

CAVE DIVING - BRITISH STYLE

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Many people have now taken "cavern-diving" or "cave-diving" courses, and dived in the warm, clear caves of such places as Mexico, Florida, Dordogne & Majorca. These areas provide easy, interesting and pleasurable cave diving. There are significant differences between those areas, and the UK.

Here are some things that we would tell anyone thinking of going cave-diving in the UK - things we think they should know...

Firstly, only a small proportion of the British Isles consists of the limestone in which caves most commonly occur. Thus there are a very limited number of cave-diving sites, and of these, only a handful have reasonably easy physical access combined with roomy underwater passages and occasional 'good' (ie. more than 2 metres) visibility. Most of these would require you to be a fully-fledged caver yourself, and you would need to have the necessary ropes & ladders and know how to use them safely (including competence in Single Rope Techniques - abseiling & prussiking). As some of the caves can be three miles from the road, several hundred feet deep, with lengthy crawls and other obstacles, you would need to be able to muster a team of cavers to carry your kit to the dive site. And of course you would need to know where the cave entrance is!

Virtually all cave-diving sites are on private land. This means that visitors **must** get the permission of the landowner before they visit. Some landowners have installed physical barriers (eg. locked gates) to prevent access, and may treat trespassers on their land to a close-up view of the wrong end of a 12-bore! At some sites it may be that the landowner does not care if people want to visit the cave (or indeed, they might prefer *not* to know of such a visit) but most of them just like to be asked nicely for permission to visit the caves. Ignoring such etiquette may result in the cave being closed permanently - guaranteeing you the hostility of all the cave divers in the UK!

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Realistically, the only way to find out about the current access arrangements, would be to ask local active members of the CDG. They will also have knowledge & experience of the effects of the weather on the cave in question, and whether the cave will be in flood, have good diving conditions, what kind of visibility could be expected and what state the guidelines are in, etc.

Most cave diving in the UK is carried out with the aim of exploring new cave. Dives for the purpose of training/ testing of techniques & ancillary equipment are also carried out. Occasionally, when conditions allow it, a few divers will do tourist/ pleasure dives. The dives recorded in the Cave Diving Group Newsletter reflect this pattern.

Most exploration is carried out by an individual or small group of divers working together on a specific project, usually after researching geology/ hydrology, etc. and previous dives done at the site - via the relevant Sump Index, CDG Newsletters & caving club journals. The divers will subsequently publish their findings in the CDG Newsletter, or send them to its Editor for his 'secret file' (to be published at a later, more suitable date) in order to share these with the caving community at large. It is also expected that a survey (plan & section) of any new discovery should be published with the report in the CDG Newsletter. Etiquette

dictates that other divers will not 'pirate' someone else's project while work continues. It is therefore the individual's responsibility to let it be known that a project is taking place, and, equally, when work is complete, to let people know that it's 'open season' again at the site in question.

For the safety and convenience of others, any diver who finds the lines in the sump in a different condition to those previously published, should notify the changes to the Editor for inclusion in the Newsletter.

Now let's look at gear & techniques. Many divers will have come across the 'Hogarthian'/'Doing It Right' philosophies promoted by the WKPP, GUE, etc..... **No argument - these principles are perfect for the large, deep, easy-access springs, and the open water sites they dive.** The value of the techniques and gear configuration is reflected in the amazing explorations they have carried out with few accidents. As the old saying goes - the proof of the pudding....

Sadly, such gear configuration and techniques cannot be used in British cave diving. Let us explain why...

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For a start, most sites in the UK are inaccessible to divers using back-mounted bottles - quite simply, you would not fit through the cave passages. Thus the long hose/ short hose debate, and where to put one's light, etc. does not arise. And you can leave the scooters at home! Here streamlining is vital, and side-mounted tanks are *de*

rigueur.

Although the water temperature is always cold (7 Celsius tops, 4 Celsius normal), wetsuits are still commonly worn in many sumps. The bulk and restricted movement of the drysuit for caving, and the likelihood of overheating and damage, precludes its use in all but the easiest access sites. Exceptions are the long deep sumps, a long way into a cave, when ordinary caving gear is worn to get to dive site, with the drysuit being carried and put on once the sump has been reached.

