

Congratulations

Congratulations to newly ordained Reverend Professor David Poyner.

David was ordained on 1st July at Hereford Cathedral as a deacon in the Church of England (*see picture right*).

As David says: “A deacon is a sort of apprentice vicar; I can bury people but I won’t be able to marry or baptise anyone until next year when I go back to the cathedral to be ordained as a priest. I work part time (one day a week) based in Highley, covering Billingsley, Chelmarsh, Glazeley and Deuxhill, which is most of the Shropshire bit of the Wyre Forest Coalfield. I’ve already organised one mining-themed service.”



Mining Themed Service

David’s mining themed service was on Sunday 12th August at Billingsley church and involved his father, George Poyner, who spoke about his time at Alveley Colliery as a Pit Carpenter.

George gave the “After Meeting” talk at the July Club meeting on the same subject and a transcript of his talk is on page 6.

Right: David and George Poyner (right) after George’s talk at Billingsley Church.

(David Poyner)

Congratulations

Congratulations to the Sproson family who celebrated 50 years of running the Stiperstones Inn over the August Bank Holiday weekend.



Sad Note

Sadly this issue of ‘Below’ contains the obituaries for Dave Newill (the Club Tackle Officer for ten years between 1976-86) and John Mason. Although not a Club member, John was a big influence on Club Founder David Adams in his mine exploration activities, and effectively one of the instigators of mine exploration in Shropshire in the late 1950s and 1960s.

See pages 2 to 5.

Cave Rescue Success

The recent cave rescue in Thailand has probably been **THE** biggest cave rescue ever undertaken and has put caving and cave rescue in the media spotlight. PADI (the diver training organisation) has reported a 150% rise globally in cavern diving course applications - it seems everyone wants to be a cave diver!

The rescue wasn’t without tragedy, which underlined the seriousness of the rescue, when Thai Navy SEAL volunteer Saman Kunan lost consciousness while laying stage cylinders. Despite his companion getting him back to the dive base he sadly passed away. He has been named as a national hero in Thailand. *See page 5 for more.*



Dave Newill 8th August 1942 - 16th May 2018



Dave, in May 2014. He regularly shaved his beard and hair off for charity!
(Bridget Newill)

Dave joined the Club in December 1976 and was an immediate asset to the club and soon became its tackle master (post he held until September 1986). He was an experienced caver and had been a leading light within the Wolverhampton Caving Club, where he had led many visits to Yorkshire and much further afield into Europe, Turkey and Iran.

Dave, his Wife Nicki, children Claire and Kester had escaped from Angola and ended in Edgmond, where several Christmas Socials were held starting that December. They later moved to Upton Magna where the inevitable Christmas and other socials continued.

Dave was an extremely enthusiastic outdoor explorer. When he wasn't caving or walking in the mountains he managed to train as a teacher, having worked at Hilton Park Colliery near Cannock, where he decided there were insufficient holidays to satisfy his eagerness to explore the world.

As tackle master he set about making ladders as we did in those days which led to inevitable social evenings. Nicki usually had to force us out of the door at 1.00 am as the children were constantly being disturbed by our social gatherings. Dave also became *Bar Master*, the 7 pint cans were getting expensive and once open had to be finished, bottles and smalls were not freely available at that time. Dave therefore

took on home brewing and kept the clubhouse stocked for meetings. Such was the quality and price rather a lot was consumed!

Dave was always one to raise the standards of Cave/Mine exploration in the club and became chairman for at least 2 years. In October 1983 he proposed that all full members should have a test of caving competence, until it was pointed out people were members for reasons other than caving. He later encouraged all underground explorers to learn how to tie a figure 8 and a bowline. The Caving visits were too numerous to mention and I only highlight some of the ones of interest.

Mike (aka Sid) had his stag do over the August Bank Holiday Gaping Gill winch meet. Dave came along in his VW Carvenette - this was an ancient motor, but had served him well on family holidays. Dave left early on the Monday, and me being love sick (only recently married) accompanied him back home. Sadly as we got on the M6 it broke down with a serious engine problem! Dave didn't have breakdown cover and he suggested I try and hitch a lift back home.

Well I made it to Charnock Richard whereupon I found 12 others trying to get lifts, after 2 hours of not one person moving on. I realised there was an active Police Post (a rare sight nowadays) and asked for information about trains. They suggested I walk to the village where there was a bus station. I did this and found out there was a late National Coach on its way from Blackpool to Birmingham via Stafford where I lived. Joy! I waited and sure enough it set off. About 5 miles later I saw Dave hitching, I pressed the stop button and asked the Driver if he could pick him up. Well Dave wasn't actually a suave and sophisticated well dressed man of the year. After all he had been caving, camping and his vehicle had broken down. The Driver shouted at me to "sit down, get out of the way - he wasn't having

his bus hijacked." Dave spent the night in a barn and was collected by a mate. I was dropped off 300 yards from home!

One of the many caving expeditions was the Lancaster/County pot exchange. The plan was for Dave and his friend Mike to descend County Pot and we Lancaster Pot, this being the easy route. We met in the middle and we each de-tackled the other team's equipment.

Unfortunately John Heathcote who was leading got lost at Elbow junction and couldn't find the way on. Myself, Alan and Bob Taylor resigned ourselves to a call out and how much beer we would have to provide, however the irrepressible Sid persisted and after 3 hours found the route. By the time we got out, the moors were pitch black and we were exhausted. Dave had left 4 hours before and had left our call-out notice outside the Red Rose Bull Pot Clubhouse for us to be out a lot earlier, unfortunately a different method to South Wales where most of our caving had taken place: no call out unless a friend has received an exit call by a given time.

There were 2 Caving Expeditions to County Clare in Ireland in May 1983 and April 1985 organised by Dave and friends from the Wolverhampton



Dave underground in the 1970s or 80s.
(Bridget Newill)



Dave Newill 8th August 1942 - 16th May 2018

Caving Club. The first visit became notable on the return to Dublin for the ferry. Bob Savage had wanted to visit the city and the minibus was parked alongside the river for a short walk into the centre. The inevitable happened and the van was broken into and gear stolen. It was necessary to report this to the police. Inevitably Saturday night in a city centre police station was full of the usual battle-scarred drunks and wide boys - it was very late when they eventually got out and too late for an official campsite. At Dave's suggestion they set up tents on the lawn of the Royal Irish Yacht Club in Dun Laoghaire.

In 1985 our clubhouse "Snailbeach" was sold to then-member George Trystman, who had various plans for chocolate box lids and tried to sell off 12 inch square plots to Americans. As a result, our Mr Quinn became incensed and blocked off our access to the rear parking area and the meetings in November and December of that year were held at Dave's now Coalbrookdale home. Dave had resigned as chair earlier that year due to transport problems but still kept closely in touch with



Dave and Bridget Newill at Snailbeach, 6th May 2018.

(Bridget Newill)

the club. His last recorded caving trip as a member was to South Wales in October 1987. He did however keep in touch with several of us and he attended numerous Club Dinners.

It seems only a few weeks ago he rang to tell me had terminal cancer of the oesophagus. He was always an enthusiast and tried to pack a lifetime of memories in those few months. I'm very pleased to say that Kelvin

Lake and myself were able to take him into Day level on one last visit on May 6th. He was clearly suffering from the effects of his illness, but as ever was full of enthusiasm and planning for the future. Sadly he passed away only a few days later.

I will miss tales of his adventures being it mountains, caves or his beloved canal boats.

Mike Moore

John W.R. Mason 1936-2018

The instigator of mine exploration in Shropshire



John Mason at the Club's Veterans Reunion, 2017.

(Kelvin Lake - I.A.Recordings)

Shortly after I left school in 1955 I was sweeping out a storeroom behind our shop when a figure appeared in the doorway, asking if I was David Adams. I told him I was and he asked if I would like to join

Newport Young Farmer's Club. He was John Mason who was assisting his father in their butcher's shop in Newport High Street. I speedily agreed to join and we became the best of friends.

His father had opened a small butcher's shop in Donnington, which was frequented by miners from the nearby Granville Colliery buying their meat. He found them very friendly and pleased to talk to him about mines and mining. One day he suggested he would like to visit a mine, but his mining customers advised him against venturing into coal workings, which they said were too dangerous, but he could study metal mines, which did not have the same hazards and there were some not far away in South Shropshire.

My good friend started to disappear at weekends and I wondered what he was up to, so I decided to find out, thus in December 1958 I made my first ever journey to the area in question finding the great white dumps of the Snailbeach Mine for the first time. I drove up the track and found the great stope (then still open) on Lord's Hill. No he was not down there, so I moved on up the valley and finally found his yellow van near the bend outside the Burgam Mine. Here I found him helping the late Tom Rowson, who with his partner was driving a new level high on the mine site, using rather primitive tools. With the help of his coal-mining customers John was able to obtain better hand drills, together with helmets etc and was actually helping them with their



John W.R. Mason 1936-2018

Continued ...

work. I do not think that much lead was ever produced from this level, which I think was a bit of a tax fiddle, the men being employed by someone in the Black Country. Their 'office' was an old wooden shed with an old galvanised tin bath lying on top. The last time I looked some years back the shed had rotted away but the tin bath was still there lying in the nettles.

I explored this level and others nearby and I likewise was 'hooked', and decided I must learn more about the area. In 1959 I was fortunate when Mr D.B. Corbyn came into our shop with his two eldest sons Edward and Andrew to buy a length of rope.

On asking them its use I was surprised to be told that they too were exploring the South Shropshire mines and needed a safety line. I was immediately invited to their house where I was advised to get hold of the proper O.S. maps and a book. This was 'The Bulletin of the Geological Survey of Great Britain No 14' which I speedily ordered and bought. So with John able to get more helmets and lamps we were able to go and explore them, both above and where we could get below ground.

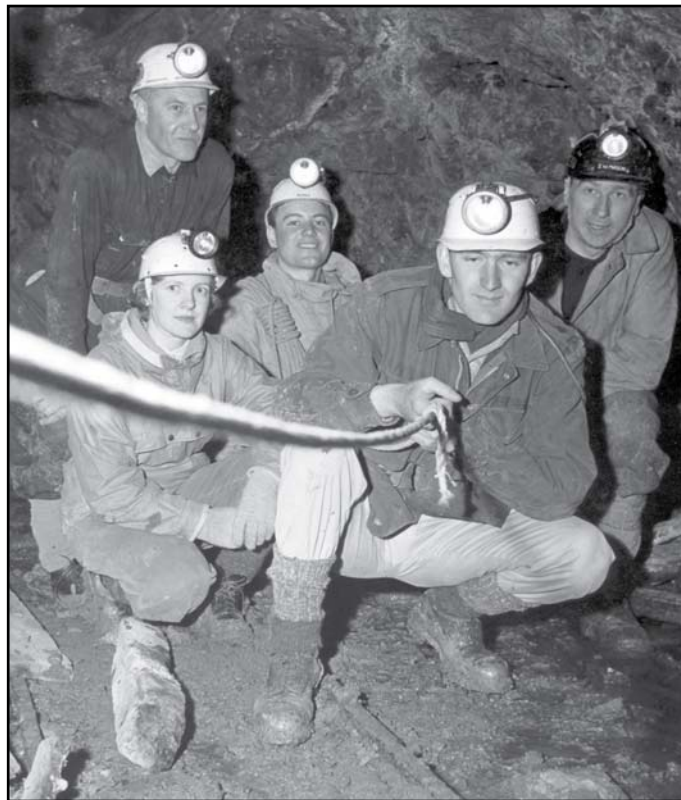
We once attempted to explore the drainage level from the Snailbeach mine by canoe, but got it stuck between the wooden props. Also of course we explored Roberts Level.

As the year went on I thought we ought to do more than just visit the mines but also record what we found. Thus with John in command and me doing the recording we commenced the first modern survey of the South Shropshire mines commencing at Rorrington in January 1960. Later that year I first met the professional archaeologist Miss Lilly Chitty who told me that what we were doing was most important and that we should record all the visible details of the sites we visited.

