Plymouth Caving Group

Newsletter
No. 132

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Plymouth Caving Group meets at the Thistle Park Tavern, Cattedown on Thursday evenings. Committee meetings are held on the first Thursday of the month at 20.00. For enquiries please contact:

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Editorial

Welcome again to another iassue of the PCG Journal. As usual I'll put out a plea for more articles, preferably from some of you who aren't regular writers. Hope you enjoy your read.

Last issue's Editorial raised a few eyebrows and some at DCUC welcomed the comments, so now I'm on my high horse and out to point the finger of criticism at any organisation where there may be wrongs being committed. Give it a few more issues and I'll probably have been lynched. This issue I'll turn my critical eye to DCRO. This is a fine outfit which is undoubtedly well organised and run (I would say that). However, the attitude of some of the membership possibly leaves a little to be desired. In my experience of the last few rescues where many people called out (by DCRO or via others) have been ill disciplined and of little use leaving other people, who should have attended, at home because they have not been called out due to large numbers at the scene. Attendances at DCRO practices and training events has been poor in recent years and, despite over 100 people being on the callout list, at times it is still the same small crowd who make the effort to attend. The last callout (report in this issue) put a small dent in our reputation as the Police were left with the impression that we were a disorganised rabble (despite carrying out the task very well). This was partly due to people arriving on the site with little comprehension of what they should do and how to behave (over enthusiasm was largely the problem I suspect). Although it is only a tiny mark on our reputation (and probably almost forgotten already) it serves to illustrate the importance of people knowing what they should be doing so that rescues run smoothly and safely.

Dartmoor Rescue Group demand all members attend six exercises a year or they are scrubbed from the list. They also have a substantial training period before members are placed on the callout list. This is a bit extreme for DCRO given our level of activity but I would make a case that the same principles should apply - anybody not on the list should not be involved in a callout and inclusion on the list should not be a right but earned by demonstrating some level of aptitude initially followed by ongoing commitment to practices. Your views please!

Keith Jackson

Get your breath back. Here is the account of that callout.

DCRO Callout - April 29th 1999

This was a fairly minor event where DCRO was asked to help DRG with a search for a missing person who had attempted suicide earlier in the day. At the time the Plymouth caving community were having their Thursday night beer when the DCRO pager went off with a message to contact the Plymouth Police Station. We were asked to help the DRG search by checking an adit near Goodameavy Tunnel which was suspect. This was about 10.30pm but fortunately we had a sober driver with a Landrover outside with caving kit still in from a club trip two nights previous. We managed to reach the rendezvous at Clearbrook in twenty minutes from being paged with a half dozen people and kit. Not a bad response time I thought! After

being briefed by DRG (and then rebriefed differently by the policemen in charge...) we set off to the adit which is short and a bit wet and which was found to be clear.

This did seem a bit of an unnecessary callout as there was no real reason as far as we could see for suspecting someone was in the adit. Given the time of night and the nature of the task a full callout was not initiated as it seemed unnecessary and I feel our response was quick and effective. Thanks to all those involved.

Keith Jackson

1) In a series of articles on cave conservation

Conservation Vs Preservation

Over the past year I have seen an apparent trend for preservation to be confused with conservation. So is there much of a difference (I hear you ask). This article should demonstrate the considerable difference between conservation and preservation and point out when each should be used. Initially, this article will talk in general terms before applying it to caves (Devon caves in particular) since this is open to interpretation.

Conservation - (in terms of the environment)

> To attempt to maintain, and if possible improve, a designated natural environment through careful management. Traditional activities that do not damage the site are encouraged, along with public involvement and education. Activities that are damaging are altered to have as little impact as possible, but when this cannot be achieved the activity is stopped. Good management should lead to a general improvement of the site compared to when the active conservation was initiated.

Preservation - (in terms of the environment)

> To attempt to maintain a designated natural environment through isolating the site from all human impact. In preservation alone, the site is fenced off from human intervention and left to its own devices. No alterations are made to the site other than occasional monitoring. Preservation is usually intended to allow the site to naturally improve compared to when preservation was initiated, but can lead to no change or, in rare cases, considerable deterioration to the site.

Natural Environments?

Before discussing conservation and preservation further it is worth considering what a natural environment is, because this demonstrates how preservation appears to fail occasionally where as in truth it also always succeeds.
Early attempts to protect meadow flowers were deemed a failure. This is because a process of preservation was applied and the meadows left completely alone. Inevitably the meadows started to revert to their true natural state, woodland. This showed that the meadows only existed as a consequence of traditional farming methods. Preservation, in fact, worked perfectly in creating a natural environment, it just failed to protect the environment that needed protection.

This raises the question of whether a particular environment is, as such, a natural environment. In the case of the meadow flowers they were noticed to be in decline due to modern farming methods and yet relied on traditional farming methods, bringing in the concept that environments change over time due to human, as well as climatic, influences.

It is not possible to create a truly natural environment as such, due to the extensive changes over time from human influences. For example, since Roman times many species have been introduced that we now consider part of our natural environment, including rabbits and grey squirrels, and others have vanished, including bears and wolves. There have been suggestions that Britain's environment should be returned to how it was before it was altered by humans and therefore prior to farming, ie. the Stone Age. If this is applied to caves it must suggest we should live in them!

If we therefore accept that the environment we live in is a consequence of 4500 years of human influences we must decide what we are really aiming for in conservation and preservation.

Preservation of Caves

Except where bats are concerned (see the section on bats below) preservation is an admission of defeat and should only be used where conservation has failed.