The streams in the caves are often heavily peat stained, and carry substantial amounts of silt and organic debris - thus visibility of one to two metres is considered quite reasonable/ normal, and three to four metres plus is excellent (but sadly very rare). Higher water flow rates also mean more wear and tear on the line, so 4mm thick is considered a minimum and 6mm is not uncommon. We have even put half inch galvanised steel chain in one cave, as the floods just kept eating 11mm caving rope! Consequently thicker line means that line reels need to be fairly chunky/ heavy duty. The very pretty aluminium and plastic enclosed reels you will see lots of 'tekkie diving' shops flogging would probably last about five minutes in the UK- plus you couldn't get any proper line on them. The lovely thin soft string these reels come loaded with would be a menace in a UK sump.

Next, in the UK, we always wear helmets! We guarantee you that your head gets bashed on the roof of the cave at least once during a dive, and in some of the smaller sumps, it will be constantly grinding against the rock roof. It's also a handy thing to mount lights on - so you can see something (albeit a brown glow and a line pressed against your mask) while you are negotiating some of the less pleasant sumps. We normally wear two twenty-watt lights, with 10 degree beams, plus two or more focusable 6-C-cell torches, on the helmet. Hand held lights and a bare head add up to trouble over here ! Most UK cave divers will take a minimum of 5 different light sources on a dive, and all of these will be helmet-mounted.

You are probably now beginning to realise why the Cave Diving Group members may seem to discourage people from diving in caves in Britain. If the truth be told, underwater caves in the UK can rarely be described as a pleasant environment. Sure, you can get 'job satisfaction' from a well-executed dive, but do not expect to see what you see in the photos in glossy magazines...

British sumps have a grim reputation. In response to the Brits being impressed by his pushes, and the distances he explored - Olivier Isler once commented: "Here in the Dordogne, the passages are large, the water is warm & clear, so laying line here is easy. But I know in England the caves are very small, the water is very cold, and you cannot see anything. Those are very difficult & dangerous conditions." That from a man who has broken World cave-diving records.

So what else is different about cave diving in Britain?

Perhaps even more strange than the gear configuration, for many open-water divers, is that you can forget about having a 'buddy' underwater in British caves. Most cave divers in Britain believe that being solo in a sump is safer for any number of reasons - such as:-

- There's no-one to get physically jammed in the passage behind you (thereby blocking your exit);
- There's no-one behind you who may get tangled in the line, and have to cut it - leaving you with no guide home;
- There's no-one to accidentally disturb your 'out tags' at line junctions (e.g. in one cave there are 10 branch lines off the main line in the first 500m of passage);
- There's no-one to cause silt problems (but yourself);
- There's no chance of being called upon to share air - in small passages thisThere's nothing to get confused about - communication in sumps varies from the difficult to the impossible would be impossible anyway;
- There's no-one to provide you with a false sense of security;
- There's no-one to worry about, but yourself - you can concentrate on your own safety.

This all presumes, of course, that your gear is suitable and properly cared for, and that you are fully proficient in all the techniques required.

But if this were not the case, you would be liability to yourself and any buddy anyway.

A 'buddy' out of the water is, however, nice to have along - for the company (caves are lonely places), to help each other kit up, as a safety measure against accidents such as slips, falls, etc. in the passages approaching and beyond the sumps, and to compare notes with afterwards regarding the nature of the cave and possible leads. Similarly there may be odd occasions (e.g. digging/ drilling & scaffolding) where you may be better working together underwater.

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One of the best things about bumping into other cave divers at a dive site is to have a good look at their kit. What lights/ bottles/ harness/ reel do they use? Why do they do that way?

The same diver may well use different configurations at different dive sites, and even on different occasions at the same site, depending on the purpose of the dive. And they may well have come up with a wizard idea which they

would love to share with you....

Adaptability and imagination are the hallmarks of cave divers. There are a surprising number of items of home-made kit in use - generally more robust/ heavy-duty or cheap/ disposable than open water gear. Caves constitute a very harsh environment, and thus equipment does not remain pristine for long - just notice most bottles, harnesses, helmets & lights in use. Sometimes 'normal' gear may be used, but adapted in particular way. We are also lucky that we normally dive only in freshwater. This means that electric contacts can be left open to the water - so you will see lights made dichroic units & lawn mower plugs combined with leftover bits from the plumbers merchants - and also mild steel bits & pieces hardly affected by rust. Most people will be more than happy to explain their gear, and the hows, whys, and wherefores of why they use it. Put ten cave divers in a room with their kit, and everyone will have his own way of doing it - each method refined to suit it's user. Of course, they will all take the Mickey out of the other nine, but then they will sneak off to try out someone else's ideas!