Gradually more people became interested in what we were doing, such as Mike James who was also a member of the Y.F.C., Mike Gaut and Colin Lears, but John would have none of it. No, he said we must keep to our little select group and not encourage others to come along. This rather upset me, because I thought if they were interested why not. Later I broached the idea that we could form a Club, like the Y.F.C. with him as Leader, but no he did not want anything to do with running a Club, chairing meetings, making rules etc, and having all sorts of people come along. In the end we had to disagree. Things came to a head when John and I organised a great 1961 Easter Camp at the Gwynffyneth gold mine site in mid Wales, but when I suggested that my friends Mike James and Mike Gaut could come John strongly objected. This led us into having two camps on the site about 50 metres apart. I realised that if he was not prepared to chair a new Club it would have to be up to me. On a lone walk through the forest on the last day I made the final decision.

John held all the equipment so all that summer was spent buying helmets, lamps, and rope ladders etc, via our family business plus ropes, which we normally stocked. The founding meeting was held on the 6th September 1961 and with our friendship in suspension I think John was a bit put out, but after nearly 57 years I am absolutely sure that I was right. At one time I think he even tried to raid our equipment store to regain something he thought we had taken from him, but by 1963 he had finally decided that the Club was here to stay and officially joined, having his photo taken with us in Roberts Level by the Shropshire Magazine photographer in May of that year, and our friendship was restored.

John had a lifelong interest in the proper use of explosives and guns, becoming a licensed 'Blaster' in the footsteps of the great 'Blaster Bates'. He and I had first attempted to lengthen (unsuccessfully) an old mine level on Plynllymmon on our Easter Camp of 1959, (the remains



David Corbyn (President 1961-82), Liz Mason, Mike Gaut, David Adams (Founder Member) and John Mason (Instigator) life-lining the bridge over the big stope in Roberts Level, Snailbeach, 12th May 1963. (David Adams)



John W.R. Mason 1936-2018

Continued ...

of the shothole we drilled that day are probably still there), and I often assisted him with his work. Now he found his new contacts in the Club useful and several assisted with the blowing up of the great pumping engine house near the head of Trench incline in December 1964. Today the blowing up of such a notable landmark would be considered an act of vandalism, but as John explained the land developer wanted it destroyed and if he didn't do it someone else would get the job. My attempts to save it failed and the job was done.

The Club members strongly felt that the Club had a public duty to offer an underground rescue service, and John suggested that in order to do that we ought to have some training exercises. To do this he suggested the recovery of an old heavy ship's winch from deep within a slate

mine at Glyn Ceriog. In the end after much work the recovery was abandoned, but we had learnt much about working as a team. In March 1969 he took a full part in the great Parys Mountain attempted rescue on the Isle of Anglesey, the teamwork paid off.

He also worked with the Club in the removal of the engines from the old Milburgh Tileries at Jackfield in the early days of the Ironbridge Gorge Museum; blasting out the boiler bases so that they could be moved.

His wife Elizabeth had become very interested in steam engines having a steamroller of her own and exhibiting it at the then Bishops Castle steam rally, so John's interests then joined with hers and his contacts with the Club inevitably diminished. His friend Andrew Marsh sold his farm at Field Aston near Newport

and bought one in southern France where John began to make many visits, spending much time there and becoming enrolled in a French shooting syndicate, where the rules of operation were far less restrictive, his last visit being only last October. He and Elizabeth were pleased to attend the Club's 50th Anniversary Dinner at Wroxeter in 2011, and I think have attended one since. He and Elizabeth also attended the S.M.C. Veteran's lunch on October 16th last year, but in early May I was informed that he was seriously ill with cancer, I last visited my old friend on the 18th of May finding him very quiet and unwell. After an interesting life of 82 years he instructed Elizabeth that he wanted a quiet private funeral, and quietly passed away on the morning of 13th of June.

David Adams, June 2018.

Thailand Cave Rescue - Success!

On the 23rd June a group of children and their football coach entered Tham Luang Non Cave. This is a showcave in Northern Thailand. As June is normally a dry month (the monsoon doesn't usually start until July) there wasn't any reason for them not to enter the cave.

However, the monsoon broke early trapping the party in the cave and preventing rescuers from reaching them. Search parties were sent through the dense forest above the cave system in the hope of finding an alternative entrance - with at least one shaft having food packages thrown down just in case it connected to where the group were.

Following a request from the government of Thailand to the British Cave Rescue Council (BCRC) two highly experienced British cave divers were sent out (with additional divers and a support team travelling out later).

As Club members are aware, cave diving requires a totally different set of skills and approach than normal open water diving, with visibility

when diving in a cave often being near zero. Cave divers also make use of re-breathers to extend their time underwater and reduce the size of air cylinders needed.

Ten days after the children were last seen, British divers Rick Stanton (MCRO's dive officer) and John Volanthen found the group. Then began the tricky part - how to get them all out alive!

The press coverage of the rescue was 'crazy' to say the least. It also brought cave rescue into the International spotlight. The BCRC website, which normally ticks over quietly had so many visitors that the web server crashed and the website had to be moved temporarily to a server of its own! In the first hour of the new server starting there were 46,000 visitors to the website!!

Thousands of people were also sending in suggestions to the BCRC as to how to evacuate the children.

In addition to the divers and support team out in Thailand the committee of the BCRC and cavers from several

UK cave rescue teams were heavily involved in organising the collection and movement of specialist equipment and kit (such as positive pressure dive masks) to Heathrow for flights to Thailand and attempting to answer some of the emails!

This was a massive International cave rescue effort, with over 10,000 people involved, including 2,000 military personnel, and dozens of Thai Navy Seal divers in addition to cave divers from around the world.

The fact that all the children and the football coach were successfully rescued is testament to what can be achieved when people from all walks of life and nationalities work together.

For those who know Rick, with true humility, both he and the others have rejected the idea of being labelled as heroes, they are just cave divers, doing what they do best, solving problems and getting the job done.

However, look out for a rash of films and documentaries on the rescue!



Memories of a Pit Carpenter

George Poyner

At the July Club meeting David Poyner (DP) came along with his father, George (GP), (who had recently celebrated his 91st birthday) and gave an interesting talk after the meeting on his life as a pit carpenter at Alverley Colliery. This is a transcript of his talk, with a few anecdotes from the evening added.

Memories

I was born on June 27th 1927 in Highley. My father, Jack Poyner had worked in the mines at Kinlet and Highley since coming out of the army after the First World War. I left Highley school in August 1941 and went for an interview with Mr Chesworth, the chief engineer and Mr Caine, the assistant manager at Alveley Colliery. I wanted to be a carpenter and Dad had asked them about a job just before I left school. They gave me a job in the carpenters' shop.

I was lent a saw, hammer and chisel by another carpenter, George Elcock and my first job was making a roller box. This was a wooden box which contained a cast iron roller. This fitted between the rails. In those days the coal was loaded into tubs and these were pulled along the rails by a wire rope attached to a haulage engine. The roller box stopped the rope from dragging on the floor.

When I started, Alveley was really new. It was sunk in 1935/6 and had only been in full production since 1940. Alveley had nice new brick workshops, offices, a lamproom, winding house and ambulance room. The headframe was made of concrete with a height of 60 feet to the winding wheels and 20 feet above that to a gantry for lifting or changing the wheels. *(DP: You fell off that didn't you one time? GP: I did!)*

My father looked after the 50 horses underground along with George Price and Job Hammonds. The man in the hay shed was George Wood and every day enough corn and hay for all the horses had to be taken to the pit top.



George Poyner (c1950s) sawing a baulk of timber in the stores compound at Alveley; he still uses the saw. *(George Poyner Collection)*



George Poyner (left), Ben Herberts (right) and Harry Deakin (seated) on an Allis Chalmers bulldozer in the compound at Alveley.

Ben was the bulldozer driver; it was meant for use on the mound to spread the spoil. The bulldozer had a number of adventures, being used for a joyride in the pit yard one evening (when the driver discovered he couldn't work the steering...) and once being taken across the bridge over the Severn to the screens, despite it being well over the weight restriction.

(George Poyner Collection)

My first experience underground was when I was 15. I went down with Alan Kelly, a fitter, to drill holes, 1½" diameter into a baulk of timber for a tension screw for a haulage rope. *(GP: I went down the cut (incline) and they had manholes that I had to dive into when the wagons came by.)*

I usually worked on the surface. I worked with Fred Guy in the canteen making tables and benches.

As we were in the war, we had to make black-out curtains for all the windows. The water in the canteen was boiled in two small cast iron boilers and I had the job of chopping sticks to light the fire. We were allowed pork pies every day as part of our ration; the van used to fetch them from Marsh and Baxter's in Kidderminster.

I made all kinds of things for the pit such as ventilation doors



Memories of a Pit Carpenter Continued ...

underground, to control the flow of air round the workings. I had to go down the pit quite often to fit things. I made window frames and doors for buildings on the surface; a lot of these went round the entire area to other pits in Shropshire and Staffordshire.

Sometimes I had to work away from Alveley. Once I went to Lilleshall Abbey to put up some timbers to support the abbey walls where they were starting to subside due to coal mining (*Ed: Granville Colliery main faces were under Lilleshall*).

I went to Baggeridge pit to help put in new electric winding engines. (*GP: They replaced the steam winders with 2 electric winders during the August fortnight holiday, so they didn't lose any production. Ted Carney, the engineer from Madeley, who was also there wanted to fire a shot to free the shaft of the old steam winder. I also made the doors for the loco shed at Baggeridge.*)

Nationalisation

Alveley Colliery was nationalised in 1947 and a lot of changes took place. In 1950 the baths and the new canteen were opened. It was a great asset to the miners as they could shower and go home clean. The baths and canteen were opened by Sir Ben Smith, chairman of the West Midlands Division of the Coal Board. I remember building the stage for the opening ceremony.

The canteen was a smart building adjoining the baths. My sister Brenda worked there for a short time; all the family worked at the colliery at this point! Of my brothers, Ray and Des were electricians, Arthur worked underground and Geoff in the carpenters shop with myself. Dad was the horse-keeper. I well remember Brenda and mother cutting the snap, (sandwiches) for 6 hungry miners! I also remember the colliery breaking the record of drawing 1,000 tons of coal in a day. Everyone was given a savings certificate of 15 shillings.

The colliery was only about 20 years old when there was a major reconstruction. This was about 1958. The shaft was deepened from 340 yards to 400 yards and a new road was made underground to the coal seams. It was a major undertaking. Boreholes were sunk at Six Ashes, beyond Alveley. It was my job to make boxes to store the cores that came out of the boreholes and then these could be checked to see what strata they were drilling through.

The Staple shaft was another major undertaking when a 15' diameter shaft was sunk underground. This was a pit within a pit; a shaft that connected two underground levels at the colliery. It was an escape shaft; if anything happened to the Alveley winder or shaft the men could go down the staple shaft, get into the old workings and walk underground beneath the river and then up the Highley shafts.

Sinking it cost the lives of two men. This happened when they tried to drill a 2 foot diameter shaft to take away the waste they would create from the making the main shaft. It went out of line so they abandoned it and sealed the bottom with a metal plate. Three men were at work sinking the main shaft, at the bottom, filling the bucket which was hauling the waste out of the top. Only one had a safety harness on. Suddenly the floor caved in when they accidentally hit the 2 foot shaft. Two men went down this with all the waste on top of them.

They had to take the plate off the bottom of the 2 foot shaft and empty it; when they recovered the men, all their clothes had been stripped off them. Their names are on the board outside the Severn Centre in Highley, with all those who were killed at the pits. I was working down the pit that night; I was in the shower at

the same time as the lad who escaped and he was as white as a sheet. (*GP: He'd got out by climbing up the concrete ring lining of the staple shaft.*)

I stayed at Alveley pit throughout most of the 1960s. In the late 1960s the Coal Board said that it was unprofitable and decided to close it. I left a few months before the end and after a few weeks at the Star Aluminium I moved to Westpoy Construction where I carried on my trade as a carpenter.

I worked at the colliery for 26 years; a lot of time, 7 days a week, 7am until 3.30pm, with ½ hour break. Sometimes we had to work really long spells.