Preservation is very easy for caves, since they are easy to gate compared to wide open spaces. It is also almost guaranteed to keep the cave in the same condition as when it was first preserved, and some caves have been known to clean themselves up over time. In the unlikely event that it was found that the cave environment relied on humans in some aspect, the sudden change brought about by preservation would be likely to be very damaging and difficult to reverse quickly.

This may generally sound like the ideal solution in terms of the cave but the alternative of conservation should be studied.

Conservation of Caves

Conservation relies of careful management. Generally the changes made by conservation are more subtle and can easily be changed should they be found to be detrimental to the cave. Education can easily be integrated with the conservation by informing groups of the work being carried out and most importantly the results can be seen in the cave to encourage further conservation. With activities like cleaning, the cave can be considerably improved and if all groups using the cave are involved the stals are unlikely to be re-muddied for a considerable length of time. Good conservation should see a continued improvement in the cave whilst allowing for access to cavers and other interested parties.
Conservation tends to be fully supported and spreads from site to site as the benefits are seen. Preservation generally has less support and creates more pressure and therefore damage to the remaining sites. It is possible to conserve, but not preserve, every cave in Devon with support from cavers.

Bats and Caves

When a cave is a significant bat roost preservation becomes a practical option. Since we know so little about bats, conservation cannot easily be applied ie. we cannot improve the site other than by isolating it from humans. Despite this a policy of conservation is usually applied in that the sites are often open to controlled numbers of cavers at less sensitive times of the year. This means that cavers can get to see the results of the conservation measures and thus can appreciate them. On the whole most cavers are quite happy with this arrangement, again showing thhe benefits of conservation over preservation.

Humans and Caves

In rounding up this article I would like to consider the role of humans and caves. Most people will agree that in caving we are intruding in an environment best left alone. Though this is very likely to be true it is worth considering the use of caves throughout time.

Throughout the stone age any open and dry caves are likely to have been occupied by humans. As settlements developed the caves may have been used by bears, wolves and other large mammals. When the bears and wolves became extinct in Britain the caves probably were less often occupied but some were certainly used by badgers and foxes and as a general shelter for animals up until caving became popular.

Considering this, it is conceivable that a healthy cave relies on large mammals to sustain it. Large mammalscould well assist in bringing in seed and spores every day from their foraging trips which cover a relatively large area. Also the material they would usually introduce, like bedding, food and waste, could be essential in sustaining certain cave species. Even their presence in the cave may be important in creating extra circulation of air and raising the ambient temperature.

Though I agree that this is unlikely to be true, or at least has no noticeable or beneficial affect and may even be damaging, it is still worth considering. It may prove that the role of cavers (as

a form of large mammal) may, in the future, be found to be beneficial and may even be essential. Thus I would also like to conclude that subtle conservation should be used where possible until the full long term affects of the sudden changes from the preservation of caves are known.

Calum Beeson - Conservation Officer

DCRO Training Weekend 5/6 June - Pengelly Centre

This event proved to be quite a success despite being plagued by torrential rain on the Saturday but some improvisation by workshop leaders kept many activities indoors.

The Saturday morning saw seven people trained and hopefully eventually certified in the use of SLB explosive under the direction of Nick Williams of the BCRA Explosive Users Group (EUG). The rain unfortunately restricted the number of practice blasts taking place but enough was achieved for the participants to be classed as competent (!?!). Meanwhile, Jon Whiteley did well to quickly improvise an indoor rigging workshop and Lee Willis of the PLIMS Emergency Doctor Service gave a refresher lesson on CPR and basic casualty life support with the aid of two able and willing plastic assistants.

After a huge delivery from the local chippy the afternoon started with Keith Pearson giving an impressive demonstration of the use of Hilti caps for splitting boulders followed by a demonstration of the use of Plug and Feathers by Nick Williams. The afternoon saw Hugh Browning sharing his knowledge of placing rock anchors and everybody had an opportunity to place a spit in the back wall of the Pengelly Centre back garden. Ali Neill also gave a useful workshop on rigging and hauling techniques. After a brief talk by the representatives of PLIMS and EUG a monster meal was produced by Lynn Furneux and Bill Richards which was well appreciated and lubricated by a barrel of ale.

After dinner John McColm who is a radio communication expert with links with DRG and an emergency radio group called RAENET told us a lot about the subject of communications for emergency services as well as a quick lesson on operating protocols for the radios we would use the next day on an exercise organised by DRG. Dave Crooks of DRG then briefed us on the exercise and told us some more about his group. The evening was the rounded off with an excellent slide show by Andy Pryke of the DSS Berger Expedition followed by much beer and silliness.

The Sunday started with an excellent breakfast (again thanks to Bill and Lynn) and a drive to Ventford Reservoir to meet DRG. After a hike up above the reservoir we split into small groups to refine our navigation techniques with assistance from DRG members. This was followed by a search and rescue exercise to find two casualties, treat them and then evacuate them on stretchers. Our searching technique was not immediately successful but we found the casualties

eventually and headed back to the reservoir for a debrief at about midday. The weekend then wrapped up with a pub lunch in Holne.

Everybody involved seemed to have a good time and thought it was a worthwhile weekend despite the appalling weather. Many thanks to those running workshops or catering and to Keith Pearson and Stewart Newall for collecting and transporting the rescue gear. Particular thanks to Lee Willis for his time and the donation of a stretcher from PLIMS and to Nick Williams for coming down from Derbyshire. Thanks also to the farmer at Churchill Farm for removing Robert the bull from Bakers field! The next DCRO event is likely to be in November and will be a conventional rescue practice. Anybody who would like to organise this is welcome to volunteer.