What they will not do, however, is to ram it down your throat and tell you that theirs is the only way to do it! What is right is what is right for you, to keep you safe and happy & get you back home in one piece. Just think carefully, first, about what you are doing, before you do it.

Jammed by your backmounts in a tiny passage, banging your (unhelmeted) head against the roof, while trying to untie your handheld light & 17ft long hose from a 2mm white nylon line that's spilled off your beautifully engineered (but broken) plexiglass line reel, it will be small comfort to know that you are fully compliant with some well-publicised philosophy and gear configuration that was developed for use in very different conditions.

Think of the Eastern European divers who refused to be beaten by a low mud filled sump, and finished up putting their bottles into a streamlined container made from two child's plastic sledges - so they could push it forward through the ooze in front of them, like a snow plough. What they did was right for them.

In the same way, CDG members are often seen to abandon their sidemounted tanks when they are away on holiday, playing in the big, clear springs in France, etc. - simply because it's easier carrying big bottles from the car to the water on a back mount. Horses for courses.

Every member of the CDG has many years of 'dry' caving behind them before they got to dive in a sump. They were not *taught* how to cave dive. With a little help and advice from their friends, looking at how others go about it, they *learn*. Watching, asking - but most importantly by **THINKING** - and then cautiously trying out what they've learned for themselves.

This is the approach that we have taken for the last 60-odd years. That's why we had line laying techniques, good lights, gas management rules, rebreathers and multiple redundancy years ago. But not content with that, the innovations continued with mixed gasses, DPV's, and gear adaptations by the bucket load. We sat, we thought, then we went out & did - cautiously. And we still do the same before & after every dive - always on the lookout for new ideas, techniques, equipment which we can use, or adapt, and incorporate into what we do. Then we share our experience with others.

"Air may be only metres away - or kilometres - but if you can't reach it when you need it....."

This is where the CDG helps. They are there to disseminate information and to try to share experience among cave divers in the UK. The CDG is a non-profit making group of

individuals with one common interest - the exploration of caves. They do not run formal courses - training is very much on an *ad hoc* basis, with no commercial considerations whatsoever. To pass through the grades to 'Qualified Diver' status may take years.

There are no shortcuts, and no amount of money can buy you the amount of experience needed.

There are no 'ready made' courses which churn out 'Qualified' cave divers and if some people seem to imply that their course will turn you into an experienced UK cave diver - don't believe them! - there is no substitute for experience. Examining the accidents that have taken place in British sumps shows that the vast majority of people drown within metres of an airspace, and that they usually have limited experience.

So by all means go on that cavern or cave-diving course somewhere nice & sunny abroad - it will hopefully give you an enjoyable and interesting experience. Almost certainly the techniques you will learn, and the discussions re: gear configuration, etc. will make you a better diver. But they are a world apart from what you would normally expect to find in a British sump.

In the CDG's 'Qualified Diver' test, the candidate will be taken to a muddy quarry and will be expected to lay line, navigate, survey, as well as operate normally underwater like any other diver (i.e. breathing & ear clearing, controlling buoyancy, and maintaining air margins). Additionally the diver will be given some manual dexterity test, and at various stages he will have his mask dislodged/ removed, usually after the examiner has quietly turned off the candidate's reserve set, immediately followed by the set he is using, whilst tangling him up in the line! If the diver copes with all this without approaching the incident pit, and can later satisfy the examiner with his technical knowledge, then he can be put forward for qualification. Even then, the candidate must be *elected* to 'Qualified Diver' status by his peers in the CDG.

And, sadly, this is still no guarantee of invulnerability in the sump. There are few more frightening experiences than being lost in a sump, or physically stuck, or having a catastrophic gear failure. Air may be only metres away - or kilometres - but if you can't reach it when you need it.....

To dive safely in the caves of Britain requires careful thought and planning, a thorough understanding of caves & caving, training, the right equipment, and the right mental attitude.

So let's close with a few words from the CDG Manual:-

'Cave diving calls for complete self-reliance and independence of judgement, which does not imply ignoring the experience of others.....the divers responsibility for safety is his and his alone, if he delegates responsibility for any part of the operation, he does so at his own risk.....he should examine his motivation for cave diving.....he must to a great extent live cave diving as well as practice it.....this is a hard doctrine to accept, nevertheless it is one born of experience.'

(This article reflects the personal viewpoint of two CDG members (Scoff & Dave Ryall) - who would also be the first to point out that not all of the people will agree with all of the people all of the time!)