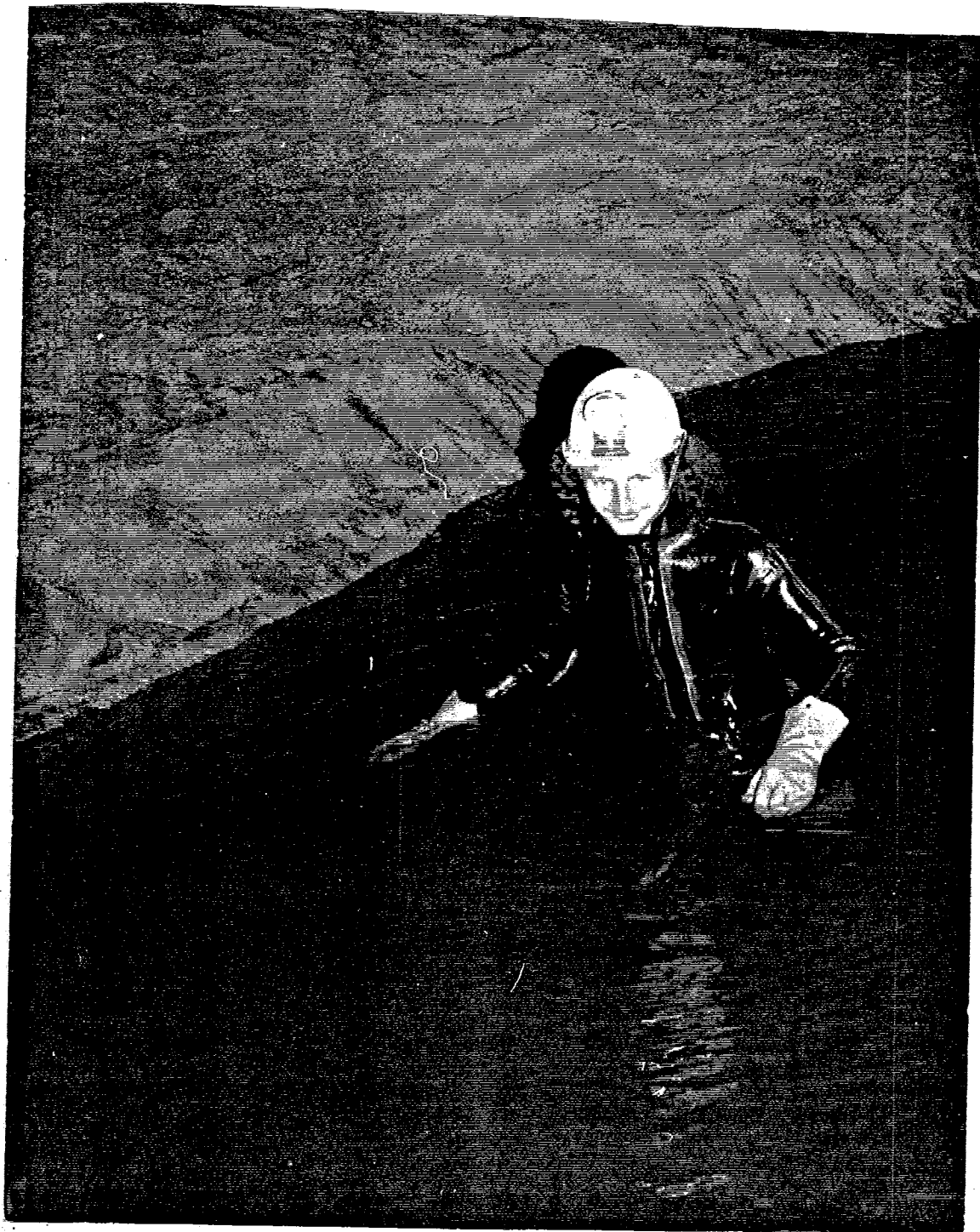


U.B.S.S.

University of Bristol Spelaeological Society



NEWSLETTER

Vol 11 No. 1 March 1995

THE EDITOR MOST HUMBLY GROVELS.....