Participants:- Keith Jackson, Ben Ford, Tom ?, Hugh & Trish Browning, Patrick Hanlan, Jim Hanlan, Stewart Newall, Ali Neill, Jon Whiteley, Adi Parsons, Annabelle Ozanne, Keith Pearson, Lynn Furneux, Bill Richards, Geoff Dommett, Mike Bond, Andy Pryke, Bill Tolfree, Karl Russell, Alec Collyer, Lee Willis (PLIMS), Nick Williams (EUG), John McColm (RAENET), Dave Crooks (DRG)

Keith Jackson

This is the final article in a series, begun in the December 1998 Newsletter, describing caves and caving, often in diary format, by PCG members in northern Spain over the past few years.

Matienzo 1996-1998 (Part 3)

At Easter 1998 a large group shepherded in diving gear for Martin Holroyd and Ross in order to continue exploration of the upsteam Rio Rioja, from where Rupe left off. They dived sump 3 for 50m to a cross rift, and on the way back found the way on in Sump 2 - beyond here Rupe had evidently just followed an inlet. This was left at 50m, when they curtailed activity due to bad weather and fear of flooding. A number of trips were made to look at leads in the Maze area, which didn't go.

When the major extensions were made in 1994, a number of side passages were noted during the exploration of Toc Gallery (a major stream passage which heads towards Matienzo and the South Vega system) by Ali and the Catalans. At Easter 1997 Ali, Keef and Paul Stacey had a look at these, as far as the Grand Daddy of all avens (+100m high and 20m in diameter). Keef managed to make a very awkward climb up slippery mud-covered walls into a previously un-noted roof tube, which was left for a further trip. This was returned to by Ali and Johnny in August 1998. After a number of connections back to the roof of Toc Gallery, a switch-backing rift passage was followed as far as a draughting climb up, which may need hammering. This passage is about 170m long.

Further downstream in Toc Gallery, a draughting inlet was pushed a short distance. At Easter 1997 this passage, named Hale Bop, with a fine orange flowstone floor, was pushed through a tight squeeze by Keef and Paul. In the summer, Ali, Paul, Annie Wakeham and the Catalans opened up the squeeze and climbed up into a series of fossil passages. These choked in both

directions but a side passage led to a draughting inlet explored by the Catalans to a draughting constriction. After this we exited leaving the Catalans to wait for their friends who had gone to do a bolt route in New York Gallery - which didn't go. On their return they discovered the rope of Double Dutch pitch was snagged, leaving them stranded for 13 hours before somebody decided to go and look for them. There are no obvious points for a rope to snag on the pitch, so perhaps it would be good practice to make sure ropes are always tied off at the bottom of pitches.

Another trip (Ali, Julia, Paul, Annie, Martin Upfold) looked at a draughting passage on the left just after the 1994 breakthrough point. This connected to a route Big Nose had previously explored, ending at a climb into a large chamber. A strong draught was found in a rift in the roof, followed but not surveyed for some distance. The system is now about 25.9km long.

774 Cueva de la Morenuca

In summer 1997 we looked at a number of sites. Going through the long Magic Carpet crawl into Mostajo, a traverse was crossed into a large passage which ended at a choke and inlets. Below the Bad Bolt pitch, a crawl leads over a pit into a wider passage, one way leading to a stal choke, the other to a draughting sand dig which was pushed some way and may be worth pushing further. The pit leads to the Stair-rod to Heaven, a pitch which was dropped in 1995 by Sheffield University S.S., they said it didn't go. We had another look, finding the pitch dropped into a chamber where the draught came from a slot down on a ledge on the right hand wall. A few minutes hammering opened up a drop into a crawl, which led to a constriction hammered open onto a short drop. Returning the next day with a ladder, signs of previous exploration were soon noticed - we were in the GT Series of Torca del Regaton. At the same time others made new connections down pitches from Mostajo into Regaton. This has opened up the possibility of an epic through trip in the Cubija System, entering El Cuvio into Regaton, up to Morenuca, along Magic Carpet into Mostajo. So far this trip has never been done.

852

A climb down to a dig with a good echo, this was dug in 1998 by Ali and Pete Smith, to gain an awkward climb down into a blind aven.

1088 and 1089

Shafts near Alisas discovered in 1996, 4m and 30m deep.

1120, 1122 and 1123

New shafts found near 545 in the summer of 1996.

1128

A previously found site, a climb down onto cattle carcasses then a steep awkward slot descending to the top of a pitch of perhaps 20 or 30m depth, not descended. Inward draught (Ali and Pete Eagen Summer 1998).

Sites at La Secada, Easter 1997

Paul, Pete, Liz, Lank, Ali, Hugh. A walk around La Secada - a short walk from the campsite. Ten new sites and digs found - including Speleoarson - a tight tube taking a strong inward draught when a fire was lit at the entrance. Fortunately Lank did not repeat his exploits of the previous day, when he set fire to a huge area of hillside, almost destroying a farmer's water and electricity supply, whilst (he claims) attempting a smoke test on a possible dig.

1184

Previously unexplored, a 10m crawl.

1211 Cueva de Fanny

This cave is on the ridge over Fresnedo, and may be connected to that cave. We were shown it by the farmer. A 4m pitch onto dead things, then 100m of passage ending where the draught goes into tight rifts. (Ali, Phil, Julia, Simon, Summer 1997).

1212 Torca de Necrophilia

Pitches of 8m, 12m and 12m to a dig later passed to a further pitch and choke. Ali, Phil, Tania and Julia, Summer 1997.