I have been called from my bed to deal with emergencies when there were problems with the shaft and the winding rope and occasionally I had to work 24 hours or more. (*GP: I remember we were working at the bottom of the pit on a ramp, we'd worked Saturday, Sunday and Monday morning, we'd got bolts and everything laying all about and the Deputy manager Mr. Gittins came in and said to the Engineer "Look, that's not the way to work men, look at all these bolts lying about! Get them cleaned up!". The Engineer said "Come on up the pit" and took him out the way. Gittins got into a bit of trouble after that.*)

But I enjoyed the work. It was hard at times but you always helped each other and I had wonderful friends. I've still got some of the tools I used in the pit - and still use them!



George Poyner (right) and fellow carpenter, Harry Deakin (left) roofing the dirt disposal shed at Alveley. (*George Poyner Collection*)



Trip Report: Hampton Load Forge, Stone Line Culvert Kelvin Lake

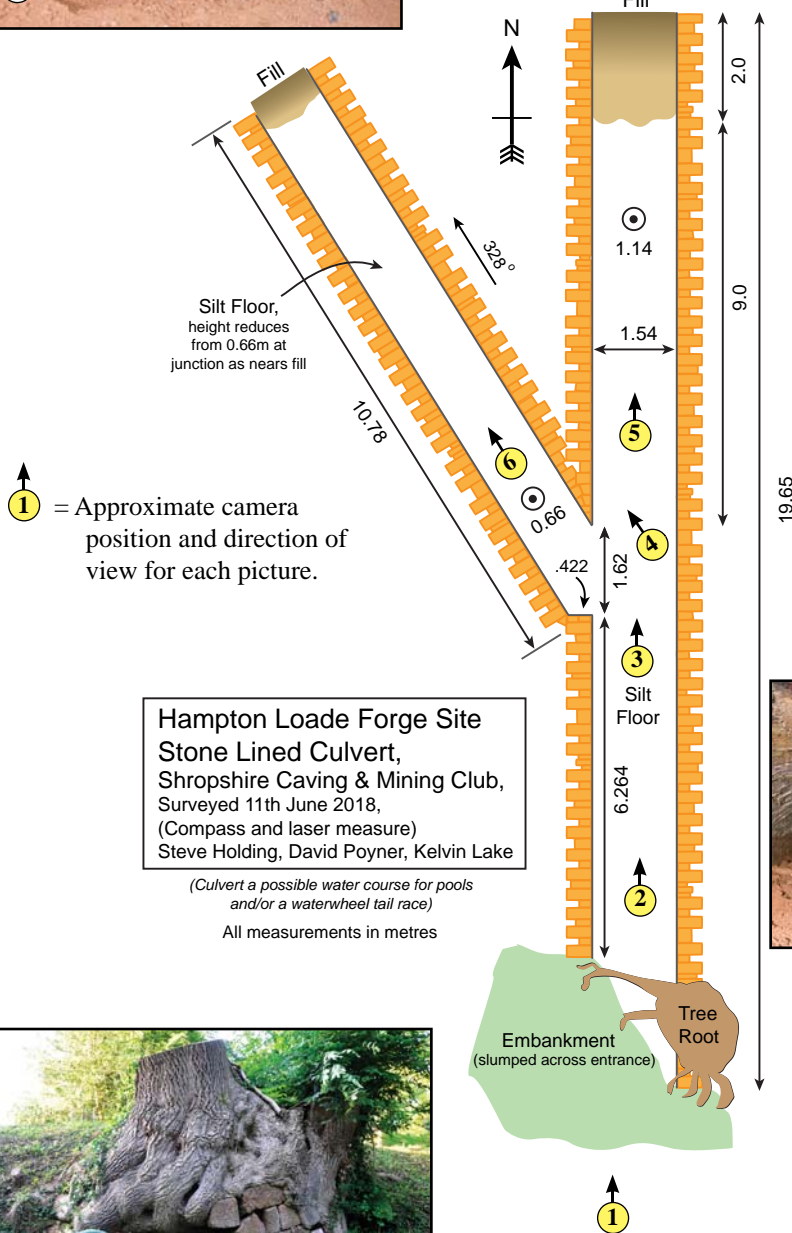
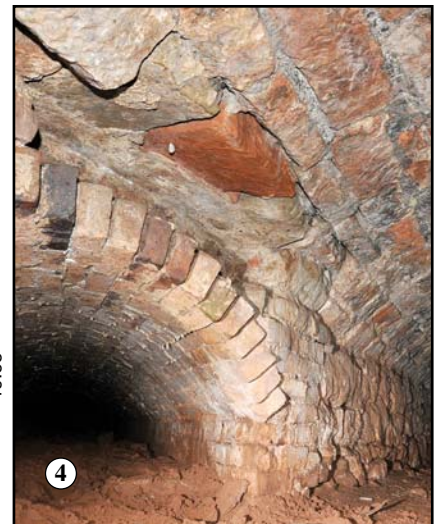
Members of the Shropshire Caving & Mining Club visited the site of Hampton Load Forge on 11th June 2018 to investigate a stone lined culvert. The culvert effectively ran from under the site of a forge pool and into the embankment of a lower pool.

A small branch about 6m into the culvert, went to a collapse, under the yard at the rear of a cottage. Both

sections of culvert were stone lined and appeared to have carried water.

It was postulated that one of the culverts might be the tail race from a waterwheel, while the other was the waterwheel bypass culvert or a drain from the higher pool to the lower one.

The fill that had run-in at the end of the large (N-S) culvert contained a lot of broken roof tiles, plus a slender 2 inch length of tobacco pipe stem.



① = Approximate camera position and direction of view for each picture.

Hampton Load Forge Site
Stone Lined Culvert,
Shropshire Caving & Mining Club,
Surveyed 11th June 2018,
(Compass and laser measure)
Steve Holding, David Poyner, Kelvin Lake
*(Culvert a possible water course for pools
and/or a waterwheel tail race)*
All measurements in metres



Hampton Loade Forge

David Poyner

Introduction

Following the recent exploration of a short culvert system at Hampton Loade Forge (SO 784864), these notes give some background to the history of the site. It is located on the Severn and fed by Paper Mill Brook (Figure 1). It straddles the parishes of Quatt and Alveley and for much of its life it was possible to distinguish between upper forge in Quatt (north of the brook) and lower forge, nearer to the River in Alveley.

The forge took brittle pig (cast) iron, straight from a furnace and converted it into bars and rods of wrought iron which could be worked by smiths. The pig iron was remelted to allow carbon (responsible for the brittleness) to be burnt out. The resulting product was typically hammered into bars and rolled to give wrought iron. Until the late 18th century, the pig iron was remelted in a hearth called a finery and exposed to a blast of air to burn out most of the carbon. It was then hammered to form a bar and reheated in a second hearth called a chafery to complete the refining. Charcoal had to be used in the finery, although coal could be used in the chafery. In the 1780s, an alternative process for making wrought iron was developed, known as puddling. This dispensed with the melting finery completely. The iron was melted in a reverberatory furnace (fuelled by coal, which never came into direct contact with the metal) and stirred to encourage it to react with air, to remove the carbon. The refined iron was removed, hammered and passed through a rolling mill to form bars of wrought iron. Both processes were used at Hampton Loade.

The History of the Forge

Hampton Loade upper forge started life around 1783, when William Whitmore, who owned the land on the Quatt bank of Paper Mill brook, was given permission to construct a dam across the brook; this was almost certainly for the forge. By 1794, it was leased to William Jones. Exactly what was happening at the forge at this period is unclear; it

apparently consisted of one finery and nothing else. Jones may have been simply melting scrap iron but could have been carrying out a form of puddling.

Lower forge originates from 1796, when John Thompson was given a 47 year lease of nearly 2 acres of land adjoining Paper Mill brook in Alveley, to dam the brook and build a forge with two workmen's houses. In 1797 Thompson was given a 21 year lease of a further 6 acres of land to erect forges and engines. In 1801 Thompson leased Lye Hall farm (overlooking the forge and where he lived) and the upper forge from William Whitmore. Thompson came from a Sheffield family of ironmasters and was also involved with a slitting mill in Kinver and a blast furnace in Aberdare.

By 1802 Thompson was in partnership at Hampton with his brother Andrew as well as John and George Scales. This partnership was terminated in April 1802 when the Scales left, to be replaced by John Hazledine of Bridgnorth Foundry. In September 1802 John Thompson left the partnership, perhaps to concentrate on his newly opened Stanley Colliery in Highley, where Hazledine was also his partner. He continued to live at Lye Hall until he sold Stanley in 1812. John's departure triggered the formation of the Hampton Loade Iron Company,

comprising Andrew Thompson, John Hazledine, John Hincksman, Ann Boulton, William Bates, William Jones and Robert Thompson. It seems that Hazledine and Andrew Thompson were interested in partners who could bring capital to the forge.

There were some subsequent changes to the Hampton Loade Iron Company, with various partners leaving. In 1806, Whitmore drew up a fresh lease to the company for 21 years and a description of the works survives from that year. There were three works; a rolling mill, the puddling plant and a turning mill (Table 1). The wheel of the turning mill originally operated the bellows for a finery (perhaps that of 1794) but by 1806 it drove a mill "for turning rolls"; effectively a lathe to maintain the rolls for the other mills.

John Hazledine died in 1810 and was replaced by Robert, his brother. In February 1816 Bates and Jones from the partnership were declared bankrupt. Their assignees spent some time in unpicking their involvement at Hampton Loade. The entire works were offered up for sale in 1818; the sale notice indicates how they had expanded since 1806 (Table 1). Of particular note was the installation of a steam engine to work alongside the water wheel; the engine apparently drove the merchant bar rolls.

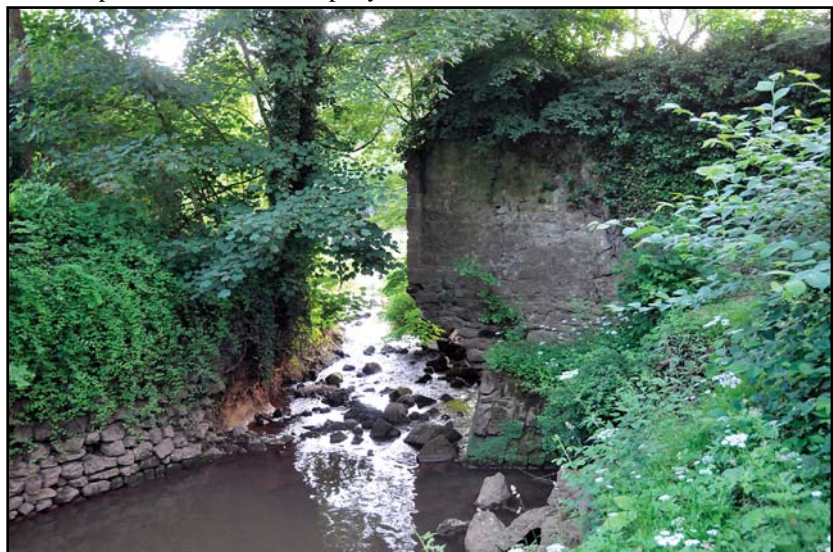


Figure 1: Wall of northern compound and the basin with a possible collapsed pillar in the water. (Kelvin Lake - I.A.Recordings)



Hampton Loade Forge Continued ...

There appears to have been no buyer in 1818. However, James Foster of Stourbridge, an up-and-coming force in the West Midlands iron industry, took control of the forge in November 1819. He also owned Eardington Forge. Foster first expanded the forge, adding new refining plant and a new rolling mill. However, the iron industry was in depression at this time and within a short period he embarked on a new venture. In 1822 the forge was rebuilt as a tinplate works. Unfortunately this was also not a success and production seems to have ceased in 1826. Thereafter the forge reverted to producing wrought iron, using charcoal as a fuel in a version of the finery and chafery process to produce high quality wrought iron. It eventually passed to James's nephew and heir, William Orme Foster. The market for charcoal iron declined steeply in the second half of the 19th Century and the forge closed in 1866, although it was not completely demolished until after 1890.

Archaeology

Today, nearest the river are two sets of walled compounds, which probably stored pig iron, charcoal (if protected from the rain) and other materials. To the north, all that exists is a stone wall with stone buttresses facing the river (Figure 1). Until recently the southern set was more complete (Figure 3). The stone walls had brick buttresses and there was an internal division. Furthermore, it seemed as though the portion nearest the river had once been in two parts, each with their own entrance.

