

Caving is often thought of as the poor cousin to other outdoor activities, either because fewer people participate in the sport, or because of a perception that it is dirty, uncomfortable and claustrophobic. I often hear, *"I couldn't go down those cold dark places, I would be afraid of getting stuck!"* Mine exploring in contrast is hardly thought of at all, but I'm sure it must have an even more negative image – *"Surely those old mines are extremely dangerous!"* Well, we know they can be too. But the risks, if managed properly can make this a quality adventure activity.

Twenty years ago, I was taken on a trip around Cwmorthin Slate Mine by Adrian Pearce, a mines expert. We entered the mine passing three roof collapses, (no worse now than their stability then!). We scrambled down through huge chambers, viewed countless relics of the mine's past, waded through water, struggled up an old incline, crossed a decaying old bridge and escaped up the miner's "Stairway to Heaven". This was a five hours round trip and I was well and truly hooked!

Now 20 years have passed since, as a caving instructor (C.I.C.), I was involved with Adrian in creating the Mine Leader

Training Scheme for the National Caving Association (as it was known at the time). This scheme had its origins in North Wales and I would like to look at what we created and how it benefits us today.

In March 1993 the first Mine Leader training course ran at the Kent Mountain Centre in North Wales and led to a national scheme which now covers mines in North Wales, the Forest of Dean, S.E. England, North Pennines and Derbyshire where the course included a mix of mines and caves. This then became the Local Cave & Mine Leader Scheme (LCMLA).

Most of the mines used by groups are in the areas listed, plus a few odd ones in the Lake District and South Wales. Some mines used are very simple, for example, Goldscope Mine (N. Lakes) is

a walk-in adit (a straightforward tunnel with no hazards) to the first chamber. Others like Cwmorthin (N. Wales), which has just been inspected and passed for use, provide a complicated and fairly extensive trip with abseils, traverses and a zip wire ( and this only visits half the trip I did in 1993!)

In the early days having got the North Wales part of the scheme up and running, someone thought it would be a good idea to run this past H.M. Mines & Quarries Inspectorate, (a department of H.S.E.) and get their approval. Thus our man from the N.C.A John Cliffe, and a 'tame' mining engineer Dave Carlisle, who has done a lot for the scheme over the years, went to the meeting at Bootle and brokered an agreement. This agreement established two key principles:

## Mine Exploring with Groups

by Dave Baines



*Main Pic: At Rhiwbach Slate Mine a boat is used to cross a large flooded chamber*

1. Leaders should be assessed and qualified by holding the LCMLA
2. The mine, or part of the mine to be used, must be inspected and given a report, (like an 'MOT') by a qualified mine engineer.

The LCMLA is administered by the N.C.A (now British Caving Association), and the inspections are organised in each region by local co-ordinators or groups which agree with users which mines people want inspecting. The inspections are paid for by all the users together, who each then get their own copy of the annual inspection report. The legal situation is quite different to cave leading, because a mine leader is considered to be at work, (i.e. centre instructor), and therefore some of the mines legislation applies to them, but not to caving.

## MINES vs CAVES

' Aren't mines a bit boring compared with caves?'

Some mines and caves can be, but not necessarily. So what is the purpose and benefit of exploring old mines with groups?

- Mines can offer an excellent adventure environment equal to a caving trip.
- It is possible in some mines to see interesting remains, artefacts and demonstrate the methods used in extracting the material taken out.
- With use of surveys/ mine plans, underground navigation can be interesting and challenging.
- In an area where there are no caves, mines provide an excellent winter-time activity when we discontinue many of our watersports.
- A mine visit teaches about social history, e.g. working conditions, what the stone/ mineral was used for and its importance at the time.
- In some mines there are beautiful formations to be seen as in some caves.

For example, I have a self discovery exercise which I use with groups in Holme Bank Chert Mine. This has the following brief:

"Find the way through the mine avoiding all danger areas marked on the map, entering at Entrance No.1 and exiting via No. 6. On your way through the mine you will find it interesting to see how many of the following features you can discover, e.g.

1. A piece of hanging chain.
2. A miner's boot.
3. A two seater loo for very friendly miners.
4. A stone built pillar.
5. A winch.
6. A mine truck. (etc.)"

