UK CAVES

Typical Terrific

GAVIN NEWMAN

Cave diving in the United Kingdom is a sport only a true cave explorer could love. It takes a tough mental attitude, a good pair of boots and a willingness to haul your gear from one shallow sump to the next. On a typical dive, the viz is poor on the way in and non-existent on the way out. Maybe that's why the British Cave Diving Group tries to weed out the bubble blowers.

photos: Gavin Newman

Cave Diving always looks so glamorous and exciting. Water clear as air, seemingly limitless possibilities for length and depth penetrations, endless excuses for new toys to play with and it's all given respectability under the banner of exploration. The ultimate technical diving fantasy.

The all encompassing term "cave diving" though is rather a generalized tag for a sport which has many different manifestations. For British cave divers like myself life is not one of warm clear surface pools — our sport is still called cave diving but it's a completely different one from that pursued in Florida, the Bahamas or Mexico. A simple analogy could be made with that rather overrated sport of football. The game called football in the U.S. is a completely different one to that played here in the U.K. — the only common factor being that they are both played on a field. Similarly, the only common ground between our two sports of cave diving could be said to be that we dive in cave passages, but that's about as far as it goes.

What we do in the U.K. is often referred to in the U.S. as sump diving, a sport pursued by cavers rather than divers. Cave Diving in the U.K. is very much that, an extension of cave exploration rather than of the sport of diving.

The U.K. has very few surface entry cave diving sites. The majority are located underground at the end of extensive dry cave systems. As a result the attraction for non-cavers is minimal. Often long hauls, first overland and then underground, just to get to the dive site makes our particular U.K. brand of cave diving a sport for the dedicated cave explorer. Even when finally underwater, conditions are often not conducive to diving just for the sake of diving. Water temperatures of only 41-50 degrees F (5-10 degrees C) and visibility of only a couple of meters on a good day make the attractions of diving questionable!