Paper Mill brook splits into two as it threads its way through the site. The more northerly of these follows the parish boundary and so probably is the original course of the brook. It goes under a road in a culvert. Beyond this, it opens into what resembles a small basin bounded on the south by a substantial stone wall from which two culverts emerge (Figure 4). It seems to have originally passed under the wall of the compound to reach the Severn. A low stone wall that apparently

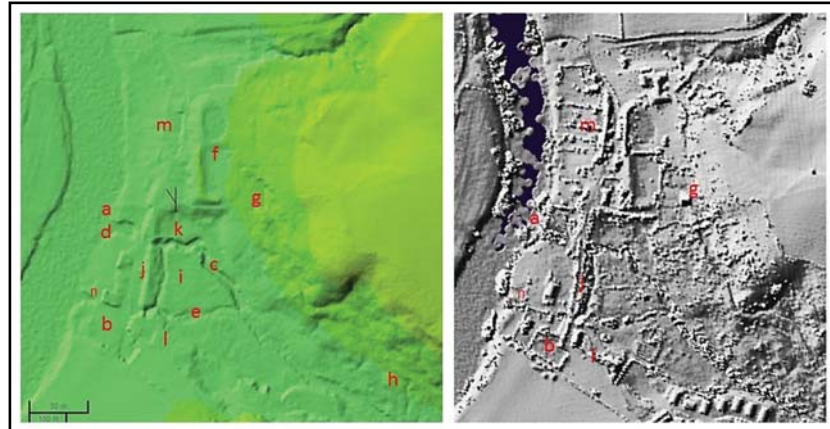


Figure 2: Lidar mapping of Hampton Loade Forge.

Left: DTM (ground surface, <https://data.gov.uk/dataset/6a117171-5c59-4c7d-8e8b-8e7aefe8ee2e/lidar-composite-dtm-1m>).

Right: DSM (showing trees and buildings as in 2012,

<https://houseprices.io/lab/lidar/map>)

Key: a) upper compound, b) lower compound, c) north branch of brook, d) basin, e) south branch of brook, f) upper pond (north portion still holds water), g) Top Mill, h) leat to Top Mill and upper pool, i) lower pool (dry), j) dam of lower pool with road on top; eastern face forms the back wall of the lower forge, k) culverts (shown as lines), l) manager's house, m) workmens' houses, n) culvert mouth visible in 2000.

projects into the "basin" at this point might be a fallen pillar (Figure 1).

The 1882 OS map (Figure 5) shows neither brook nor basin, perhaps suggesting both were silted up when it was drawn. The second branch of the brook passes more directly into the Severn, under a cast iron bridge. Just beyond this is substantial weir with a shallow channel in the top, resembling the feed for a breast-shot water wheel (perhaps the 20' x 10' wheel described in 1806). In this case, the northerly branch of the brook would be an overflow channel.

The sites of upper and lower pools are still obvious. The upper pool, still partially in water, was fed by

a leat that first served the "Top Mill". The upper pool must have provided water for the upper forge, shown on a map of the Whitmore estates dated 1817 (Figure 6). This plan cannot represent the true state of affairs

as they existed in 1817, as it fails to show the lower pool, carefully recorded by the Ordnance Survey on their 2":1 mile drawing the year before and which stored water for the lower forge (Figure 7). The road that accesses the former forge manager's house runs along the dam for this pond. Lower forge is first shown in detail on the 1840 tithe map (Figure 8), when it co-existed with upper forge. Only lower forge survived to be shown on the 1882 OS map, when of course it had been closed for over 15 years. There are no above-ground remains of either the upper or lower forges, beyond the back retaining wall of the lower forge, which has traces of a chimney or hearth. The "Top Mill" is now a house.



Figure 3: Southern compound in 2000.

(Tim White)



Hampton Loade Forge Continued ...



Figure 4: Drainage culverts in the wall of the basin, with Paper Mill brook emerging from its culvert. (Kelvin Lake - I.A.Recordings)

Figure 7, below: 1816 OS 2":1 mile preliminary drawing. (British Library)

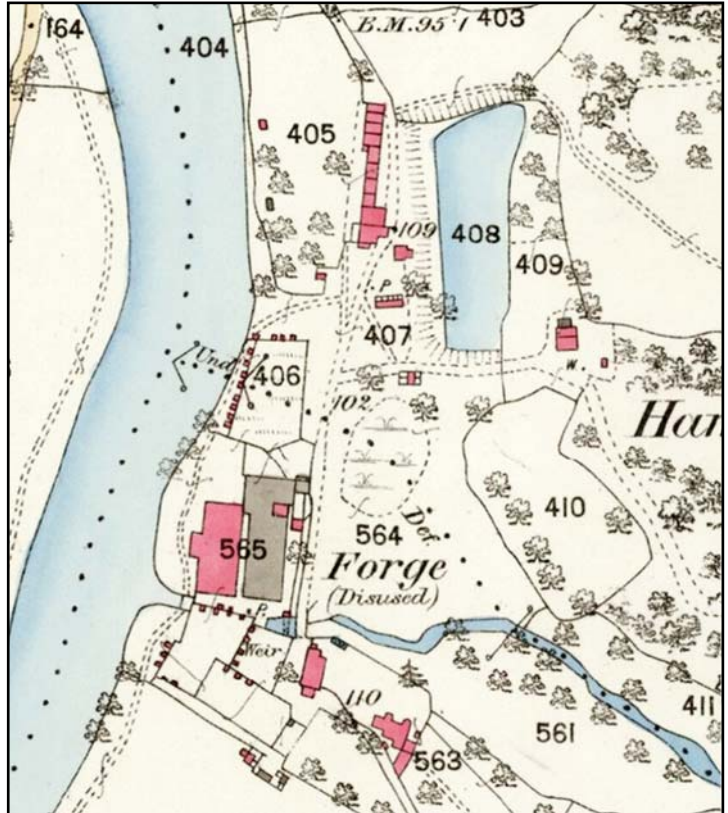


Figure 5: 1882 OS 1:2500 map. Brick or stone buildings are in red, timber and sheet iron in black.

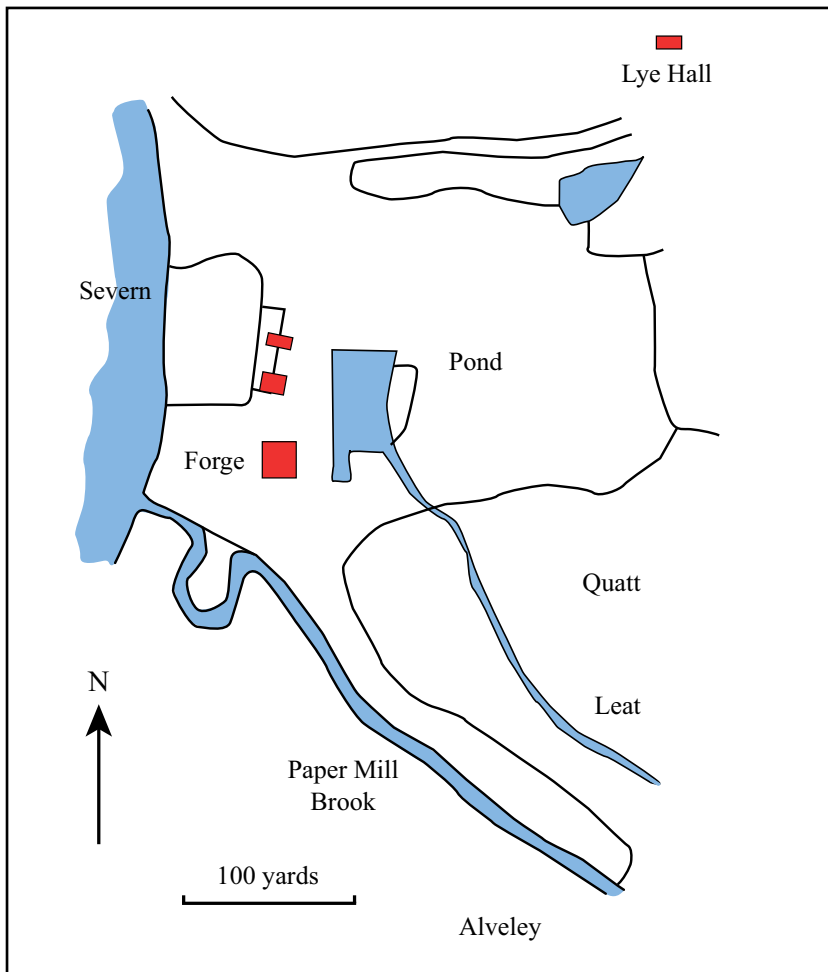


Figure 6, left: 1817 map of Whitmore estate (redrawn)

Culverts

The culvert system explored by the club seems to have been associated with the upper mill. It almost certainly served to move water used at the upper forge back to the lower pond and so must date from when it was first built.

The two culverts visible in the south wall of the "basin" must have been drains from the lower forge.

The opening of a third, brick culvert was visible in 2000, in the south east corner of the lower forge site (Figure 9). This was set into a bank, close to the river and would have been within the footprint of the lower forge building. It might be another drainage culvert but it could also be the mouth of a flue from a hearth (or boiler) leading to a chimney stack.



Hampton Loade Forge Continued ...

Table 1. Equipment at Hampton Loade Forge

Site	1806	1818
Lower Mill	Water wheel (20' dia. x 10' wide) Pair of shingling and bar rolls. Pair of boiler plate rolls. Pair of large sheers. Pair of small sheers. Two heating furnaces	Water wheel. 30" Boulton and Watt engine "newly erected". Two pairs of rolls for merchant bars Pair of rolls for sheet iron. Pair of puddling rolls Two puddling furnaces. Two reheating furnaces. Furnace for heating sheet iron
Upper Mill	Overshot wheel. Tilt hammer. Pair of puddling rolls. Two puddling furnaces	Water wheel. Tilt hammer. Three puddling furnaces. Reheating furnace. Air chafery
Top Mill	Water wheel and turning mill	Water wheel and turning mill

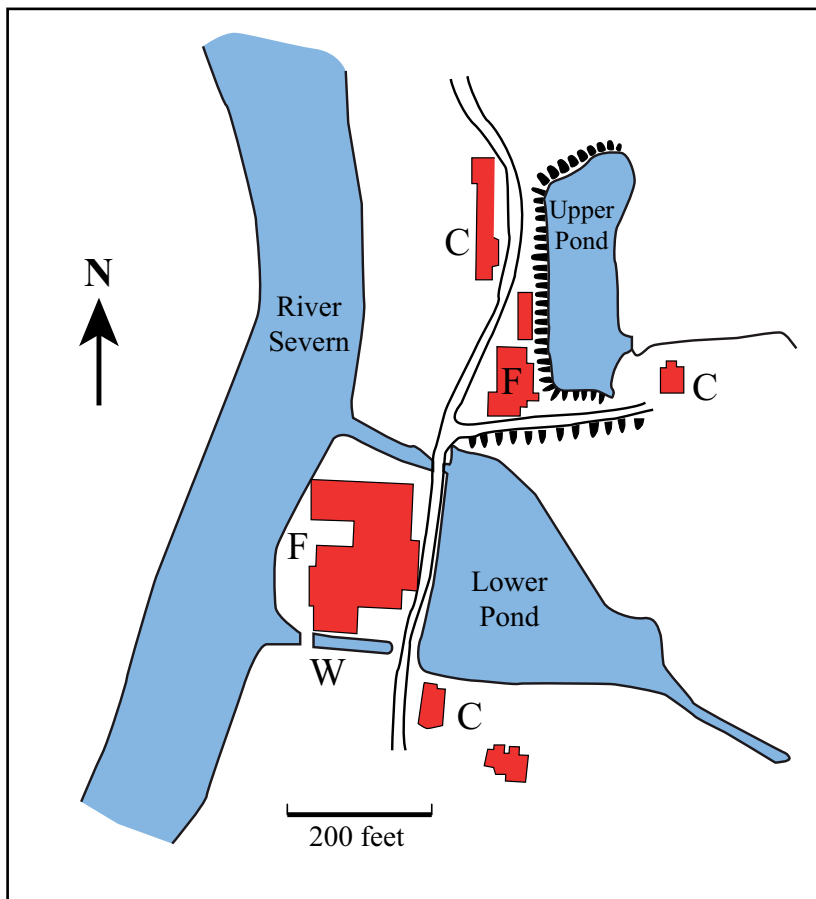


Figure 8, above: 1840 Tithe map (redrawn);
F = Forge Building,
C = Cottage or house,
W = Probable site of water wheel

Sources

The most comprehensive treatment of the history of Hampton Loade forge remains the article by Norman Mutton, *The forges at Hampton Loade and Eardington*, *Trans. Shrops. Arch. Soc.*, (1965-8), 58, 236-243. For the pre-1820 history of the site, see my article, *Hampton Loade Top Mill, Wind and Water Mills*, (2009), 28, 2-14.