Once again, I must begin by sending my most sincere apologies, both for the lateness and for the minuscule size of this newsletter. I feel I should write a mammoth article to fill some more pages, but having just spent most of this term writing up an entire research project, I am feeling less than inspired. I hope you will all forgive me for being the world's worst newsletter editor and help me to bully somebody else into taking over from me after the AGM. It's a great job for anyone who thinks they might be less overworked and slightly more organised than me.

Whilst this issue may not exactly be the best ever, it would probably never have materialised at all if I had been left to my own devices. I would therefore like to thank Graham, to whom I am extremely grateful, for coming to my rescue and typing out most of the articles for me, and especially to Andy Farrant for taking the half finished version and finishing it for me.

I would like to wish you all a highly drunken, scandalous summer term, in the hope that my successor, whoever he or she may be, has plenty to write about in the next edition.

Rach

NOTE: The opinions expressed in the following pages are those of the individual authors and do not necessarily reflect the views of the committee.

Cover Photo - a young hairy Tony 'Hero Doctor' Boycott (absolutely irresistible according to Rachel Privett!).

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Newsdesk

As many will be aware, Ogof Draenan, which was discovered last October has been extended to a length in excess of 21 km. It is now the fifth longest cave in Britain (after Easegill, OFD, Daren and, Agen Allwedd) and the fourth longest in Wales. The entrance series is somewhat squalid, as it has been mostly dug out, but it leads into a large network of phreatic passages strewn with mud covered boulders, reminiscent of Aggy. The streamway is over 3 km long and has been traced to Snatchwood risings 10 km from the entrance near Pontypool. One of the interesting features of the cave is Gilwern passage. This major high level fossil passage trends N-S and at first appears to be an inlet carrying water south into the main streamway, and possibly representing a continuation of the Aggy/Daren/Craig ar Ffynnon fossil passages. Wrong! The passage actually drained north to the Clydach Gorge, so a rethink of the early spelaeogenesis seems in order.

Access is controlled by the Morgnannwg Caving Club and trips can be arranged via Tim Long, Tel.(01443) 207549, Fax: (01222) 500771 or by E-Mail: Tim@timlong.demon.co.uk (internet) CompuServe 100126,1112, in writing (send an SAE) or by email.

Swildon's

The entrance series of Swildon's appears to have stabilised a little, but still take care and avoid the area if you can by going round the zigzag route.

The Gruffy Field

The land known as the Gruffy Field in which GB and Charterhouse are located has now been sold to the Somerset Wildlife Trust. A lease for access to and control of the underground part of the land had been agreed with the trust by the Charterhouse Caving Committee. A limited company to administer the lease has been set up by the member clubs of which we are part. The first (probably contentious) company meeting is to be held in April. Many thanks go to Graham, Dave Irwin, Linda Wilson and any other who attended some long and tedious meetings to preserve access. Much appreciated!

Bos Swallet

As documented later in this issue, the UBSS has been digging at Bos Swallet with some success. The cave has now been extended to the same depth as Rods Pot, with the way on still open although requiring some persuasion. A good draft blows out of the cave. Digging has ceased over the winter because of hibernating bats, but will resume shortly when the weather improves. Meanwhile, over at GB, the wet weather has sumped Ladder dig, so no progress has been made.

The 1995 Floods!

The winter of 1995 was very wet in the southwest with much of Somerset receiving over 300% of its normal rainfall in January. There were major floods at

the start of December and over Christmas, but the worst occurred in late January. Longwood swallet overflowed both normal and flood sinks and water continued to flow on down the valley and into Cheddar Gorge, leaving a fan of boulders across the road. In Cheddar itself, Gough's Cave (the showcave) flooded to the roof and water was flowing out of the turnstiles. Incidentally, a short way downstream at Andy Farrant's parents house, the water level reached its highest level since the great floods of July 1968. Water was also seen to enter the Swildon's Blockhouse 'like a whirlpool'. Over at GB, a small stream had flowed into the entrance depression and down the entrance passage washing much gravel into the crawl into Mud passage and filling the puddle! This had the effect of revealing many lumps of galena (lead ore) strewn over the passage floor, some of which are now in the museum. Ladder dig was well and truly flooded. No digging at the end of Bat Passage seems likely in the near future.