Naturally I am accompanying the group in order to maintain safety as there are some very dangerous places off the approved route!

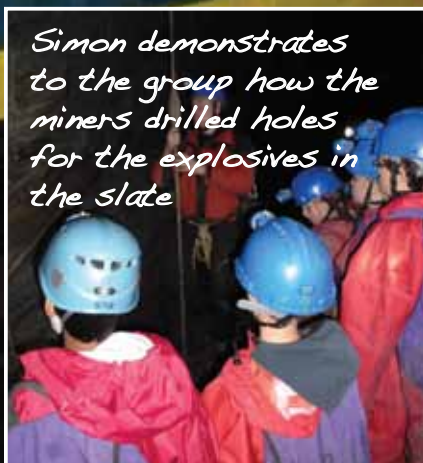
Holme Bank Chert Mine is a 2 Km through trip in Derbyshire.

Some other typical mine trips are:

- Smallcleugh Mine (N. Pennines), three kms to the Ballroom and back with challenging route finding.
- Rhiwbach Slate Mine (N. Wales), an adventurous through trip with a dinghy crossing, zip wire, abseil and waterfall climb.
- Devonshire Cavern (Derbyshire), a labyrinth of passages with a junction every 10 or 20 metres, and lots of scrambling.

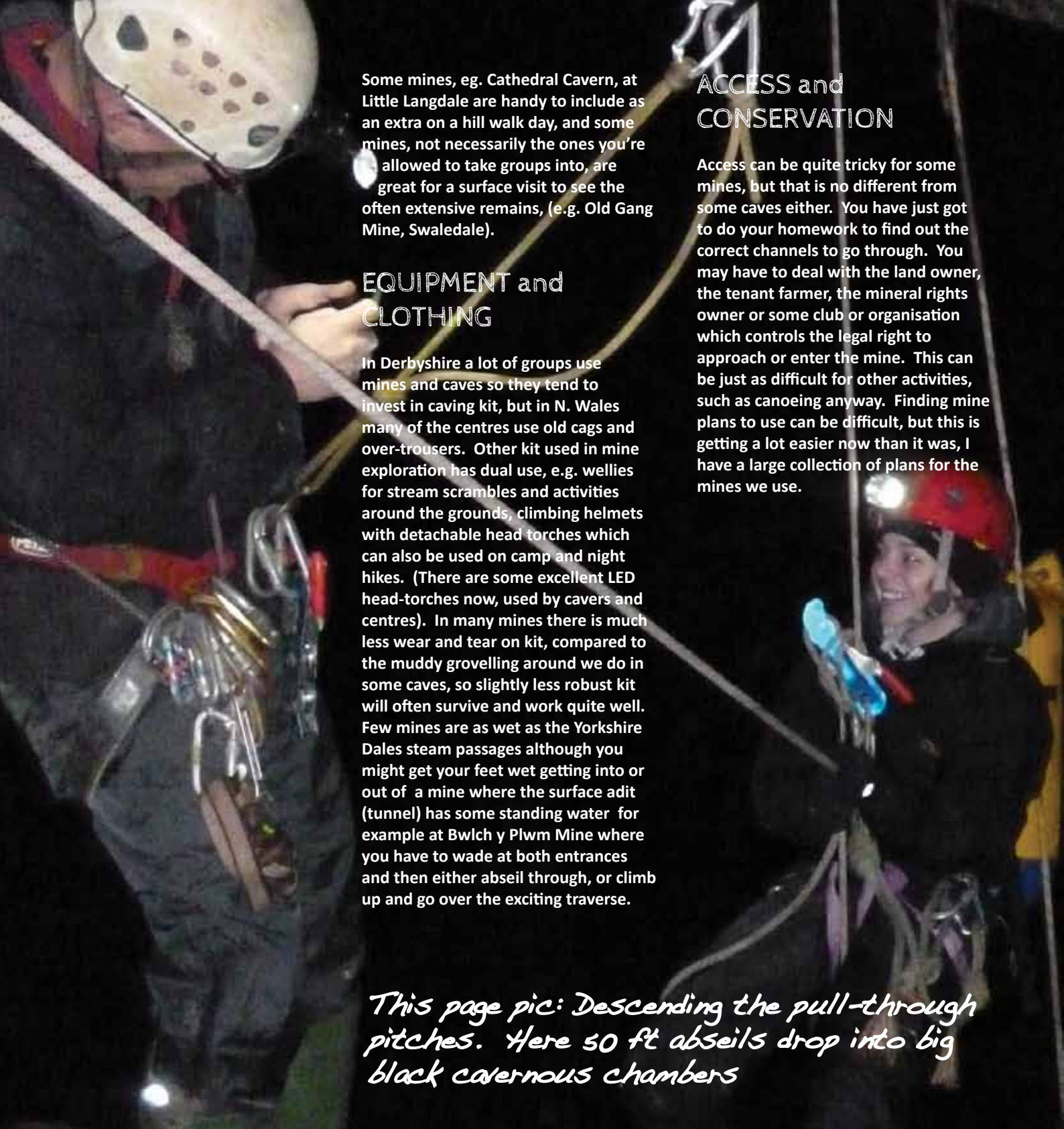
In Mouldridge Mine, a favourite of mine (forgive the pun!) for primary school groups, there was a spooky old plastic lab skeleton which was hung up in one of the passageways and moved from time to time. In Wrysgan Slate Mine, there are three baby dragons looking down at you at one point, (well it is Wales!). In Cwmorthin Mine you can turn the (working) lights on in the compressor chamber.