Acknowledgements

I would like to thank Roger Brown for allowing me free access to the site and Dr. Peter King and Tim Booth for much advice on its interpretation.

Figure 9: Mouth of culvert on the site of lower forge, 2000.
(Tim White)



SCMC Underground Trip Reports May & June

Steve Holding

May 2018

Thursday 17th - Andy Kennelly and Steve Holding visited Yewtree Level and carried out more digging of the external trench. Prior to digging in the trench, work was required up in the field to unblock the pipe that carries water in a different direction – there were lots of cows around the pipe and it looks as if it is their activity that blocks the pipe.

Digging in the trench seemed to go very well with a significant void produced under the large plastic pipe and with lots of water draining out.

Thursday 24th - Andy K and Steve returned to Yewtree Level, with Nick Southwick (Sherpa and photographer). Matters were a bit disappointing in that:

1. The cows had diverted the water again.
2. There had been slumping of material in the trench (partly due to the flow from the cows activity) such that water was not flowing well.
3. The inbye end of the level was checked and it will be necessary to get the water at least another 12" lower.
4. My waders leak! (See picture 1 below)

Wednesday 30th - Andy K and Julian returned to Yewtree Level to dig – had to contend with a major slump of ground which was possibly not that surprising after the exceptionally heavy rain the previous Saturday night.

June 2018

Wednesday 6th - Andy Kennelly, Andy Wood and Richard Silk returned to the Yewtree Level dig and made significant progress in clearing the trench (see 2, 3 & 4 below)

Friday 1st to Friday 8th - NAMHO Conference and significant activity in Forest of Dean during the following week.

Monday 11th - David Poyner, Kelvin Lake and Steve Holding visited the tunnels at Hampton Loade – these are brick-lined culverts presumably carrying water related to the forge (see short report on page 8).

Thursday 14th - Andy Wood, Andy Kennelly, Steve Holding and Idris Williams* took a party of three scouts plus scout leader to Snailbeach 40 Yard Level. *Idris did not descend.

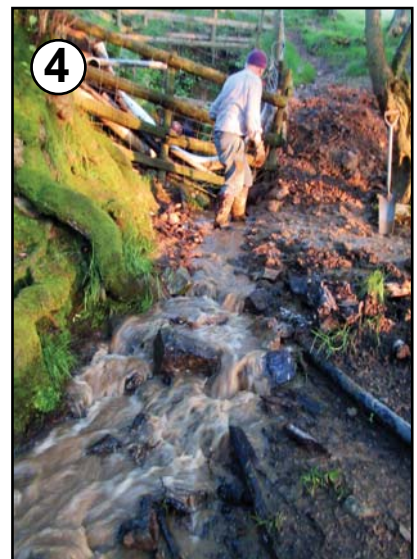
Sunday 17th - Group of thirteen club members and spouses visited those parts of Williamson's Tunnels under the control of Friends of Williamson's Tunnels – those who had previously visited were surprised at the amount of material that has been dug out since earlier visits. Five of the group also visited those tunnels operated by the Joseph Williamson's Society – they expressed disappointment of the 'air of neglect' about this part.

Thursday 21st - Andy Wood, Andy Kennelly and Steve Holding carried on further digging at Yewtree Level.

Wednesday 27th - Andy W, Andy K and Steve returned to Yewtree Level. On this occasion, Andy W entered the level and confirmed that the water was now low enough at the dig; the larger diameter pipe, used by Lords Hill Farm in drought conditions, was relaid such that it is now well within the level – water was draining through it. A brown 110mm drainage pipe was also put in place.



Yew Tree Dig in May.
(Nick Southwick & Steve Holding)



Above: Richard Silk working on the Yew Tree Dig, 6th June.

(Steve Holding)



SCMC Underground Trip Reports July & August

Steve Holding

July 2018

Wednesday 4th - Andy Kennelly, Andy Wood, Stuart Cowper, Nick Southwick and Steve Holding visited Yewtree Level and installed a 1.4m plastic tube in the entrance of the Level. The new pipe is large enough for most to enter by just stooping – it is slightly sloping in.

Thursday 5th - Steve Holding and Graham Smith visited Snailbeach as a preview to having the MCRO rescue practice in August.

Saturday 7th - SMT took visitors into the Somme Tunnel, as part of the Hay Meadow Festival.

Friday 13th - Steve Holding, Alan & Vicky Robinson, Andy Wood and Joe North met up with Roy Fellows at Fron Goch. Most of the time was spent enlarging the crawl on the 14 Fathom Level – basically improving from flat-out to hands and knees crawl.

Thursday 19th - Andy Wood and Steve Holding returned to Yewtree Level. An old gate was cut and now acts as a grill at the entrance of the new pipe. Further clearing work was carried out.



Above: The old gate used as a grill on the new pipe in the entrance to Yew Tree level, fitted on the 19th July.

(Steve Holding)



Left: Digging in the entrance to Yew Tree level on the 4th July.
(Nick Southwick)

Below: Scenes around the bottom of Sheep Shaft.

Kelvin Lake on the aluminium ladder installed at the bottom of the Shaft

Peter Eggleston and Andy Wood near the shaft bottom.
(Ian Cooper)

Thursday 26th - Andy Wood, Andy Kennelly, Julian Bromhead and Al Braybrooke recovered a ladder from deep within Snailbeach and relocated it to close to Sheep Shaft.

Steve Holding, Kelvin Lake and Peter Eggleston replaced the rope going up the iron ladder towards Paint Shaft from the Big Chamber, and carried out bolting to locate a hand-line up the slope in the Snailbeach Big Chamber.

Then all fixed the recovered ladder in place by Sheep Shaft to form part of the evacuation route.



SCMC Underground Trip Reports July & August Continued ...

August 2018

Thursday 2nd - Andy Wood, Ian Cooper, Kelvin Lake and Peter Eggleston carried out work at the top of Sheep Shaft in preparation for the rescue practice.

Thursday 2nd - Alan & Vicky Robinson and Steve Holding had a trip to the high level of Capelcleugh (Nenthead) – about 6.5 hour trip. There had been quite a bit of fallen rock on the entrance route of Capelcleugh.

Friday 3rd - Steve Holding, Alan Robinson and Nick Green (Nenthead Mines Conservation Soc) visited Rampgill (Nenthead) – trip including descending and exploring an intermediate level between Rampgill and Brownly Hill mines.

Saturday 4th - A group including Graham Smith, Kelvin Lake, Peter Eggleston and Ian Cooper carried out further work at the top of Sheep Shaft to allow the fitting of the MCRO Larkin Frame and the hauling out of people from the shaft.

Saturday 4th - Alan & Vicky Robinson, Steve Holding and Nick Green (NMCS) planned a long trip beyond Bog Shaft in Smallcleugh but encountered a substantial collapse on the Middlecleugh Second Sun Vein, between Cars and Cow Hill Cross Veins. This collapse loses about half of the mine and prevents the Capelcleugh to Smallcleugh through trips.

Monday 6th - Alan & Vicky Robinson visited Rampgill Mine, exiting by climbing up Proud Sump to Smallcleugh.

Thursday 9th - Kelvin Lake, Steve Holding and Nick Southwick carried out further bolting/rope installation work in the upper part of the Big Chamber in Snailbeach.

Peter Eggleston and Ian Cooper carried out Heyphone trials to identify good comms points for the rescue practice on Saturday 11th August.



Above: Graham Smith and Ian Cooper working on the Sheep shaft lid.
(Kelvin Lake - I.A.Recordings)

Below: Ian drilling mounting holes for the MCRO Larkin frame.



Above: It required 24mm holes to be drilled (with permission) using Ian's specialist drill.

Left: Once done, the base of the Larkin frame could be securely bolted to the lid.

(Ian Cooper)



Left: Using a Land Rover belay the frame can then be used for hauling (or lowering) people in Sheep shaft.

(Ian Cooper)



Note

The set-up was successfully used on the 11th August to evacuate 7 members of the public from the mine.



From the Archives: Huglith Mine - Badger Level

Recovery of a Mine Truck, September 1975, M.D. Newton & D. Webb

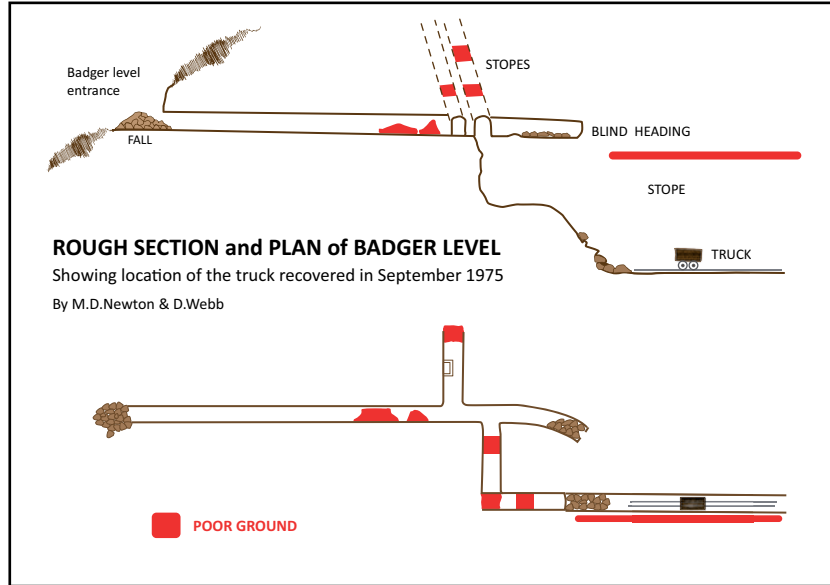
The following has been compiled by Steve Holding from a document passed to SCMC by Malcolm's widow, Sheila. The photographs have been adjusted and some (apparently unrelated) photographs have been excluded. The truck drawing, with dimensions, has been found separately in Malcolm's papers but is assumed to be the same truck.

The truck was recovered from the main upper stopes accessible from Badger Level – the location is just below where there are impressive malachite formations, often referred to as the "Blue Pretties". Traces of the truck can still be found at that location.

Malcom Newton was a long serving member of Shropshire Caving & Mining Club who died in 1999. He is well known for the drawings, paintings and models of mining scenes that he produced – many club members have such pictures in their houses.

SCMC would not now encourage removal of artefacts from a mine but this is a record of actions from 1975 when conservation attitudes were less developed.

The recovery of the truck took most of September 1975 due to the condition of the workings which were littered with falls and the fact



The truck in its original position at the bottom of the stope.



Emptying end of the truck.



Malcolm noting measurements and joints of the truck.



The truck before work started amongst a litter of props and rails.



Malcolm descending the final pitch from Badger Level to the lower workings.

that the truck itself lay at the bottom of two deep pitches, both of which required laddering.

The first visit was made in order to plan the route of removal, the clearing of the falls and the marking of the Badger Level entrance which had become very over grown. The whole area had been planted by the Forestry Commission in 1968 and locating the entrance took almost the whole afternoon. After clearing the main level the pitches were examined in order to find how much ladder and rope would be required for reaching the truck.

The second visit with ladders gave access to the lower level and the truck. The truck appeared in good condition but on closer examination the woodwork proved to be too far gone to survive the ascent in one piece as had been hoped. It was decided to take all the necessary measurements and rebuild the box from new timber.

After completion of measuring and noting joints etc. the truck was taken to pieces. The axles proved to be of greater weight than had been anticipated and could not be broken down any further than shown in the photographs.

