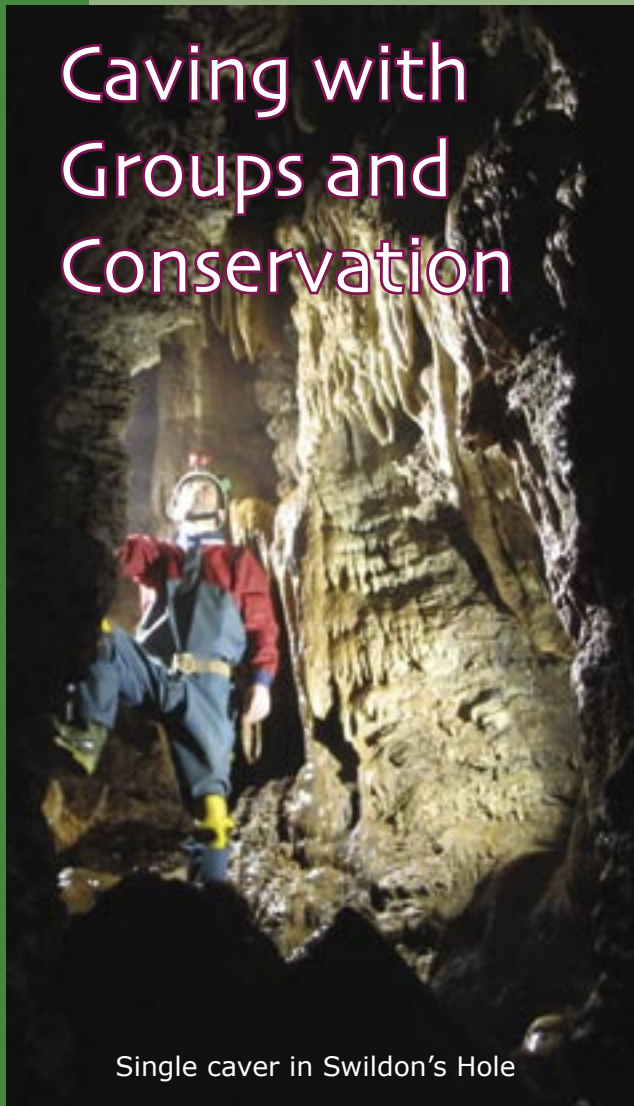


Caving with Groups and Conservation



Single caver in Swildon's Hole

WITHIN A CAVE, WHAT NEEDS TO BE CONSERVED AND WHY?

● Formations such as stalactites, stalagmites, curtains, flow stone, moonmilk, gour pools (rimstone dams) and straws can all be vulnerable to something as apparently trivial as a touch from an inquisitive person's finger. Many fragile speleothems (cave formations) are absent from caves which are frequently used by novice groups, having long since been destroyed either wantonly or by accident. Although the growth rates of speleothems can vary massively, it is widely acknowledged that they do accumulate very slowly and can often be aged in thousands of years; this point can be used as a reason for treating such formations with delicate respect. Although almost a cliché nowadays, the oft-repeated mantra of "Take only memories, leave only footprints, kill only time" is pertinent to this environment.

● Fauna is often overlooked but deserves better; the common cave spider (meta menardii) is usually to be found at the threshold of a cave with its characteristic white tear-drop shaped cobwebs, while lesser horseshoe bats can be found further in, and they will even occasionally use frequently visited caves as a shelter. Bats are protected by stringent laws.

● In some areas, caves have been systematically exploited for their formations and portable archaeology to satisfy the Victorian era's demand for such oddities as souvenirs and keepsakes. Despite the almost wholesale removal of speleothems from certain caves there remains an opportunity to highlight conservation as a topic for young minds to ponder. Many caves are Ancient Scheduled Monuments because

Points which can be highlighted or discussed during an underground group session.

Most caving instructors have 'awareness of cave conservation' on their list of educational outcomes for group trips. Caves are a beautiful and scarce resource in the UK and these are just a few suggestions to illustrate the kind of topics that can crop up underground.