For Sale

It's nice to see Paul Drewery hasn't lost any of his old habits recently. On a trip to the Dales some time back, and the silly sod forgot half his SRT kit. He proceeded to buy a Petzl Croll chest jammer, and a Petzl chest jammer (one of the long tapey ones) just for the weekend. Consequently, he now has some spare SRT to sell (at about 80% of new purchase price, but it is all negotiable). He is now on email, so people can contact him direct. I must emphasise that these are shiny new, with only one trip down Meregill, and not covered with mould, rust, gick and some form of unidentified jelly, like Tophers SRT kit.

The Internet

For those who have access to the internet (and who have enough time and money to 'surf' on it), then you may be interested in the caving Home pages that exist. A good starting point is the LUSS home page with their 3D map of the Dales, accessible via the Lancaster Univ home pages. From here, there are links to other caving related bits, such as the OUCC, SWCC and SUCC home pages and to other global info sources. These include Sherry Mayo's caving page and some stunning photos of the new cave paintings discovered in France. Is there anyone in the UBSS with the time and expertise to set up our own home page??

Obituaries

Members will be saddened to hear of the deaths of two long standing members of the Society. Marjorie Sweeting died of Lung Cancer in December. She was one of the foremost researchers into karst geomorphology and had worked all over the world. She held a position at Oxford University for many years and will be best remembered for her 'Karst Geomorphology' textbook. Leslie Grinsell died a short time ago after suffering an illness. Even up to the last few hours of his life, he was actively thinking about archaeology and having his work published. Both members will be sadly missed. A full obituary for both will appear at a later date.

Gravel

After seeing the latest documentary on how the CRO spend all their time rescuing student cavers in Yorkshire, a little known caver rescue organisation has been discovered lurking in the Hampton Park area of Bristol. This area has been the scene of several rescues by

the 2CvRO. So far the only victim, a Miss H. Brickl, has been successfully rescued on several occasions by the UBSS crack car pushstarting team. Delicate negotiations are currently underway to extend the service to Mazda vans, yellow ex-BT Landrovers, VW Passats and Fiesta's.

Readers will be surprised and dismayed to hear that both Rachel Privett and Hilary Davies behaved impeccably during this years annual dinner, thus depriving this column of the usual apres dinner gossip. According to Linda, the ladies toilets weren't half as interesting as last year. However, a new role model for those keen young impressionable freshers has been found in the form of Andy 'Trousers' Atkinson, who along with that other old lag Topher Martyn succeeded in proving that pepper pots are not indestructible and sparked a major a sneezing epidemic.

Congratulations to the new Hon Sec Simon Grace for his admirable performance in teaching novices how to SRT - thankfully above ground. Whilst demonstrating the subtle art of rigging a pull through he clipped into the wrong rope and plummeted to the ground. Not so much Grace as Gracelessly.

Wanted: Newsletter Editor.

An editor is needed for this highly prestigious publication. Will suit nimbly fingered gossip mongering student with lots of spare time and a discerning ear for scandal. Fourth year vets and final year Postgrads not considered. Apply to the usual address...

Rumours that the French have finally expelled Paul Drewery have been vigorously denied by M. Drewery. His story of deliberately leaving a well paid job in the south of France to return to

wet and cold Bristol and sign on the dole seem somewhat hard to believe.

The saga of the UBSS quest to find the Northern Lights in OFD continues. After several trips to locate the entrance (which Steve Cottle crawled past and didn't notice), an ambitious US military type plan was conceived to finally enter the series. However, the jinx struck yet again. First, as usual Harriets 2CV had to be push-started, then driving up the M4 we discovered the Severn Bridge was shut. Up via Gloucester and the finally arrived at the SWCC hut - to find no-one there..! Ah well, there's always Porth yr Ogof....

Congratulations to the Hero Doctor Boycott who travelled half way round the world to find caverns measureless to

Man in the steamy rainforests of Sulawesi. In the time he was away more cave was found in S. Wales. Perhaps he should go away more often...?