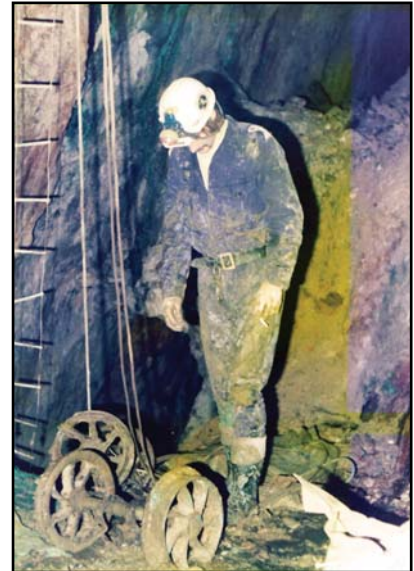


From the Archives: Huglith Mine - Badger Level Recovery of a Mine Truck, September 1975, Continued ...

This made it very difficult to haul them up the stopes.

The visit on the third Saturday saw the pulling up of the two axles and other iron pieces which were left at the top of the second stope buried under rubble to prevent their removal by other visitors as had been the case at Snailbeach some years before. This operation was to take all afternoon (4 hours). Some worry was expressed as to whether the ropes would stand the strain of the axle weight, however they did so and all was completed without mishap.

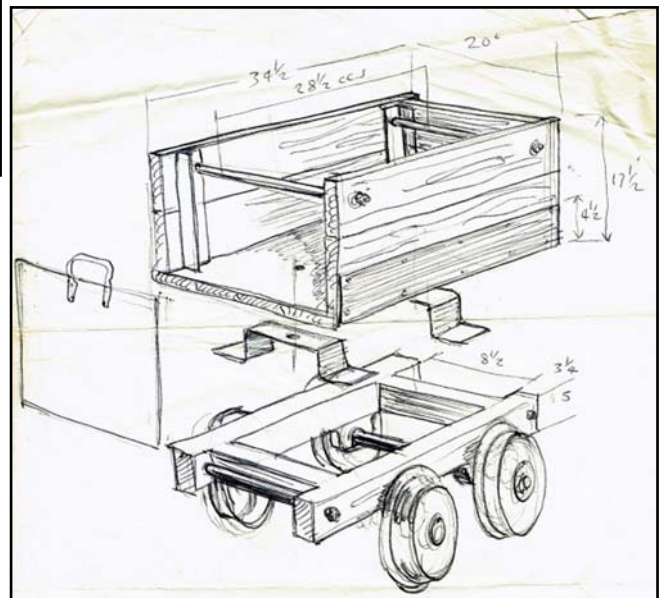
The fourth and final visit saw the trucks removal from the main level and to the surface from there up the steep hillside to the car which was parked in the lane on top of the main Huglith workings.



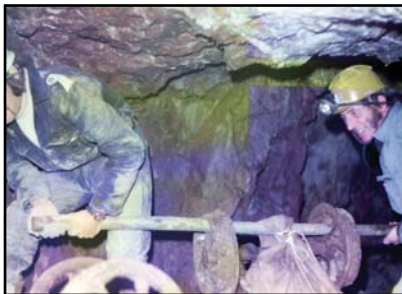
The axles being tied to the pulley ropes for hauling up the main pitch.



Left: The truck after the body had been removed.



The drawing, by Malcolm, of the truck showing it's dimensions (in inches).



Left: The method used to take the axles to the surface was the only one applicable in the small space.



Left: The completion of the salvage operation.



Left: The rebuilt truck salvaged from Badger Level Huglith.



Right: Back in action on a 'private' back-garden mine railway.



Mining Interpretation Projects - The Bog Ropeway Completion, 26th June 2018

The Stiperstones and Corndon Hill Country Landscape Partnership Scheme (LPS) finished at the end of March. While the ropeway trestle at the Bog had been erected (see last issue of Below) the installation was not quite complete.

The erection of a fence and installation of an interpretation panel still needed to be done. The local contractor had completed these tasks by early May.

The LPS had purchased some fine grit to be used for paths etc. around the area. Not all of it had been used and what was left was in a heap on the car park by the Institute at the Bog.

On the 26th June Andy Wood and Mike Shaw enlisted the help of Club members to move some of the grit to spread around the ropeway trestle base inside the fenced enclosure.

Andy and Mike were joined by Nick Southwick, Peter Eggleston, Steve Holding and Kelvin Lake. The grit was transferred from the car park to the back of the Bog Centre in Andy Wood's trailer. It was then moved by wheelbarrow into the fenced area and spread around the base to give a 'smooth' finish to the area.



Above: Club members moving gravel from the car park to put around the finished ropeway trestle at the Bog visitor centre (former Bog School). L to R: Mike Shaw, Nick Southwick, Peter Eggleston, Steve Holding, Andy Wood.
(Kelvin Lake - I.A.Recordings)



Above: Spare bucket and gravel around the finished ropeway trestle at the Bog visitor centre.



A spare ropeway bucket donated by Forterra Ltd. was placed on the concrete base. The iron axle, which is thought to be from one of the Bog ropeway trestles was also put on the base.

Below: Details of the display panel erected near the trestle.

THE AERIAL ROPEWAY
a MINING TRANSPORT SOLUTION

This trestle designed by 'Ropeways Limited' stands on the line of Bog's aerial ropeway. It is similar to steel trestles used on the ropeway and is placed here as a memorial to all those who worked at the mine.

The trestle was built for a line serving a brickworks near Lancaster, which was closed and the trestles abandoned late in the 20th century. It was made available by Forterra PLC of Claughton Manor (Brickworks, who have the distinction of having the last functioning ropeway in the country).

Bog Mine Transport
Bog mine was redeveloped before the 1st World War and different ways of transporting ore from the mine to the railway at Malenhurst and of coal back to the mine were considered. Traction engines would cause extensive damage to the coaks, and extending the railway from Snailbeach would be prohibitively expensive. The solution adopted was a five mile aerial ropeway which took less land and could cope with rough ground and gradients. Its drawbacks were its limited carrying capacity, problems in frost and high winds and the amount of maintenance it required. It was designed and constructed by 'Ropeways Limited' during 1918. Much of the construction work being done by German prisoners of war. The mine closed in 1925 and the ropeway with it.

Aerial Ropeway Route
From the Bog to Malenhurst, with trestles at Snailbeach and Burnhugh to Malenhurst.

A second line from Houghton Mill to Malenhurst was constructed in 1925 and discontinued until 1948.



News Round-Up 1

Snibston Colliery Buildings - Additional Listing

Following the closure and subsequent demolition of the Snibston Discovery Museum in 2015 there were concerns for the future of the Snibston Colliery site. While the pit top buildings and structures were designated as Scheduled Ancient Monuments in 1999, there were several important buildings, which form part of the complete coal mining complex dating from the industry's peak production period, not included within the scheduling.

The Office Block, which contains the Lamp Room, Control Room and Medical Centre, the Powder Magazine and the Locomotive Shed have now been given Grade II listing. With the proposed new housing development on the colliery site, Coalville Heritage Society hope that listing will protect the buildings and allow for the possibility of setting up a heritage centre.

MINOS

When Snibston Colliery closed the Control Room had a complete MINOS Computer system. MINOS is an acronym of MINE Operating System, it became the standard computer software system for the National Coal Board.

The first remote monitoring systems were introduced in the early 1960s, but it was only when minicomputers became available in the late 1960s and early 1970s that information could be managed in real time, making automatic remote control systems feasible. Following a series of experimental installations in UK mines by the NCB, they decided in the mid-1970s to introduce a control system based on an industry standard.

The idea was to expand the computerisation concept to cover all the mining operations at a colliery, including production, transportation, environment and ancillary operations such as power systems and water pumping. In a mining system where an error could have consequences ranging from loss of production to loss of life, a prime requirement is for a well proven, safe and reliable software system, hence the use of an industry standard re-useable software structure.

From the outset MINOS was designed around well designed and simple, modules making the operation of each module predictable (unlike modern operating systems like Windows which have thousands of lines of redundant code and which can produce random, unpredictable results!).

For the computer buffs among you, MINOS ran on a standard system based on Digital PDP-11 or LSI-11 hardware and was programmed using CORAL 66 (BSI 1980) - a variant of Coral 66 was developed during the late 1970s/early 1980s by the GPO for the System X digital telephone exchanges.

The NCB invested heavily in computer systems and control technology in the late 1970s and by 1983 had 110 MINOS systems operational at 65 collieries. It was the very standardisation of the system design rather than a 'bespoke' system which made this rapid exploitation possible. The reliability of the systems was high, but limited by the reliability of the computer peripherals rather than the software. The operational safety record of the system was also excellent.

Sadly it is unlikely that the MINOS system at Snibston will be preserved - assuming it hasn't already been ripped out! Luckily I.A. Recordings recorded the control room in March 1987, shortly after Snibston closed, and MINOS in use at Bagworth Colliery in 1991.

Further reading

MINOS: Systems Reliability and Reuseable Software, R.M.G.Perkin Systems Development Branch, National Coal Board, Mining Research and Development Establishment, Burton on Trent, Staffordshire.

[See the Science Direct website for the complete paper](#)

Cavanacaw Gold Mine

At the end of June a crosscut driven from the decline at the Cavanacaw Mine, Omagh, Co.Tyrone intersected the main Kearney Vein, about 15 metres below the level of the Kearney open pit. At this point the vein is about 2.8m wide and channel samples have been taken to check the grade of gold mineralisation.

It is planned to extend levels north and south along the vein, producing some ore for the mill. On August 8th the processing plant commenced operating on feed from the new underground development on the Kearney gold vein.

The processing plant has the benefit of a recent upgrade to some sections and is expected to operate part-time until production stopping commences in late 2018 or early 2019.

An escape-way will be constructed to provide a second method of egress.

www.galantas.com/news/

Abbeytown Mine, Ballysodare, Co. Sligo

Erris Resources have opened entries to the former Abbeytown Mine, Co. Sligo, and are planning an underground mine exploration programme including 3D laser surveying, systematic channel sampling followed by underground diamond drilling.

Key Development Points

Surface diamond drilling programme started 300m south of the old Abbeytown mine.

Drilling intended to test for potential extensions of zinc-lead-silver-copper mineralisation extending south from the old workings at the Abbeytown Mine

Cleared and opened access portals at the historic Abbeytown Mine, planning under way for underground mine exploration programme including 3D laser surveying, systematic channel sampling followed by underground diamond drilling

New grab sample from underground pillar returns 500g/t Ag, 27.9% Pb and >30% Zn

www.errisresources.com/news



Baterias de Cabo Tiñoso

Andy Wood

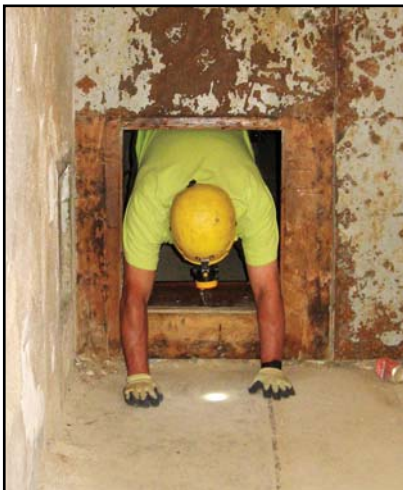
As a result of a 1926 maritime defence plan for naval bases, Vickers won the contract to install six new gun batteries to cover the Cartagena naval base. Two with two 15" guns, two with four 6" guns and six anti-aircraft bases each with four 4.25" guns. These were established in 1935 but saw little real action other than during the Spanish civil war but were manned until 1995 when they were all closed.

Those club members on the 2008 trip to the Cartagena/La Union mining area in Spain will recall that we visited the 15" Bateria de Las Cenizas, high on the cliffs overlooking Portman and providing a wide field of fire to cover the sea access to Cartagena. Unfortunately, underground access here has now been stopped but the batteries at Cabo Tinoso on the other side of Cartagena, being less easy to find and accessed by a hair raising single track mountain road are well worth a visit.

The site is designed as a series of medieval castles and some restoration work on the facades of the main buildings guarding the access tunnel, belies the vandalism and destruction of much of the barracks and other buildings.

Bateria de Castillitos

However, the Bateria de Castillitos also has two 15" guns still in situ



Above: A broken access hatch gives access to the underground shell handling area and gun turrets.