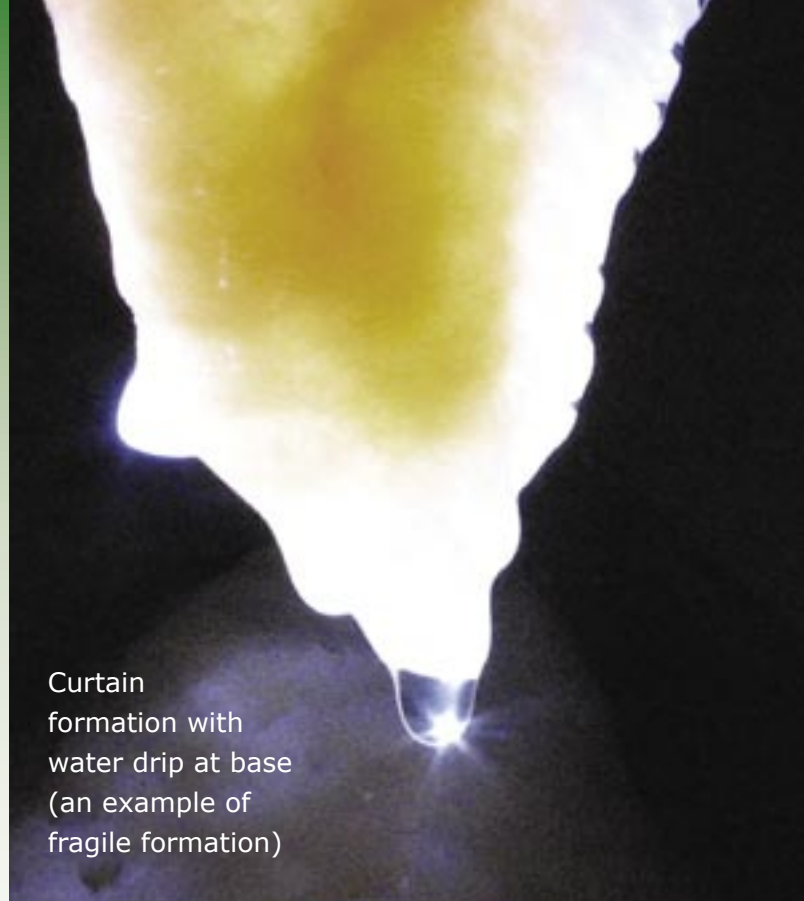
by
Christopher
Binding

Environment
&
Conservation

of archaeological discoveries made within them; more recent archaeology may comprise graffiti on the walls dating back many hundreds of years – this, too, is worthy of protection. To what extent should we offset access with conservation? Should exploration cease? These are good debating points.

- Many caves used by groups have established “trade routes” which constitute a user-friendly and varied route, suited to most abilities and allowing a beginning, middle and end to the experience. There are variations on the routes taken and passing places for when times are busy. These pathways have become so well established over the years that some sites’ main hazard is now the risk of slipping, with attendant bruises, rather than anything as outrageous and media hyped in the public imagination such as flooding, rockfalls or spontaneous collapses of chambers. Trade routes are the underground equivalent of a surface footpath and so further wear and tear is affecting a surface which is already well trodden.

- Litter in caves includes the obvious – chocolate bar wrappers, cigarette ends and packets, flat batteries, used fireworks, abandoned tea lights (candles), tissue paper, broken glass, drinks containers, crisp packets etc.. But litter also includes urine, faeces, spit, food crumbs and other organic materials. Cave fauna can be imbalanced by food sources allowing micro fauna to thrive and then overwhelm its normal, natural, prey species – these small scale glut/famine events are evidenced in some caves by hundreds of isopod corpses, no longer than 4mm, found on many surfaces; mostly as a result of vegetable food sources or seeds being washed in by floods – again this observation can prompt consideration by students.