Although Mike White was awarded the "Bright idea of the year award" at the annual dinner for suggesting to Tim to trash the Gents in Crockers, perhaps Tim deserves a special prize for attempting to carry it out - the 'Don't get caught' boobey prize...

Some people may have noticed a slight improvement in Andy F's moods. recently. Full marks to Pete Smart for thinking that this was due to his getting down to writing his Ph.D. and had absolutely nothing to do with his improved sex life whatsoever....!

THE HON SEC'S BIT.

Well, as the old Hon Sec's bit was hopelessly out of date by the time this newsletter came into being, and the new Hon sec hasn't had time to do a new one, this is actually the Hon Newsletter editor's replacement's bit. Still never mind Eh! Anyway, most of the trips that were arranged this term have either happened or were cancelled, and as yet the summer term plans have yet to be organised. However, there are several permits available for Yorkshire in early September - contact the Hon Secs. However, next term there almost certainly will be a Yorkshire or a South Wales weekend (perhaps combined with a trip to Ogof Draenan?), and if people want it, a trip to Devon to do some surfing/caving and drinking. The Alderley Edge trip scheduled for this weekend has had to be postponed to a future date, yet to be organised. If anyone has any preferences of what cave they want to do (within reason, a Lecheguilla trip may be a little difficult), the new Hon Secs, Simon Grace and Ian Morley are open to suggestions and will try to arrange it..

However, as it is the summer term and many of the undergrads have exams, people tend to arrange their own trips in the Pub. So if any of you out there fancy a trip, whether you have been before or not, then feel free to come along to Crockers on Tues evenings at 9.30. For those who are interested in the archaeological side of the society, then Chris Hawkes would be glad of any assistance. He is usually in the Museum at 8.30 on Tuesdays - although ring him to check first.

CHRISTMAS DINNER IN DERBYSHIRE.

We set off from the tackle store at about 6pm on Friday 10th March. Those of us who were unfortunate enough to be squashed in the minibus stopped at the Asda hypermarket. We all wanted to go into Toys-R-Us, but Ian wouldn't let us, so we ended up buying fifty loaves of bread instead. Simon found it necessary to use up a whole trolley for one small piece of cheesecake!

We arrived in Castleton a little before closing time and went into the Peak Hotel for a swift few, before bedding down in the (most comfy) TSG hut. Our dormitory contained most of the Freshers plus Andy Cook, who was desperately trying to show that he isn't yet a Crinkley. He failed dismally!

On the Saturday, at about midday, Eve, Tim, Simon and I set off in Eve's car to Nettle Pot. We stopped at the farmhouse to let them know what we were doing and were handed a notice saying that there had been a rockfall further down the cave and that it was dangerous. However, we decided to try and negotiate at least the first pitch, which was quite tight in places. Then, after crawling around in a low, muddy, scrotty bit and failing to find the next pitch down, (or a pitch with bolts in it, anyway!), we ended up going back up again. My brand new oversuit was finally muddy, (so much so, in fact, that you couldn't see the separate bits of my SRT kit. It was just one huge lump of mud!).

In the evening, we all had a Christmas dinner in the Peak Hotel. Suffice to say, this rapidly degenerated into a napkin and party-popper throwing competition, which no-one won, but which I definitely lost, since I was sitting in the line of fire! The food itself was quite tasty and we made sure we cleared up the mess afterwards.

Later, the "Old Nags" stayed in the Peak Hotel, whilst others went to the Cheshire Cheese. When we arrived back at the hut, most of our dormitory went to bed, only to be woken up half an hour later, by a drinking game going on in the kitchen, in which Rob confessed to having had sex with a shower!! He spent the rest of the night on the toilet (see Hilary's 'photo).

On Sunday, most people with a furry suit went to Peak Cavern. I was most unimpressed with the show cave, but the rest of the cave was really good and thoroughly enjoyed by all. We split up into two groups, Andy Farrant describing the Geology of the bottom streamway and then having a mud fight, whilst a chap from the TSG hut (Dan), showed the rest of us around. I went through my first sump, (Lake Sump). On the way out, Julian was persuaded to walk through the stream and crawl underneath all the bridges, whilst we all walked over the top.