1248

A shaft found by Hugh and Trish in the valley above Toad, explored to a depth of 48m.

1250 Torca Lorca

A very strongly draughting site discovered by the Davis family. Several days were spent digging down to a constricted pitch through boulders. This was later passed and 179m of passage surveyed, but the dangerous state of the pitch has put people off and needs sorting out before anything further is done.

New Sites Discovered during Summer 1998:

1320

A new shaft, unexplored, on La Colino (cueto).

1321

A 7m free- climable shaft.

1322

Shaft about 7m deep.

Torca Candida

A shaft which Steve and Candy Openshaw discovered on their honeymoon, when Steve nearly fell down it. Looked at by Steve, Ali, Joe and Phil Pappard last summer, who found it choked. Other sites found nearby were 1326 to 1329.

1332

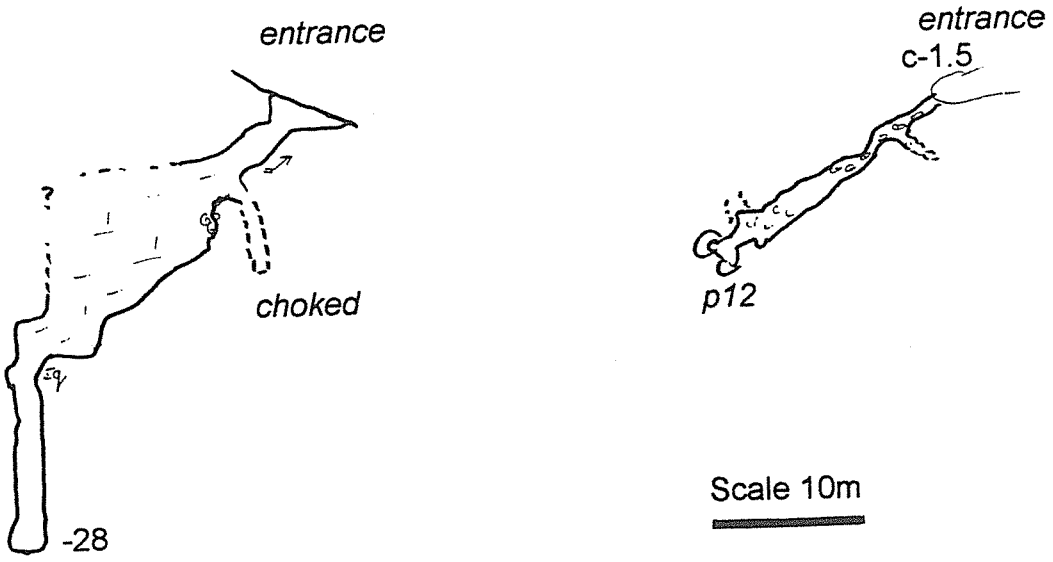
A new site found by Ali and Jane. A large depression, with a climb down at the back through boulders which gives a huge draught in hot weather. A bedding gives access to a climb down into a roomy chamber. Back under the climb a further large chamber is reached, where a slot at the bottom gives a good draught. This was enlarged by hammering and Hilti caps so it is nearly possible to get through. A climb up on the back of the chamber leads to a draughting pitch descended by Pedro, where the way on was too tight, and a series of rifts with a connection back to the entrance bedding. This cave may be connected with the East Wanders in Cabana, and there may be a major continuation to the east - there are many strongly draughting holes over the hillside.

1333 Torca Tortilla

A site found after the Tortilla competition at the Baker's Bar, a grand event which was part of the Matienzo Fiesta. It's amazing how much vino has to be drunk to judge a good tortilla! A large slot on a steep hillside high on the ridge led to a draughting entrance, a drop into a steeply descening rift. After a steep stal floor, two pitches down with very tight heads were dropped by Pete but didn't go. The outward draught presumably comes from higher entrances and may connect with the tall rift passage at a higher level. 35m long. Pete Eagen and Ali, August 1998).

Torca Tortilla 1333 *Survey Matienzo Expedition 1998 BCRA Grade 5c*

Elevation *Plan*



Other New Sites Found in Summer 1998

1320 an undescended shaft found by Ali on La Colina (the hill formerly known as Cueto).
1321 a 7m free-climable shaft.
1322 shaft about 7m.
1323, 1330, 1331 shallow shafts near Reguilon.
1334, 1335, 1337, 1338 blind shafts (Ali and Jane).
1336 undescended shaft c 30m.
1340, 1241 shafts undescended (Ali and Pete).

Other New Sites (numbers not known)

26th July 1996 La Gratuna area. Toby, Jane, Graham, Ian Lawton. This is a new area to the expedition, above the significant resurgence of cave of Fuente Aguanez which we had been allowed to explore in previous years. Locations for further visits were noted. South of Aguanez, an old zinc mine was looked at in 1998, partly an enlarged cave passage.

La Gatuna. Tib Pot and Fib Pot (7m and 13m) descended 1996.

New site above Codisera, 9th April 1997. Lank, Pete, Liz, Paul, Ali, Hugh.

Walked along Beralta - a 15m shaft to a choked rift.

Six new sites near TV mast. Two 8m shafts descended. (Hugh and Trish, July 1997).

Various digs at the top end of the Vega (Paul, Annie and Ali, Easter 1998).

An interesting rift and other sites nearby, not fully explored due to a dodgy bolt (Stump) and driving rain and snow (Stump, Rob, Ali, Vince) - in an area high above Arenal, worth returning to (Easter 1998).

A shaft not explored above Cobrantes - Ali and Joe, Summer 1998.

