clywedog Trail passes through, making Minera an excellent base for a day exploring this stunning valley.

All year round events and guided walks are held and staff are available for groups who book visits in advance.

How to get there:

Follow the signs on the A525 Ruthin Road, passing through Coedpoeth. Minera is signposted at the Five Crosses public house. Follow the B5426 for 2 miles to the main entrance on the right.

Visitor Centre and Meadow Shaft Site (Tel: 0978-753400) open Easter to end of September, Tuesday to Sunday 10am-5pm. Bank Holidays and Mondays in August.

There is a small admission charge to

the Centre.

The Country Park is open to the public every day until sunset. Country Park and Ranger's Office Tel: 0978-751320

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 by visiting:

<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 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
- 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

Diary Dates '95

President: Alan Taylor

**Tackle & Rescue Officer:
Steve Holding**

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

1996

Chairman: Neal Rushton

**Training Officer:
Alan Robinson**

13 March: I.J.Brown talk on
"Snailbeach and its Disaster 1895",
Shirehall, Shrewsbury to the Shrops.
Geological Soc. and Shrops.
Archaeological Soc. joint meeting.

Vice Chair: Malcolm Newton

**Conservation Officer:
Nick Southwick**

16 March: National Caving
Association AGM, 10.30am, Staffs
County Council Sports & Social
Club, Eastgate St. Stafford.

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

Bat Officer: Mike Worsfold

21 April: British Cave Rescue Council
AGM, Derbyshire Police
Headquarters, Ripley, Derbyshire.

Treasurer: Bob Taylor

**NAMHO Rep:
Colin Armfield**

4-5 May: BCRA South Wales Regional
Meeting, Workmen's Hall,
Blaenavon. Cost £2.50. Trips into
Ogof Draenon on the 5th.

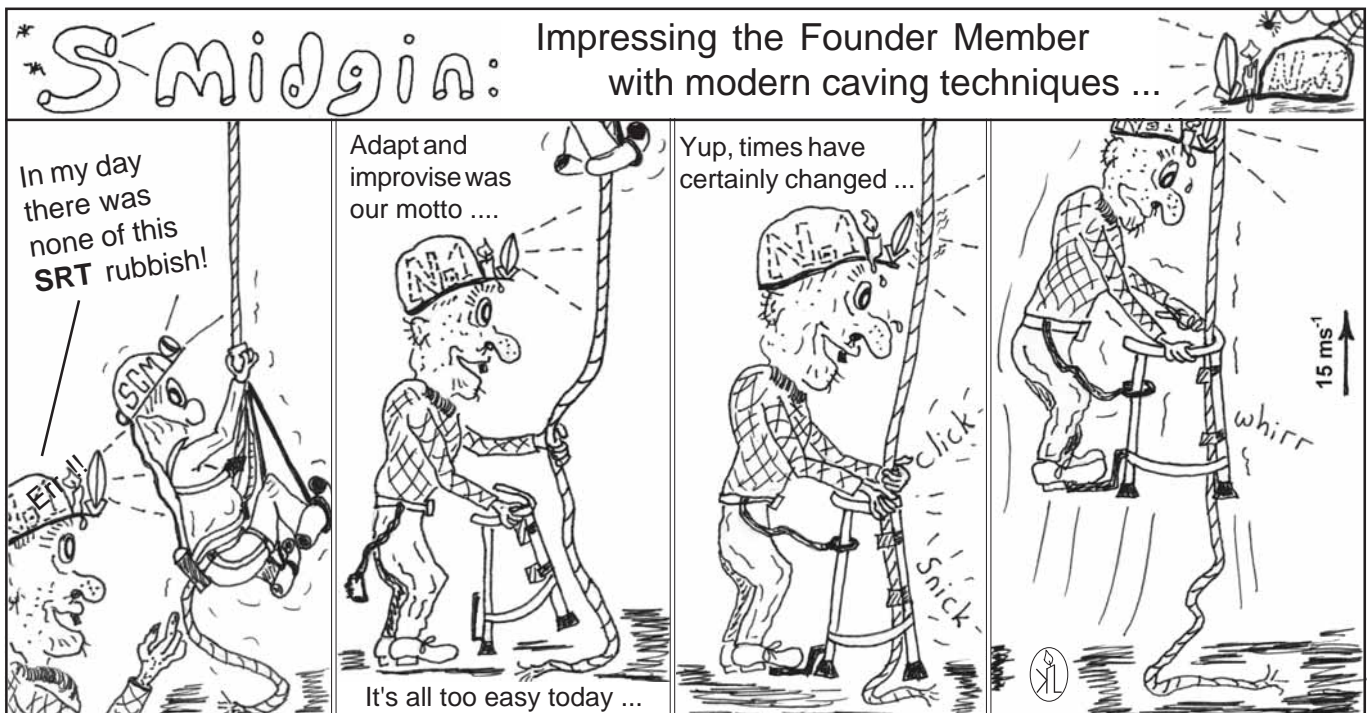
**Membership Services:
Mike Moore**

CCC/CNCC Rep: Ben Shaw

14-16 June: Royal Forest of Dean
Caving Symposium II, English
Bicknor Sports & Social Club,
sponsored by BCRA. Cost £15.00
(£17.50 non-BCRA Members).
Contact; Paul Taylor, 9 Massey
Road, Gloucester.

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

27-29 September: NAMHO Field
Meet, Princetown, Dartmoor.
Hosted by Plymouth Caving Group.



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