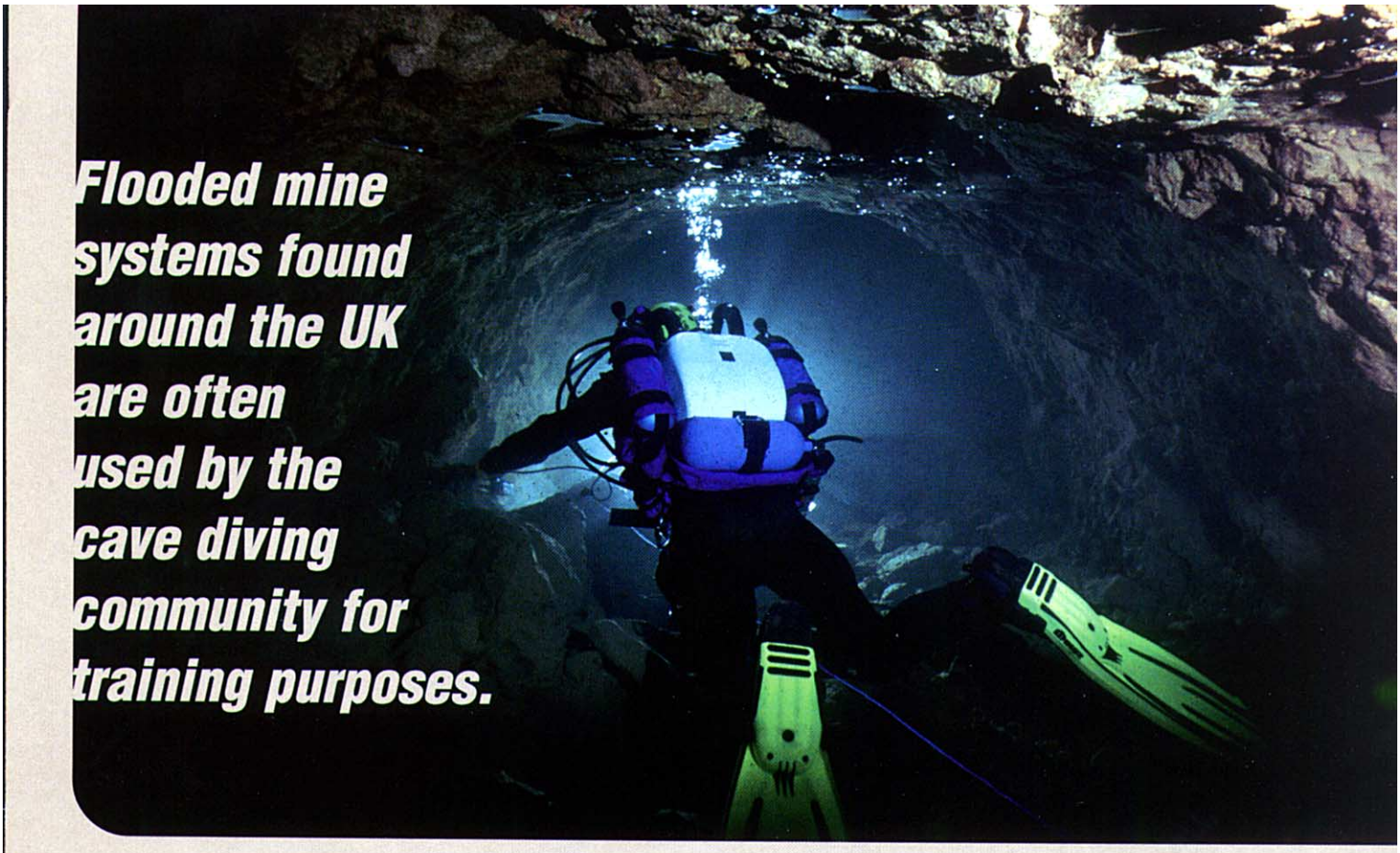
Unlike its continental namesake cave diving in the U.K. is generally about trying to find further sections of dry cave. Cave exploration is the primary motivation, not the diving, we just happen to be doing our exploration underwater. With this in mind the ethos of the British Cave Diving Group is that they prefer to take cavers and train them to dive rather than teaching divers to cave. Indeed it's a prerequisite that potential members of the group have at least two years caving experience prior to being considered for membership, and even then they have to be proposed and seconded by current qualified members. This system is often seen as very elitist amongst open water divers with a passing interest in caves, but it serves the group well ensuring only those with a real enthusiasm for the sport and no illusions as to what it involves become members.

The nature of British caves makes the use of sidemounted cylinders standard practice in most sites, with removable front mounted stages being used where extra gas is required. The relatively short nature of most sumps means that a high proportion of dives are done using small cylinders of about 60 cubic feet (7-10L). Depth rarely plays a major part in gas consumption as currently our deepest site is only a little more than 198 feet (60m) deep, and this is very much the exception with most sites being shallower than 100 feet (30m). Many sites are multi-sump systems involving a combination of diving and dry sections and in systems like these the use of wetsuits is still common. It's only on the longer and deeper dives that drysuits are used. Because of the amount of time we spend in dry sections of cave, it's not uncommon for divers to dive wearing their caving boots with extra large fins over the top. Lights are usually helmet mounted as the hands need to kept free for line handling. Conditions in the U.K. often require an actual physical contact with the line at all times.

U.K. caves are very silt prone and even

UK caves are silt prone and even with the best buoyancy control visibility often reduces to zero...

Sump 3-9 Wookey Hole Cave
left: Cave of the Black Spring, Wales
far left: Sump 20-22 Wookey Hole Cave



Flooded mine systems found around the UK are often used by the cave diving community for training purposes.

with the best buoyancy control visibility often reduces to zero for the return dive, and that's assuming you had any visibility on the way in anyway! This obviously places particular importance on line laying and following skills. In conditions where the line can often be your only point of reference it literally does become your "lifeline," and maintaining physical contact with it can be essential. With this in mind most permanent lines are 4-6mm thick making them less likely to break and easier to follow when wearing thick gloves.