*Simon demonstrates to the group how the miners drilled holes for the explosives in the slate*



*Mines can have beautiful formations too!*





Some mines, eg. Cathedral Cavern, at Little Langdale are handy to include as an extra on a hill walk day, and some mines, not necessarily the ones you're allowed to take groups into, are great for a surface visit to see the often extensive remains, (e.g. Old Gang Mine, Swaledale).

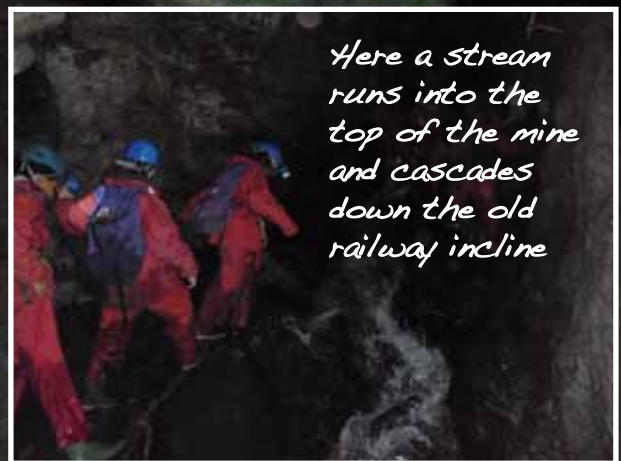
## ACCESS and CONSERVATION

Access can be quite tricky for some mines, but that is no different from some caves either. You have just got to do your homework to find out the correct channels to go through. You may have to deal with the land owner, the tenant farmer, the mineral rights owner or some club or organisation which controls the legal right to approach or enter the mine. This can be just as difficult for other activities, such as canoeing anyway. Finding mine plans to use can be difficult, but this is getting a lot easier now than it was, I have a large collection of plans for the mines we use.