Above: Distant view of the gun battery on Cabo Tinoso.

Below: Renovated facade of the main buildings.



Below: A Sentry box.

Below: Coat of arms in the ramparts.



and, thanks to some previous light vandalism of the sealed wooden doors, it is still possible to visit the underground shell handling, power room and interior of both gun turrets.

The gun turrets are mounted on the cliff edge so all the supply system is hidden 35 ft. below and behind the rocks so keeping them out of sight from the sea.

These are **BIG** guns; they could fire an 885 kg armour piercing shell 35 km!



Baterias de Cabo Tiñoso Continued ...



Left: Looking out to sea over the 15" gun.



Left: Crane for raising shells.

Above & Below: Recently re-painted French and USA ship recognition silhouettes.



Above: The 25hp diesel engine driving a dynamo to produce 110 volts DC for the hydraulic power and lighting.

Right: Diesel tank and the hydraulic accumulator/reservoir?



All pictures: Andy Wood



Baterias de Cabo Tiñoso Continued ...

The machine room contain a 25hp diesel engine driving a dynamo to produce 110 volts DC for the hydraulic power and lighting.

The shells and propellant were held separately and joined as needed for feeding up into the breech of the gun in the turret. Most of this equipment remains there and some of the hoists and cranes still operate easily.

By climbing a series of three ladders, access to the turret itself is possible and the number of manual controls indicate that gunners must have been present when shots were fired but the noise and vibration must have been overwhelming.

Each gun had its own command post and there were a number of lookout posts around the site. An interesting detail is the silhouettes of certain planes and vessels to aid recognition when seen at a distance out to sea. One of the command posts has had some repainted.

Bateria de El Jorel

The 6" gun Bateria de El Jorel lies slightly below and nearer the end of the point. The site was operational from 1933 and had a range of 22km.

Three of the guns are still in place, complete with their underground ammunition stores and elevators for



Above: Crank of the 25hp diesel generator.



Above: Gas cylinders in the generator room.



Above: Overhead shell handling equipment to fetch shells which were stored in the tanks.



Above: View inside the gun turret along the 15" gun.



Above: Controls inside the gun turret



Baterias de Cabo Tiñoso Continued ...

feeding the guns with shells. However, the fourth one is missing as it was dismantled and installed in the artillery museum park in Cartagena.

One of the stores was clearly wood lined, presumably to reduce the risk of premature explosion of the ammunition.

Beyond this battery, a narrow track leads down to the tip of the cape and another observation point. It is cut into the rock face and needs a tunnel and then a high embankment to negotiate the contours of the cliff. Access is not permitted to the lighthouse on the very tip of the cape and is by a separate track.

At the summit of the hill overlooking Cabo Tinoso was the anti-aircraft Bateria Atalayón built by 1935 for defence of the other guns. I did not have time to climb up to it but it was abandoned in 1952 and little remains of interest.

Thanks

With thanks to the Friends of Cartagena's Fortifications for much of the technical detail used in this article.



Above: How the 15" gun turret looked in 1970. (*Friends of Cartagena*)

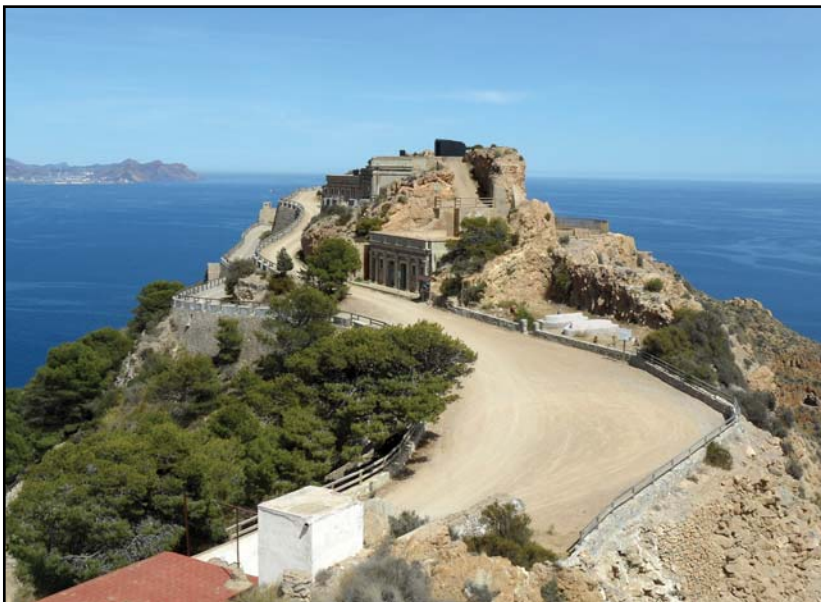


Above: Inside the 15" gun turret.



Above: Bottom of the 6" shell feeder in the expense magazine.

Below: Top end of the 6" shell feeders just behind the guns.



Above: View of Bateria El Jorel.



Right: The 6" gun turret.



What the Papers Said - "The Colliery Guardian"

Submitted by Steve Dewhirst

FROM OUR CORRESPONDENT.

COLLIERY PROPRIETORS FINED FOR INFRINGEMENTS OF THE PROVISIONS OF THE MINES INSPECTION ACT.

On Tuesday last Mr. John Bennet, proprietor of Quarry Pit, Wombridge, was summoned at the petty sessions, Wellington, by Mr. Wynne, government inspector of mines, on several charges under the above act.

Mr. Wynne charged the defendant with neglecting to provide a proper indicator for the pit, also a gauge for the engine boiler, and for not having the shaft properly fenced. Henry Halfpenny, ground bailiff, attended on behalf of defendant, and said the pit had been fenced, but that the fence had been taken away, and that they had an indicator on the chain. They were, he said, making preparations for the purpose of carrying out the requirements of the act.

The bench fined defendant £10 for the infringement of rule 13, and 1s. each for violations of the 4th, 7th, and 12th rules. Other summonses were allowed to stand over, to give Mr. Bennett an opportunity of complying with the requirements of the act.

COWRY PIT

In the case of the Cowry Pit in the same field, where two lives were recently sacrificed through neglect of the 19th rule, Mr. Wynne stated the nature of the accident and the importance of enforcing compliance therewith. Defendant, James Dorricott, one of the Chartermasters, pleaded ignorance on the ground that he could not read, and Mr. Bennet, junior, said they had only just obtained the new rules. Mr. Wynne remarked that the provisions infringed were in the old rules made live years ago. Dorricott said he did not know it was his duty to examine the pit. The magistrates said he should have known his duty, and that through his neglect the youths had lost their lives, and fined defendant £2, or in default two months' imprisonment.

16th March 1861

SEVERN VALLEY RAILWAY.

The permanent way has been laid on thin line from its junction with the West Midland at Hartlebury to beyond Bewdley, a distance of about eight miles, and the stations at Stourport, Bewdley, Arley, Bridgnorth, are in course of completion. Great delay has been occasioned by landslips at Stanley, and other points, which have led the engineer to deviate the line at those parts.

The great work of the undertaking will be the Severn Bridge, about three miles beyond Bewdley. It will be of cast and wrought iron, and will span the river with one arch of 200

feet, and 20 feet from its spring to the crown. This is said to be the largest cast-iron arch in the kingdom, and the first instance of a cast-iron arch being applied to so large a span. There will be land arches of 30 feet span on each side. The abutments and masonry are nearly completed, and, but for some delay in the production of the iron work by the Coalbrookdale Company, all would now have been ready. A couple of months will probably see this great bridge complete. Strange to say, this is the only point where the line crosses the Severn. Confident expectations are entertained of opening the whole line by the middle of August next.

27th April 1861

REFRESHMENT HOUSES FOR WORKMEN

The company carrying on the Old Park Ironworks, Shifnal, have wisely provided refreshment houses for their workmen, at which soup, tea, coffee, &c., can be had at cost price. Two cups of coffee and four pieces of bread and butter may be had for 3d., and a basin of soup for one-penny. Newspapers are on the table for use, and the rooms are comfortably furnished.

We sincerely hope they may succeed in getting them patronised by the colliers and others in their employ.

Beriah Botfield, Esq., M.P., of Stirchley Ironworks, has given notice to his Charter-masters, and others holding office under him at the ironworks, that they must either give up keeping public-houses or else leave his employ.

The practice against which Mr. Botfield has set his face has long been a nuisance very severely felt by the men, and still more so by their families. We would commend this step, and that taken by the Old Park Company, to the attention of coal and ironmasters; more especially to those of South Staffordshire.

1st June 1861

A MAN CRUSHED TO DEATH BY A FORGE HAMMER.

An inquest was held on Thursday week at Bridgnorth, on the body of a young man named Thomas Adams, who came by his death in the following frightful manner.

On the previous morning, about seven o'clock, he was engaged in his occupation as shingler at the Snedshill Works, when the stick he was using broke, and the unfortunate man was precipitated headforemost under the forge hammer, which fell upon his head, literally smashing it to pieces.

The deceased has left a widow and family. Verdict, "Accidentally killed."

10th August 1861



Letters and News Round-Up 2

A couple of points following up to articles in the Summer issue of Below, 2018.2:

p16 - Cape of Good Hope

It is an offence, under the Environmental Permitting Regulations 2016, to discharge sewage directly into groundwater, except in compliance with a Permit from the Environment Agency. It is highly unlikely that such a Permit will be granted. So if the pub is discharging waste from the toilet block into an old well, this is an offence.

The existence of this offence predates the current regulations - there was a similar offence in the Water Resources Act 1991, section 85. There is a requirement to discharge sewage into a sewer, if a sewer is available. Given that there's housing next door, I assume that there is a sewer.

The Environment Agency is the point of contact to get legal advice. (Note that this is my professional work area)

p17 - ropeless mineral 'winding'

Undoubtedly this can be done, it's merely a matter of suitable engineering with suitable materials. There is a possible disadvantage with doing it with the main ventilation airflow though. It needs a pressure differential across the material transporter to generate the force to lift it up the shaft. This pressure differential may not be present if transportation is not occurring.

Poldark - CSM

Following months of planning, Wheal Roots Tin Mine at Poldark Mine has been appointed the Field Station for Camborne School of Mines (CSM).

In May 2017 CSM lost the use of its underground field station at the Homan's Test Mine near Camborne due to the site being sold, putting an end to underground mining research and annual student mining induction courses that commenced there in the 1960s, when the Test Mine was owned & run by Holman Brothers (the drill and mining machinery manufacturers).

The Camborne School of Mines is very much respected throughout the world. It was founded in 1888 and merged with Exeter University in 1993 (amid some controversy). Subsequently the school relocated to the Tremough Campus at Penryn just under 8 miles from Poldark.

News Reports, 2018

If miners underground are subject to sudden air pressure changes of the order of 5 psi, they will suffer considerable ear pain and possibly permanent hearing damage. Clearly, it would be possible to design a system to keep underground pressure constant, but this adds to the complexity of a simple system.

The advantage of a rope-based system is that there is a mechanical link telling you exactly where the waste transporter is and how fast it is moving. The pneumatic system, without such a link, must be 'exciting' to control!

It would be possible to get positional information nowadays using an ultrasonic or laser based distance measuring system.

John Heathcote

Kendal Film Festival

This year the Kendal Mountain Festival runs from Thursday 15th to Sunday 18th November. The festival isn't just about mountain climbing, there is usually an "underground session" on one of the days. The Festival has a packed lecture programme of guest speakers, filmmakers and athletes. Crucially it's the main social gathering for all outdoor enthusiasts.

Find out more and buy Festival passes on their website:

www.mountainfest.co.uk

Ballyhickey Mine, Ennis, Co. Clare

Canadian owned Hannan Metals are preparing to drill near the former Ballyhickey Mine as part of their Clare zinc project.

The mine produced lead from 1834 until 1846. In 1852 Harvey's of Hayle in Cornwall (UK) supplied the mine with a 20" winding engine, wrought iron boiler, cage work and pumping apparatus. This early phase of exploration probably continued until 1865.

There has been extensive recent exploration 2 km away, around the former Kilbricken Mine in Monanoe townland.