As a photographer trying to capture this environment on film I'm faced with some real challenges. Photography becomes very dependent on the weather, as does much of our diving. One option which is usually open to us regardless of the weather is to dive one of the numerous flooded mine systems found around the U.K. These are often used by the cave diving community for training purposes and make excellent places for photography. Filled with static ground water, visibility is usually crystal clear, although when it does get stirred up by divers it takes a very long time to settle out. The biggest problem we have with mines is the water temperature, which rarely rises above 41 degrees F (5 degrees C) making prolonged dives something of an ordeal!

Diving in mines presents a whole new set of dangers akin to those encountered on wreck penetration dives. Mines were never designed to be underwater in the first place and unlike naturally formed cave passages, can be prone to sudden collapses. They need to be treated with due caution and respect to minimize the dangers, but when dived safely can offer very rewarding and interesting experiences, particularly from a historical and archaeological standpoint. I hope to be outlining some of the mine exploration projects we are undertaking in the U.K. in a future feature for this magazine.

Technical sport diving began with cave divers who adapted commercial and military technology to aid their explorations. U.K. cave divers have been using gases other than air for many years. Graham Balcombe, one of the founder members of the Cave Diving Group used an oxygen rebreather system in Keld Head as far back as 1945. The current trend for mixed gas exploration amongst U.K. divers however was heralded by Rob Parker's explorations at Wookey Hole in 1985, where using an experimental trimix, he reached a conclusion to the cave at 225 feet (68m) in sump number 25. This involved a two-day underground camp and was one of the first cave dives world-wide to use helium in the breathing mixture. As such it marked a significant advance to cave diving not just in the U.K. but also on a world scale. Things have moved on swiftly since 1985 and with today's better understanding of gas mixtures and decompression physiology it is now possible to repeat Parker's dive to the bottom of Wookey 25 in a round trip taking a little over six hours.

The current trend for technical diving, be it nitrox, trimix or extended deep air has grown from techniques adopted by cave divers over the past 10 years. This technology was adopted from that used in the military and commercial sectors to enable the further exploration of deep or remote cave sites, and the technology was adapted to suit the projects in hand. The emergence of these techniques into the mainstream sports diving community has it seems in certain instances led to the cart being put before the horse with the technology itself becoming the important factor, not what is being done with it.

With certain continental projects using multiple, redundant rebreathers, staged DPVs, underwater habitats and even considering the use of submarines and saturation diving techniques, cave diving may look like the ultimate technical divers fantasy. This however represents only a very small aspect of the sport. Certainly the majority of U.K. based cave diving is done using relatively basic equipment. The caves are mostly shallow, relatively small and the visibility bad. The application doesn't require the technology,

photos: Gavin Newman

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indeed in the confines of a British cave too much technology can cause more problems than it solves. More than anything else this style of cave diving requires the right mental attitude far more than the latest piece of technical hardware.

U.S. and continental caves on the other hand are mostly much larger, often deep and usually benefit from good visibility. These types of caves are far more suited to the use of more exotic technology and indeed often it's the only way to explore them safely, but for a true cave diver the technology is still only a tool enabling us to explore the cave. Many open water technical divers it seems are now looking towards the world of cave diving as a play ground in which to use their new found toys. Many of this new generation of cave divers have no real interest in the cave itself and in many cases I'm sure no real concept of what it is they are undertaking. As we've seen cave conditions vary widely around the world and consequently so do the techniques, equipment and even the psychology required to explore them safely. The mind-set required to squeeze through narrow passageways in zero visibility is somewhat different to that required at great depth in an extensive clear water aquifer. Cave diving is a fantastic sport that has much to offer to both cavers and divers but its important we understand what it is we're referring to when we talk about "cave diving" and in which country the cave is located. DJ

Gavin Newman is a TDI instructor and freelance adventure sports photographer. "I always vowed that if I ever ended up photographing weddings or children I'd go and get a proper job," says Newman.

Opposite page: Rebreather diving the Noxon Park Iron Mine.
Top: Divers between sumps two and three in Cheddar Cave.
Middle: Transporting equipment between sumps in Wookey Cave.
Bottom: Sidemount Country in south Wales.

photos: Gavin Newman