We arrived back at the TSG hut at about 5pm to find Rob still lying on the floor in his sleeping bag!

On the way home, we all sang songs in the minibus, such as, "I wanna be like yoo-hoo-hoo" and "Hit me with you rhythm stick". No-one knows why exactly.

The weekend was definitely a success, one which I thoroughly enjoyed.

Ian Morley, (with contributions from Simon Grace which have now been edited out!)

The AGM and Annual Dinner

The day started off with a planned trip to Swildons, but as no-one had a tackle store key plus a distinct lack of cars, we had to suffice with a quick jaunt round Browne's Folly Mine. This years AGM was well attended, and Bob Williams gave an interesting talk on the archaeology of Mendip from an unusual aspect - the air. He first covered the recent excavations in the Roman enclosures and mines at Charterhouse, which has for the first time proved the existence of Roman mining. This was especially interesting in view of the open rift they uncovered in the process. The aerial photos of the Gruffy Field, Charterhouse, Burrington and the Priddy lead workings were equally interesting, showing the Gruffy Field as it was before the 1968 floods.

The 'elections' for the new committee were held, this years committee is as follows:

President:	Prof. Malcolm Anderson (retiring at the end of this year)
Vice-Presidents	Prof. Bob Savage, Prof. D. Donovan, Mr A. ApSimon, M. C. Hawkes.
Hon. Secretaries	Simon Grace, Ian Morley
Student Treasurer	Lucy Chatburn
Senior Treasurer	Graham Mullan
Committee	Hilary Davies, Linda Wilson, Steve Cottle, James Sugg, Eve Pleydell and Tim Davies.
	RACHEL PRIVETT

Non-committee posts including Newsletter Editor and Museum monitor to be appointed. In addition, Andy Atkinson was proposed and accepted as a new member.

And now the drunken and debauched bit - well, not quite. The annual dinner was held in the 'Anthem' Restaurant on St Michael's Hill, (rumours that Vintner's wouldn't have us back again aren't true...honest!), where the dinner was held a few years ago, although the restaurant has changed hands since. The dinner was nobly arranged (sorry press-ganged into) by Tim Parish, who had to be dragged back from the wilds of Ascot by Rachel and Hilary to partake in it. As many of the old lags commented it was a very civilised affair, perhaps because of the thick walls separating the students table from theirs. However, Andy Atkinson excelled himself in demonstrating to the freshers what being drunk really means and then proceeded to give lessons on how to give all the blokes french kisses. If it wasn't for that the food would have been quite nice....

The annual UBSS awards ceremony was held shortly after, but as usual everyone was so drunk no-one can remember who got what - so here's what I think the prizes were...!

"Crap chat-up line of the year"-Rachel Privett (as usual)

"Most novel shopping trip of the year" - Steve Cottle (although I can't remember what for..!)

"Worst idea of the year" - Mike White for suggesting to Tim to trash the Gents in Crockers

"Nescafe Gold Blend Award for the best chat up line" - Linda Wilson

The "You did What?" Award - Jointly to Simon Shaw and Sarah Ryde for not admitting to being unfaithful to their partners.

The "Captain Oates 'I may be gone for some time' award" Bill Miners for his sojourn in Antarctica

"Sexual Pervert of the Year" Rob (who deserves it for *admitting* to having had sex with a shower..!?)

"Performance driver of the year" Eve Pleydell - although she claims Tim crashed as many minibuses as she did..

"SRT epic of the year" Chrissie for her efforts down Thrupe Lane Swallet.

"Keith Floyd Chef of the Year" Hugo 'Pong' Pile for his amazing Slovenian pepper stew.

"The Andrex Award" Andy Cooke - for the after-effects of Hugo's stew.

The "Bill Miners Memorial Hero Caver Award" James Sugg - for being a nutter.