Alasdair Neill, Keith Jackson, Bob Cawthorne, Hugh Browning

A Peep into History

The abandoned engine houses which remain as sentinals to a long history of mining in the St Just-Botallack area are perhaps situated along one of the most picturesque of the Cornish coastlines. As less and less features are to be found on the surface, the drowned levels and shafts are but a hidden reminer of the activity which took place over 150 years ago.

Let us go back to 1836.....

'The mines being almost all either in the slate (which, where it occurs, is seaward), or in the granite at no very great distance from the line of junction - many of the 'levels' (galleries) are extended beneath the bed of the ocean, the adits usually opening, but so far above the sea level, as to be out of reach of the waves. The labourers descend to the entrance either by a zig-zag path, as at Levant, or by ladders on the face of the cliff, as formerly, at Botallack.

We have been in Little Bounds, Wheal Castle, Botallack, Wheal Cock and Levant, and heard the roll of the waves overhead. In Little Bounds and Wheal Cock the excavations have been made into the sea; in the first, it being on the beach, and dry at low water, it was secured by well-caulked planks; in the second, the hole made by a borer being but small, it was stopped by a plug. We have been in Wheal Cock during a storm, and when there was but three or four fathoms of rock between us and the water. Immediately beneath the beach the roar of the billows, as they broke on the shore, and the grinding of the pebbles against the beach and each other was deafening. Nor shall we soon forget our alarm lest the ocean should break through our slender protection. The miners themselves were somewhat afraid, although they still continued to work away the thin layer of ore which stood between them and the Atlantic. In following the 'level' seaward, we soon get past and out of hearing the commotion on the shore. The noise, as we recede from the cliff, becoming more and more faint, until nothing of the 'elemental war' is audible, but now and then a pebble rolling rapidly outward on the bed of the sea, projected by a more than commonly powerful wave.

The scite of some of the steam engines is highly picturesque. Most of our readers who have visited Penzance are conversant with the prints of the Crowns' engine at Botallack; and the

water-wheel which formerly worked at Little Bounds, has embellished many a pretty sketch of the Land's End, Carreg-Looz and Cape Cornwall. The engines at Levant are in situations quite as wild and romantic - the spectator who may have descended to the adit's mouth near sea level, almost shudders as he looks up at the engines, houses, and other appendages, seeming almost suspended over his head in the air.

.....Rather a striking peculiarity of the St Just tin mines, which are worked in granite is, that the water drawn by the engines is used for domestic purposes. We have seen fifty women washing the linen of their families in the warm water from the steam-engine at one time standing around the engine-house; this occurs at Boscean and Boscaswell Downs and Wheal Owls, and we have also since seen it at Wheal Cunning. It is rather a singular sight of a Monday morning to see the females hastening to the mines, bearing on their heads their washing trays, and the linen of their respective families.

.....In most of the other mining districts of Cornwall, the holes for blasting are 'put down' by teo men, one holding the 'borer' while the other strikes it with his iron 'mallet'; but in Saint Just one person uses both these tools, and bores his hole without assistance. In this neighbourhood also, the 'pick and gad' are less frequently used than in other parts of the county; the 'picker and poker' being substituted for them.

The 'picker' is a bar of iron tipped with steel, the part next the point being flattened, to perhaps about an inch wide and one-third or one-quarter of an inch thick, its length being adapted to the spot in which it is to be used. It is employed for removing softer parts of the 'lodes' or rock in order to facilitate the operation of the gunpowder; and like the 'borer' is applied with one hand, and struck with the other. The 'poker' is used in the same manner, but on harder substances, and is simply a bar with a 'gad' point.

As might be expected, the miners of this parish very much prefer their own tools and modes of working, which they say are peculiarly adapted to their 'hard ground', to those in general use elsewhere; whilst others condemn them. On such a question our humble opinion is not worth recording'.

(Mining Journal, 2nd April 1836)

.....and closer to home..

Prince Arthur Consols

'On Monday last, there was a large gathering of gentlemen interested in mining, to witness the starting of new machinery at the above mine which under a new name is about to resume working, as Wheal Betsy, the mine was long worked by the Messers Taylor, and she returned during thirty years, silver and lead ore to the value of £190,000. She was worked to the depth of 190 fathoms under the adit level, and is now undertaken by an influential company, formed at Glasgow, on the principle of limited liability, and with a capital of £20,000. The surface works were begun as early as January last, but since then a large wheel called 'Victoria', 50 feet diameter, $5^1/_2$ feet breast, and reckoned at 50 horse-power has been erected, with all

corresponding and necessary accompaniments, such as wheel-pits, lobbies, capstans and shears, and a line of flat rods 190 fathoms from the great wheel. In addition to this, another wheel equal to the one described, is to be set up for pumping, and two more of less power for crushing and drawing.

Besides the lead ore the company have a copper sett, with lodes parallel to those of Wheal Friendship, and from which great things are expected. Captain James Richards, of the Devon Great Consuls, is the manager and Captain George is the resident agent. Mr William Mathews, of this town, is engineer, and the extensive and valuable machinery has been erected by Messers Nicholls, Williams and Co. of the Bedford Iron Works. We believe that the name of Prince Arthur has been given to the mine in consequence of the visit paid to it by His Royal Highness, Prince Arthur, when travelling in this neighbourhood.