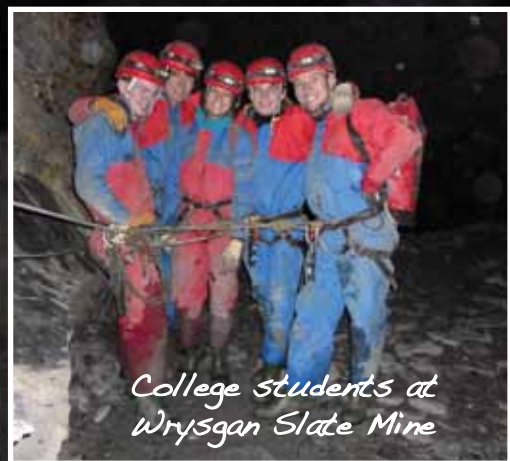
## EQUIPMENT and CLOTHING

In Derbyshire a lot of groups use mines and caves so they tend to invest in caving kit, but in N. Wales many of the centres use old cags and over-trousers. Other kit used in mine exploration has dual use, e.g. wellies for stream scrambles and activities around the grounds, climbing helmets with detachable head torches which can also be used on camp and night hikes. (There are some excellent LED head-torches now, used by cavers and centres). In many mines there is much less wear and tear on kit, compared to the muddy grovelling around we do in some caves, so slightly less robust kit will often survive and work quite well. Few mines are as wet as the Yorkshire Dales steam passages although you might get your feet wet getting into or out of a mine where the surface adit (tunnel) has some standing water for example at Bwlch y Plwm Mine where you have to wade at both entrances and then either abseil through, or climb up and go over the exciting traverse.

*This page pic: Descending the pull-through pitches. Here 50 ft abseils drop into big black cavernous chambers*



*Here a stream runs into the top of the mine and cascades down the old railway incline*



*College students at Wrysgan Slate Mine*

Conservation in the mine environment is a very important responsibility for the party leader. Just like caves, there can be very beautiful and fragile formations to be cared for. There are also artefacts and pieces of mine machinery which must be preserved. In some places, mine explorers have gathered together various odds and ends in one place where people can see them. Group members may not be able to resist playing with old equipment, but the leader must understand that such infrastructure can be unique and also possibly dangerous to play with, e.g. rusty old heavy machinery or roof supports. There can be very subtle or very fragile eco systems which exist in fine balance underground, even ugly fungus growing on old timber-work can be a significant part of a delicate food chain for creatures which are seldom seen. Bats of course, should not be disturbed, especially during winter hibernation. I have often taken groups on full day trips into big mines and it can be special to have a candle lit lunch stop underground, but I have a grave responsibility to clear up everything from my visit or unsightly alien fungus grows from the crumbs and bits of

dropped and discarded food. I once came across a just recognisable first aid kit which had been accidentally lost in a mine. Some creature had had a go at it, scattering the contents about a bit and the whole lot was covered with an unsightly furry white fungus..

## TYPES of MINES

There are four types or categories of mines, of which three are used for mine exploring.

**STONE MINES** – usually on one level and often complex, these are underground quarries extracting one layer/ bed of rock.

**SLATE MINES** – multi level, often involving underground mountaineering with big chambers, scree slopes, big drops and sometimes deep water.

**METALLIFEROUS MINES** – e.g. lead, copper, iron, gold, these are often on more than one level and can sometimes have very beautiful formations. They can be very hazardous for the inexperienced explorer with loose rocks, false floors, internal shafts and the possibility of gas.

**COAL MINES** – these are highly dangerous and not visited.

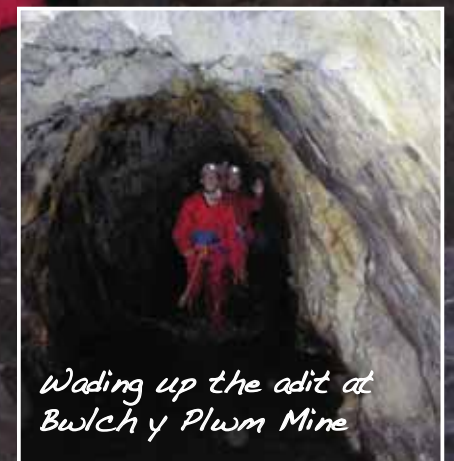
Of course, when it comes to personal exploration for the would-be leader gaining experience, there is a huge diversity of mines to explore beyond those which are considered safe for groups. But note: mine exploring can be extremely dangerous for the inexperienced and I would stress how important it is to gain experience from suitable leaders, like my first trip with Adrian. Even though I was a very experienced cave instructor at the time I had much to learn about the subtle and sometimes lethal hazards in the mines.....like the near miss I had with gas in Rampgill Mine a few years ago. ■

## AUTHOR'S NOTES

For anyone considering the mine leader scheme, go to the B.C.A. website and follow the links to training. For anyone interested in a mine leader training course in North Wales, Derbyshire or North Pennines contact: davebaines40@gmail.com.

Photographs from the Author

*This page pic: Examining old machinery at Penarth Mine*



*Wading up the adit at Bwlch y Plwm Mine*