Key Development Points:

Drilling is scheduled to begin at the Clare zinc project before the end of August, once permitting has been finalized. A diamond drill rig has been contracted to drill 4,300 metres, anticipated to be completed during Q1 2019;

The drill program is focussed on testing new shallow targets located 100-200 metres below surface with potential for standalone mineralized bodies. Targets have been prioritised using seismic and soil sampling data collected by Hannan over the past 12 months;

The three targets areas (Ballyhickey, Finanagh and Doora) to be tested lie within 2 kilometres of the Kilbricken resource area. These areas include historic lead-silver mines, a 2.5 kilometre long multi-element soil anomaly, newly discovered outcropping mineralization and all lie in a prospective context with respect to seismic-mapped faults.

Visit the Hannan Metals website for more details on the 7th August 2018 News release.

www.hannanmetals.com/news/2018/



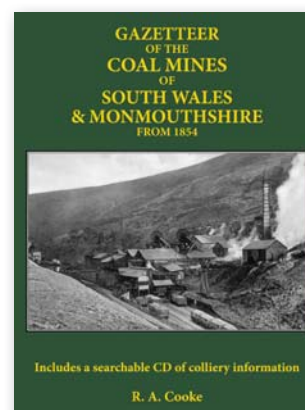
Books

Gazetteer of the Coal Mines of South Wales & Monmouthshire

By R.A.Cooke
Hardback, 192pp. 215x275mm.
ISBN : **9781911038375**
Cost **£30 + p&p**

This ground-breaking Gazetteer gives details of all known South Wales collieries on a fully searchable CD included with the book. The book itself contains a series of maps that locate each colliery and a selection of photographs to give a flavour of the coalfield. The book has been a mammoth under-taking by the

author, requiring visits to many reference sources to enable all of the information to be collated together for the first time across an entire coalfield. The information given includes all relevant dates, ownership details and changes, selected output figures and manpower, together with site maps where possible. This is a vital resource that should be useful to both mining and local historians as well as those with a wider interest in South Wales.



Wheal Trewavas

By Peter Joseph & Alasdair Neill
Softback, A5 94pp. (Trevithick Society)
ISBN **978 0 993502 15 6** Cost **£10 +p&p**

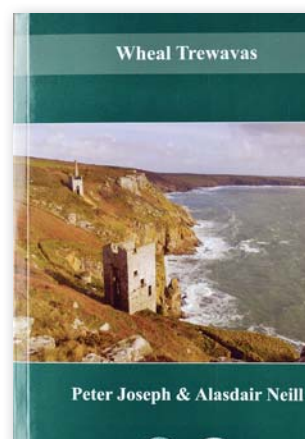
Wheal Trewavas was never a mine of significance. It is best known, if at all, for its surviving engine houses and their precipitous cliff side location on the east shore of Mount's Bay.

These buildings rival the better known examples at The Crowns, Botallack, for the drama of their setting. They are not as well known as the Crowns engine houses due to being more remote.

The book is a tribute to its joint author, Alasdair Neill, who died in 2016. Alasdair was an investigative mining

researcher both above and below ground; he published little but contributed hugely to the work of others, not least through his exhaustive Newspapers' Index, and is remembered with great affection.

In consequence this publication has been part sponsored by his friends at NAMHO, for which generosity the Trevithick Society, as publisher, is most grateful. The book covers the mine's history, archaeology and the remarkable conservation of the engine houses by the National Trust.



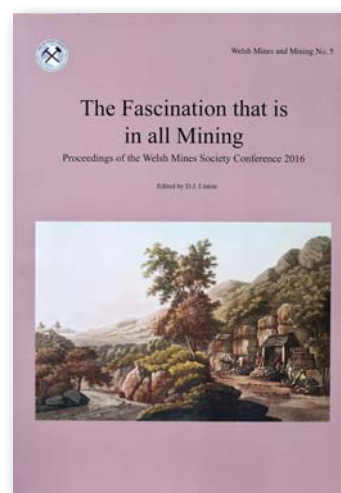
The Fascination that is in all Mining

Welsh Mines & Mining No.5
Proceedings of the Welsh Mines Society Conference 2016
Various authors, edited by D.J.Linton
Softback, A4, 92 pp.
(Welsh Mines Society, 2018)
ISBN **978 0 9561377 4 6** Cost: **£11 +p&p**

This volume is the Proceedings of the 2016 Welsh Mines Society Conference at Mellington Hall, Powys which was held to celebrated the life in mining of the society's late president George Hall (1924-2013) and gave an opportunity for society members to present papers on various aspects of historical mining in Wales and elsewhere, plus deliver papers relating to George Hall with personal recollections from people who had come into contact with him through mining, a description of his work in connection with the Shropshire mines (by Ivor Brown), a pictorial

record of his mineral processing mill at Esgairmwyn and a discussion of his archival legacy.

Other papers are: a summary of current research work on quantitative aspects of the Great Orme Bronze Age copper mines; archaeological investigations of medieval lead mining and smelting sites in Wales; early modern mining and smelting at Strata Florida and Maen Arthur; an outline of the life of the 'other' George Hall, who was involved in gold mining in Australia and Wales; mining cartoons and the reality behind them; a history of lighting in the metal mines of north Wales and an approach to the practical geology of the central Wales orefield.



Publications are available from Mike Moore at Club meetings, or online at www.moorebooks.co.uk



New Video

HISTORIC MINES OF SPAIN VOL.3 COMPILATION No.54 Exploring more mines of Andalucía (2 disc set)

The 11th International Mining History Congress was held in Linares, Spain in September 2016 and widely regarded as the best ever.

A week before joining the Congress, SCMC members explored historic mines and related structures in the West of Andalucía and Castilla-La Mancha.

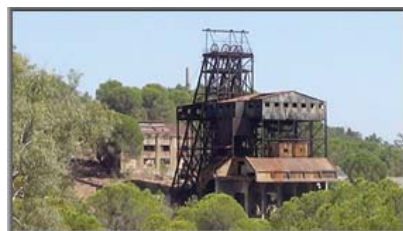


Just a few of the many sites and events featured in these two DVDs are listed here:

First week Rio Tinto Museum & Peña del Hierro opencast mine. Rail journey beside the deep red Rio Tinto river, passing buildings and slag piles from many eras of mineral dressing and smelting, plus railway locomotives and rolling stock.



San Antonio mine, huge trucks in Cerro Colorado working opencast mine, English housing exhibit and Corta Atalaya open pit all in the Rio Tinto area.



Pithead buildings and headframe on the eastern shaft at La Zarza copper mine. The well-preserved pier of the Rio Tinto railway in Huelva was visited - now a popular angling spot.

The large Aznalcóllar opencast copper mine.

Extensive preserved open pit and shaft workings around the eastern shaft at La Zarza & Tharsis.



The picturesque Villanueva del Rio y Minas coal mine with its 'Malakoff' tower style headframe on the upcast shaft.

The huge Peñarroya Company smelter site. Ancient and modern remains at Cerro Muriano.



The headframe at Puertollano coal mine museum. Excellent surface and underground tours of Almadén mercury mine museum and a trip to the Almadenejos horse whim.

Puertollano coal mine museum, with its steel headframe and nearby sites.

Not far away, the former railway tunnel to Horcajo mine village has been converted into a road and makes for an interesting drive.

The narrow gauge railway tunnel between El Centenillo mine and Pozo Nuevo.



Congress week buildings of El Centenillo mine, La Aquisgrana mining museum, Pozo Ancho Cornish engine houses and the nearby La Cruz smelter and preserved lead shot tower.



The surviving steel headframe at El Cobre mine. La Esmeralda headframe and buildings, Matababras mine - the last to work in the area, and El Cobre, which still retains its headframe and cages.

Linares English cemetery, La Tortilla smelter and shot tower, San Guillermo mine.

Rounding the trip off at the vast excavation of Alquife opencast iron mine which closed in 1996 and may re-open soon.



Thanks to Rob Vernon for researching and documenting the sites in the first part of this DVD and to him and our friends in the Colectivo Proyecto Arrayanes for organising the excellent 11th International Mining History Congress in and around Linares.

The DVDs have over 180 chapter points to aid viewing.

£ 16.80 - DVD (2 disc set)

Running Time: 2 hours 49 minutes.

Club discount available at meetings

For more details or to order online visit:

www.iarecordings.org



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

NAMHO Rep: Alan Robinson

Diary Dates

21st-23rd September 2018: Hidden Earth, National Caving Conference, Churchill Academy, Mendip. Buy tickets and find more details their web:
hidden-earth.org.uk

13th October: 29th BCRA Cave Science Symposium and BCRA AGM, University of Bristol.

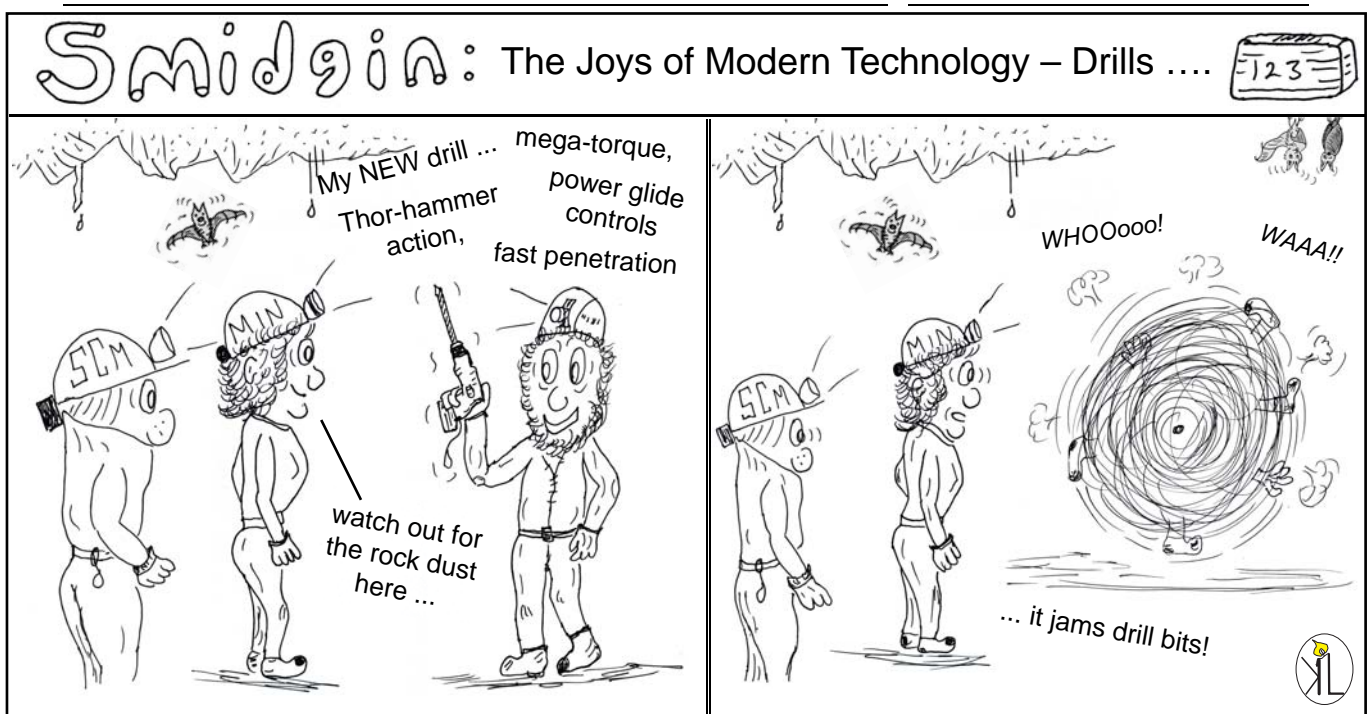
27th October: Ivor Brown Memorial Day, 9am, Glass Classroom, Enginuity, Coalbrookdale (Booking form on the club website).

15th-18th November: Kendal Mountain Film Festival. The underground session is on the evening of Friday 16th. More details and Festival passes:
www.mountainfest.co.uk

12th December: Wilderness Lecture: Return to Peña Colorada by Connor Roe, 7:30pm, Chemistry Lecture Theatre, Bristol.

2019

4th-8th July, 2019: NAMHO 2019 Conference, hosted by Roy Fellows at Llanafan (between Tregaron and Aberystwyth), Ceredigion, in Wales.



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