.....the scene on the mine was gay and animated. Large numbers of people attended from the surrounding country, and the posts were decorated with flags. At two o'clock the launder was charged with water, and almost at the same moment the huge wheel began to revolve. Mr Thompson christened it Victoria, with the usual ceremony, and the air resounded with the hearty cheering of the assembled company, cheering which 'the vales redoubled the hills'. The working of the machinery was most satisfactory, and perhaps more satisfactory to the workmen was the dinner provided for them, of which they partook in a large workshop on the mine. After witnessing the working, the general company adjourned to

The Dinner

.....After the cloth was withdrawn, and the usual loyal and patriotic toasts had been heartedly responded to, the Chairman proposed the toast of the evening 'Prince Arthur Consols' - (loud cheers).

Several of the captains proposed toasts ....ending with the health of the Mine Surgeon, Captain Kent, the Working Miners, Captain Skewis, Mr Williams and 'The Press', were proposed and duly acknowledged by the respective toastees, and the meeting broke up well satisfied with the day's proceedings and animated with cheerful hopes for the future.'

(Tavistock Gazette, 24th June 1864)

Trish Browning

Visit to Tower Colliery (May 15th, 1999)

Keith Jackson, Ali Neill, Zoe Sayer, Kay Baker, Kevin Baker

It has always been one of my lifetime ambitions to visit a working coal mine since many of my ancestors worked in the pits of South Wales during the boom era. In May 1999 I heard that Kevin Baker (of Carn Brae Mining Society) had managed to fix a visit to Tower Colliery in

Hirwaun and had spare places so I jumped at the chance. The five of us on the trip met at the Croydon Caving Club cottage and had an unusually peaceful night as we had the cottage to ourselves.

We arrived at 8am at the site and changed before meeting our guide Gary O'Brien, who is the colliery Training Officer. After a brief description of the mine layout, geology and history in the training room, we were taken to the Lamp Room and were fitted out with helmets, lights and self rescuers (a device to breathe through in case of fire which converts CO to CO_2). We then walked over to the pithead at No 4 Shaft, where we were frisked for contraband (fags, lighters, battery equipment such as watches, etc.). The room below the headgear is entered through an airlock and surrounded by fans, making this room deafening and very windy. We were given tokens by the poor bloke who I assume spends all day in this rather hellish place, and were then squeezed into a rather battered and small cage.

I must admit I felt rather unnerved at this point as the place had a rather demonic feeling, and I had remembered stories of cages being more or less dropped and the brakes being applied at just the last moment to keep the time involved in transporting the men to a minimum. Fortunately, it was quite a gentle descent, to a depth of 160m. The area around the bottom of the shaft was big, well lit, airy, and incredibly hot (I was in T-shirt, fleece and oversuit!).

The area around the shaft is on the 9-Foot seam but present workings are in the deeper Bute Seam, which is reached by a drift descending at 1 in 4, with tramway haulage. At the foot we passed through ventilation doors into the M2 Motorway, which forms the intake roadway. The air comes from the surface down No 3 New Drift, a 1 in 5 incline, 1.5km long which takes the coal up to the Preparation Plant near Hirwaun. The much warmer return air comes up the M1 Motorway, which is parallel to the M2, then along the route we took from No 4 Shaft which is upcast. From here on, instead of the traditional trams used for carrying materials, FSV's (Free Steered Vehicles) are used, kept at a garage on the M1. The M2 runs about 2km to the south west, to the areas presently worked. Various massive pumps, sub stations, and other noisy equipment were passed. The drives are about 8m wide by 3m high, and contained conveyers, which were mostly not working as this was a maintenance day. However some were still running which was fortunate as we then introduced to the art of man-riding. This is the means by which the miners travel in and out of the pit and involved standing on a platform and throwing yourself head-first onto the conveyor. This ride beats anything at Alton Towers and soon whisked us great distances. Getting off the conveyors is a bit hairy at full speed but Gary usually managed to jump off first and hit the trip button. We then entered the current working panel, passing through ventilation doors where the return air from the face is passed in metal trunking over the top of the intake roadway we came in on. At the other end of the face an intake drive also connects to the roadway, and contains coal conveyors and a crusher. Just before the face we saw work on methane drainage bore holes, which are driven up at an angle to the seam above. Methane tends to migrate from the seam into the surrounding strata, and in particular around faults. It is now piped to surface, and this year a power station burning methane has been commissioned which it is hoped will make the pit at least self sufficient for electricity. The methane is extracted by suction, the pipes carrying 50-60% methane. Methane is obviously a big concern which requires powerful ventilation to keep to safe levels, and there are all manner of methane monitors scattered around. We were told Tower is the most gassy mine in Britain.

At the face we saw the coal cutter, an awesome machine with two cutting wheels and which is wholly computer controlled. This moves along the face dumping the coal onto a Panzer conveyor. Once the cutter has travelled the length of the face (which is worked by retreating back towards the main roadways), the cutter and conveyor must be moved forward to reach the newly exposed coal. The roof is held up by powered supports which the men work and which push against the roof and floor by rams. These also act as an anchor for pushing the cutter and conveyor forward. They are in turn moved forward by retracting the rams on each in turn, there being 50 odd supports along the face. The roof behind the supports soon collapses as they are removed. It was an awkward, cramped and dangerous feeling place, even with the machinery switched off (it being a maintenance day) so we didn't have the accompanying dust, water spray and noise. There were still all sorts of creaks, groans and minor falls from the roof.

There had been considerable trouble with an unpredicted fault discovered during the development of this face, which appears to be a minor thrust. As well as causing a minor displacement of the seam, it also resulted in bad roof conditions. It had been possible to work the face through this fault, which also appears in the next face to be worked in the future, to the north west. Also in the south west part of the face, part of the seam, which is about 2.5m of top quality anthracite, carries high sulphur values so the height worked is reduced to avoid these.