"Dodgy Belay Award" Ian Wheeler and Eve Pleydell for their brilliant belaying through a krab technique

Finally, many thanks to Tim for his splendid organisational work and to the outgoing committee for their efforts last year.

A SPECULATION ON THE POST-GLACIAL DEVELOPMENT OF UPLAND SOILS WITH PARTICULAR REFERENCE TO THE DYFFRYN BAWN AREA OF MONTGOMERYSHIRE.

Nigel Wallace

My interest in this subject has arisen from a combination of sources; a long-standing interest in the prehistoric events in the development of our planet and evolution upon it, interest acquired through membership of the UBSS where, though I was mainly involved in caving and cave digging, some contact with archaeology and geology had its effect and interest in land and its agricultural history firstly as a student and more recently as owner and farmer of some hundred acres.

A further stimulus came from hearing the views of some conservationists in the early eighties. They were mainly concerned with how virtually all the activities of farmers and foresters were interfering with what they saw as "the natural unspoilt open landscape of the area". Of particular concern was the draining, liming and reseeded for agriculture and the planting of coniferous forestry of the semi-natural rough grazing areas in the Cwm Nant yr Eira part of Dyffryn Banw.

Following various reading and conversations with a variety of people, I concluded that this view was erroneous because it appears that this supposedly "natural unspoilt open landscape" of acid sticky soils with boggy patches, rushes and coarse thin grasses of low nutritional value is the aftermath of an ecological bombshell dropped by the first farmers in the area during Neolithic times. We are in fact talking about Britain's first industrial wasteland which was subsequently maintained in an open condition by a hill farming system involving a measure of cultivation on the better patches round farmsteads and ranch grazing, mainly by sheep, on the remainder.

My main source of literature on the subject was a series of papers from a symposium held at the University of Birmingham in 1975 published by Duckworth under the title *Conservation and Agriculture* edited by J. G. Hawkes. A brief summary of the view expressed in these papers is that the Neolithic peoples, who were the first farmers as opposed to hunter-gatherers, operated a shifting cultivation system based on slash and burn. basically they moved on to a patch of land, cleared the existing vegetation and burnt most of it either to get rid of it or as fuel. They then grew crops until fertility and yield dropped whereupon that area was abandoned and the process repeated elsewhere.

Soils reacted in two ways to this treatment – those classified as "robust" would, in time, regenerate similar vegetation and fertility. "Non-robust" soils, however, suffered a loss of organic matter and

structure becoming permanently low in fertility, often acid and, in the case of deflocculated clays, waterlogged. Such soils are now our areas of acid upland rough grazing, bog, moor and sandy heath.

From all this emerges an apparent outline of events as follows:- the ice of the last glaciation had a similar effect to wiping a very rough blackboard with a board rubber. Everything that had previously been around was wiped out except that, because of the rough surface and mainly horizontal plane, the "chalk dust", being mainly clay with or without varying accumulations of stones, was deposited on the rock surface instead of falling to the floor. In the Dyffryn Bawn area this would have left the steeper slopes with a surface weathering shale with areas of clay, usually with boulders, on some of the flatter parts, in depressions and in the valley bottoms associated with stony gravel collections working down watercourses and occasional dumps of moraine.

In an apparently quite short period this barren moonscape seems to have been transformed by climate and northerly movement of species into a quite fertile climax vegetation of broad-leaved woodland. The Neolithic farmers then moved in and proceeded to reduce the landscape to the situation previously described. Everything then remained in a fairly similar state until modern techniques of drainage and the use of lime to raise pH thereby flocculating the clays, produced conditions in which fertilisers and modern grass/clover mixtures could recreate fertility. It can thus be argued, if one so wishes, that the modern farmer has merely been repairing the damage inflicted by the Neolithics.

To me there have always been questions about this scenario. How was the barren post-glacial landscape able to transform into fertile broad-leaved woodland within the timescale – say from 10,000 to 6,000 BC – and to do so without acidification? Secondly, having done this once, why was the process not repeatable in the wake of the Neolithic farmers? Seemingly they had removed the fertility by around 2,000 BC from which time many areas of peat bog appear to date. Has the failure of fertility to reinstate been purely the result of the lower level farming activity continuing from this period to present times or have there been other factors involved?