Curtain formation with water drip at base (an example of fragile formation)



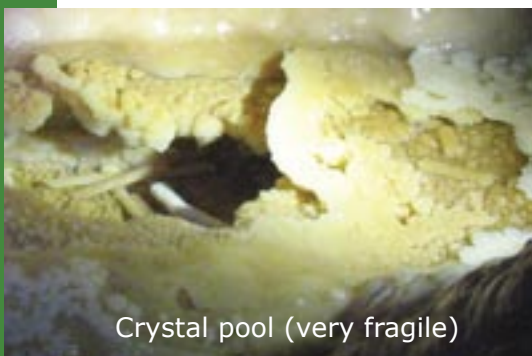
Andy Hebden (club caver) in Swildon’s Hole



Stalactites and curtain (another example of fragile formations)



BSc student (Birmingham Univ), Gina Moseley, engaged in cave climate research in Shatter Cave; shows conservation tape/pathway being followed.



Crystal pool (very fragile)

BITE-SIZED BULLET POINTS FOR USE WITH GROUPS

- Bats are protected by the 1981 Wildlife & Countryside Act. Disturbing, injuring or killing a bat can result in a £5,000 fine and six months imprisonment. In the last 250 years the only animal species to have become extinct in Britain was a bat (Mouse Eared Bat). English Nature have an active bat protection programme throughout the UK and establish protected bat roosts (hibernacula) in favoured regions. Worldwide, there are around 4,000 species of mammals, nearly 1,000 of which are bats. There are 14 species of bat in Britain. Bats are more closely related to people than to mice; they can live for up to 30 years; they are not blind and would not enjoy being tangled in your hair; Britain's smallest bat, the pipistrelle, can fit inside a matchbox; bats' wings are giant hands with skin stretched between elongated fingers; bats detect their insect prey using echo-location, a type of sonar; female bats normally only have one baby each year; many foods we enjoy depend on bats for pollination – dates, vanilla and even chewing gum! (Bat Conservation Trust).

- In Britain there is a total of over 500 miles of cave passage (Cordingley, 2002); while this sounds impressive, it is often worth balancing it with the knowledge that one cave in Kentucky, USA, the Mammoth-Flint Ridge Cave System extends to more than 350 miles (Sparrow, 1997). These figures can be quoted to make students realise that 500 miles sounds like a lot but is dwarfed by comparison with elsewhere, hence the necessity to look after what we've got.

- Just because a cave is considered to be a "sacrificial site" it doesn't mean that we can treat it without respect;

new discoveries are still being made in caves in which many people had given up hope (UBSS Proceedings, Vol23, No2, 2004).

- Within the Mendip caving region, 3 caves take the majority of educational caving trips – Goatchurch Cavern, Sidcot Swallet and Swildon’s Hole Upper Series. When compared with the 160+ caves on Mendip (Irwin & Jarrett, 1999) this means around 98% of caves are left alone.

- Endangered sections of newly discovered caves will have tape installed to mark out narrow pathways – which everyone must observe. Contrary to expectations, many taped sections do not bristle with delicate and exquisite formations but rather are muddy, formless and dull passages – this is because the sediments within caves contain clues about the cave’s formation and ancient weather patterns; cave sediments are scientifically much more important than pretty crystal formations and are jealously guarded against damage as a result. ■



Student caver in Manor Farm Swallet

Further Info.

The author is a professional freelance caver; member of the Earth Sciences Teachers Association, trainee member of the Association of Caving Instructors; works voluntarily as the Conservation & Access Officer for the Council of Southern Caving Clubs and as secretary for a local caving club.

Further reading:

- “National Caving Association Cave Conservation Policy”
- “Minimal Impact Caving Code”
- “Caving Notes for Beginners”
- “Guidelines for University Clubs”
- “Bats Underground - A Conservation Code”
- “Code of Practice for Mine Exploration”
- “So, you want to go caving” leaflet
- Syllabuses for Cave Leadership

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Author Notes

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Photographs
all by the author