The journey back was more arduous as many of the conveyors were now off for maintenance but the mile long section we walked up gave a lasting impression of the scale of the place. However, some of the conveyors were ridden giving some of us a chance to demonstrate our lack of technique at getting on! Back at surface we were shown the winder and then had a welcome shower - we were filthy by now. We were then shown the control room, where all underground operations are monitored.

Then we had a look at the modest but interesting visitor centre (open to anyone but I suggest you book as they need to unlock it). This charts the recent history of the pit from the miner's strike, the closure by British Coal as a mine with no chance of any future, and then re-opening after a workers' buyout. Everybody in the mine is obviously very proud of their achievement of running the mine as a profitable co-operative for the past five years and there is enough coal to last many years longer.

This was a very memorable trip and bears no resemblance whatever to touristy sites like Big Pit. It is not easy to arrange a trip, but if you get the chance I thoroughly recommend it.

Some sobering thoughts came over the weekend when I mentioned to Selwyn (landlord of the New Inn near the Croydon Hut) that we were to visit the pit the next day. Expecting a response of interest and surprise I was a little taken aback when he quietly recounted his memories of explosions and fires at the colliery which had claimed many of his friends and relatives in former times. What we saw now was one of the most modern and safe coal mines in the world. However, at their height the South Wales coal and iron fields were one of the richest boom areas in the world but this had a high humam cost since techniques and conditions were very much more dangerous than they are today.

Tower is the last deep mine in Wales which is now a tiny remnant of a massive industry which made the area so prosperous, but its decline and recent decimation has reduced the area to one of the poorest in Europe. This history of mining and the strong socialist tradition of the valleys seemed to made these remaining miners almost into local heroes. It will be a sad day for the area when this last mine is closed, but I hope this will be a long way off.

Keith Jackson (and thanks to Alasdair Neill for the technical info.)

News Items

South Caradon

This was re-opened without the landowner's consent last year. It had been sealed on the landowner's instructions about ten years ago. The landowners were planning a more effectual sealing of the entrance. However, the Caradon Mines Research Group have negotiated a lease. A new more secure entrance has been constructed. For access contact -

Kelvin Tiltman 01503 250370

This mine was always popular with visiting groups, in particular because of its superb secondary copper formations. However some of the timberwork is in a dangerous state, so general access may not be possible until substantial restoration work has been carried out. Any attempts to force entry may result in the entrance being sealed once more.

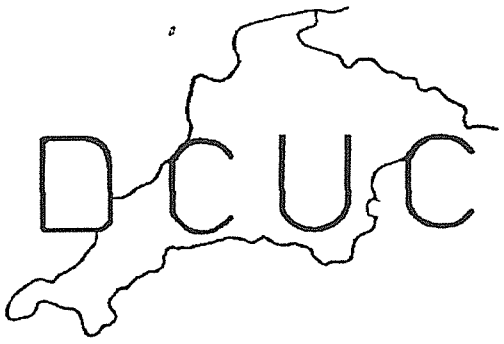
Last Devon Mine

The last deep mine in Devon, WBB Devon Clays Ball Clay Mine near Kingsteignton, closed in March this year. This mine, exploiting the Ball Clays of the Bovey Basin, was the last working mine in Devon.

Kitley Cave

Kitley Caves a popular tourist site beside the River Yealm have this summer been closed to tourists. From spradic public opening in the late 1960s and 1970s, when John Dryden obtained a lease from Kitley Estate and the site was often manned by volunteers from the Plymouth Caving Group, the caves developed in the 1980s into a popular tourist attraction run directly by the Kitley Estate. A feature of the visit was that this was one of the few caves where self guiding occurred. John Wright is continuing with his excavation work and the Kitley Estate will continue to allow visits by interested groups.

IMPORTANT INFORMATION CONCERNING THE ACCESS TO PRIDHAMSLEIGH CAVES PLEASE READ AND DISTRIBUTE TO ALL MEMBERS OF YOUR ORGANISATION



To all persons responsible for Caving.

The Devon and Cornwall Underground Council have been informed that Mr Graham Hamlyn-White of Pridhamsleigh Farm, will be increasing the fee for access to the caves of Pridhamsleigh (Prid, Little Prid and Dog Hole). The Fee will be £1.00 per person, this fee will charged for any person crossing the land. The new fee will come into force on the 14th June 1999.

Mr Graham Hamlyn-White has been forced to increase the access fee due to high insurance premiums. The DCUC are also aware that on a number of occasions Mr Hamlyn-White has been inconvenienced by the thoughtless actions of cavers. These include; leaving gates open to fields containing livestock. Damage to bales of hay. Large amounts of litter being left in the two parking areas. Mr Hamlyn-White has also received a number of complaints from neighbours, with regard to the actions of cavers, these include; feeding horses totally inappropriate food, blocking access gates to fields, abusive behaviour from groups, urinating and defecating in the fields adjoining the caves and the fields by the stream. The DCUC support Mr Hamlyn-White and are actively trying to work with him in maintaining the access to these important caves.

The DCUC are requesting the full co-operation from all users of Pridhamsleigh, please note the following important conditions of access. Please ensure all members of your organisation are informed of the conditions. Mr Hamlyn-White has expressed that **failure** to meet these conditions will result in your organisation/club being **disallowed** further access. Please display the enclosed poster as a reminder to all members of your organisation/club.

If you wish to raise any questions with regard to the above please contact: **Jon Whiteley, DCUC. 2 Church Cottages, Clannaborough, Bow, Crediton, Devon, EX17 6DA. Tel & Fax: 01363 84034** not Mr Graham Hamlyn White of Pridhamsleigh Farm.

CONDITIONS OF ACCESS TO PRIDHAMSLEIGH CAVES.

1. PARK YOU VEHICLES IN A RESPONSIBLE MANNER – DO NOT BLOCK FARM GATES
2. ENSURE THAT THE ROAD IS NOT BLOCKED BY MEMBERS OF YOUR GROUP
3. SIGN IN ON THE CHALK BOARD BY THE FARM DOOR (LEAVE CORRECT MONEY IF NON ACCOUNT HOLDER- £1.00 PER PERSON)
4. ENSURE ALL GATES ON THE TRACK TO THE CAVE ARE LEFT AS FOUND
5. DO NOT LEAVE LITTER IN EITHER OF THE PARKING AREAS
6. DO NOT ALLOW GROUPS TO ACCESS THE FIELDS AROUND THE FARM AND PARKING AREAS
7. RESPECT THE LOCAL RESIDENTS
8. DO NOT REMOVE YOUR NAME FROM THE CHALK BOARD, THIS IS FOR THE FARMERS PURPOSES NOT AS A RESCUE CALL OUT BOARD

PLEASE INFORM THE DCUC OF ANY ACCESS ISSUES. TEL:01363 84034

Hidden Earth '99

NATIONAL CAVING CONFERENCE & EXHIBITION
LEEDS UNIVERSITY CONFERENCE CENTRE, 10TH-12TH SEPTEMBER
WWW.CAVES.ORG.UK HE99@CAVES.ORG.UK

!! Group and Student discounts at the 1999 National Caving Conference !!

This year's UK National Caving Conference, hosted once again by BCRA, will take place on the weekend of 10th-12th September, at Leeds University. We are offering admission discounts to groups - but only if you book in advance - and don't forget to read the small print below!

- ***20% discount for groups of six or more* - get a weekend ticket for £14***
- ***40% discount for students in a group* - get a weekend ticket for £10***

* *Small print:* To qualify for a group discount you must be in a party of six or more, booking in advance for a full weekend ticket. To qualify for a student discount you must be part of a group booking, as defined here, and also an undergraduate student. A full price list will appear in the brochure.

- ***Prize for best club stand***

Club stands and space for displays will be available. You can use a club stand to ...

- ♦ sell club journals & advertise your club hut
- ♦ raise funds by selling T-shirts, journals etc.
- ♦ let cavers know what your club has been doing
- ♦ encourage cavers in your area to join your club

Don't forget that there will be a substantial prize for the best caving club stand. If you have been doing some surveying recently, why not display the results on your stand? - you might even win the Arthur Butcher Award (ask for details). If you book a club stand and you'd like a mention in the conference brochure - or if you'd like to advertise your club's accommodation - please contact us.

- ***Saturday evening late bar and 'stomp'***

featuring ***Rockett 88***, an R&B band from Sheffield ♦ Real Ale bar ♦ Quiet Area

- ***Friday field trips and SRT training***

We are hoping to arrange some field trips for Friday afternoon, and SRT training on-site at Leeds university. For information look out for our brochure in caving magazines and shops, write to us, or check out the web site.

- ***... also on offer:***

accommodation & breakfast on-site; campsite nearby
trade and club stands
expedition & science lectures
photography, video and cave art salons
meetings & workshops
SRT competitions
surveying competition

- ***Contact Addresses***

Bookings / general enquiries:
Peter Cousins, 8 Giffords Croft, LICHFIELD, Staffs., WS13 7HG. Tel: (01543) 251791

If you would like to give a lecture, please contact:
Paul Mann (Expo & technical), 83a Lonsdale Road, Summertown, OXFORD, OX2 7ES.
Tel: (01865) 316387 paulmann@compuserve.com

Alan Speight (UK regional), 63 High Green Road, Altofts, NORMANTON, West Yorks., WF6 2LG.
Tel: 01924 89228 alan@xspeight.freeserve.co.uk

If you can display a poster, or if you would like brochures to distribute, please contact:
David Gibson, tel: 0113 248 1218, fax: 0870 164 0389 david@caves.org.uk

Planned Meets

The following Tuesday evening trips have been planned:

20 July	Coleman's Maze, Brixham	Leader
3 August	Boat Visit to Sea Caves	Leader James Hanlan
17 August	Reeds to check formations	Leader David Jean
31 August	Pridhamsleigh	Leader
14 September	Bedford Consuls	Leader

As usual these meets will begin at 7pm from the car park opposite Bretonside Bus Station except for the first one which, because of the distance, will leave at 6pm. Also, anyone wishing to go on the boat trip should contact James in advance and Reeds should contact Dave in advance as numbers will be limited on both these.

There will be no Committee Meeting in August. The next meeting will be on 2nd September.

Have a good summer and write about it and illustrate it

The next issue of the Newsletter will contain an article on the recent Lands End trip plus an account of a South Wales visit and a survey of Cairo Shaft. Further articles or news items still required. Send to Dave Jean at 13 Tor Road, Hartley, Plymouth PL3 5TE.

Remember your subscriptions. Prompt payment to Martin Kent please. His address is Flat 2, 1 Rockland Place, Well Street, Callington. Pia will also accept subscriptions.

Also, remember the Club meets on the first Thursday of every month at 20.00 for its Committee Meetings at the Thistle Park Tavern, Cattedown and on other Thursday evenings at the Seymour Arms. Get there, join in, do something and write about it!