I was discussing aspects of this with Arthur ApSimon (Dept. of Archaeology, University of Southampton) some two years ago when he mentioned some very significant information. Firstly he told me that similar events had occurred in the

west of Ireland, notably with regard to the exposed limestone pavements of the Burren which, prior to farming activity in the area had a covering of soil and vegetation. Secondly, archaeological studies around old burial chambers had revealed samples of a type of topsoil no longer found in the area.

This soil was a loess (wind blown soil) of a type which, had it been present as a reasonable depth topsoil over the area in the past, would have given rise to sufficiently fertile conditions to support substantial broad-leaved woodland and initially provide fertile agricultural land when this woodland was cleared. The loess nature of this soil would, however, predispose to removal by wind or water erosion when cleared of vegetation during agricultural operations. As to how it got there, managed to stick and build up in the first place, a possible explanation is that it arrived at just the right moment at the end of ice age when tundra was developing under the influence of permafrost. This would have meant that the soil was frozen to the ground as it landed, not washed away as most of the ice was already gone and held in place during further thawing by the developing tundra vegetation.

This concept reminded me of a book by Charles Berlitz called *The Mystery of Atlantis* (Panther Books). In this book Berlitz reviews the legend of Atlantis, the early mystery kingdom based on an Island in the Atlantic but having an empire spreading from the eastern Mediterranean to the Caribbean. The review covers ancient literature together with historical, archaeological and geological evidence.

From the evidence quoted the occurrence of the following events is supported:-

1. The melting of the polar icecap resulted in raised sea levels and thereby the inundation of areas of continental shelf upon which archaeological remains have been found.

2. Some archaeological remains have been found at greater depths than accounted for by raised sea levels alone. The redistribution of pressure on the earth's surface resulting from the movement away from the poles appears to have caused movements of the tectonic plates resulting in some areas sinking to greater depths. It is also suggested that other areas, notably in South America, rose to a greater height. This would explain why some of the ancient lost cities there – Tihuanaco is quoted as an example –

were built in places where today the altitude results in somewhat uncomfortable living conditions.

3. It is further suggested that these movements of the tectonic plates caused major earthquake and volcanic activity of a nature sufficient to cause the violent destruction of a large island or islands in the vicinity of the present mid-Atlantic ridge had there been something of the sort there at the time.

The main evidence from ancient literature comes from Plato, who in turn refers to earlier sources. He states that there was an ancient empire ruled from an island beyond the Pillars of Hercules (Straits of Gibraltar) which extended from the far west to the east of the Mediterranean. This collapsed after the island headquarters was blown to bits in an enormous volcanic eruption. He also mentions, almost as a casual aside, that at that time the sea beyond the Pillars of Hercules was not navigable due to its high mud content. This story was apparently kept going by the Phoenicians who, having discovered that it was not, or at any rate was no longer, the case, wished to protect a trade monopoly along the Atlantic coasts. It is also of interest that several religions besides Christianity have some sort of flood myth in their ancient literature. This is so on both sides of the Atlantic.

In the mid 1980's the explosion of the Chernobyl nuclear power station in the Ukraine resulted in parts of the British Isles receiving radioactive particles due to a combination of wind from an unusual direction and rain at a particular moment. With our much more usual south westerly winds there seems to be a considerable likelihood of our receiving some of any material blasted into the air in the mid-Atlantic region. It thus seems feasible that the loess soil found in Ireland by Arthur could have originated in this way and might therefore also be the missing factor in the history of upland soils in mid-Wales and elsewhere.

There seems to be considerable scope for further research on this subject. Verification of elements of evidence quoted by Berlitz which are inadequately substantiated would be one aspect. Another would be the collection and collation of any other evidence of loess soils being found in the British Isles, particularly in upland areas, and analysis of them to see if information could be deduced as to their origin.

ACCESS TO G.B. AND CHARTERHOUSE, LATEST NEWS

The Charterhouse Caving Committee have now agreed the Memorandum and Articles of Association for their new Limited Company structure, and the Company should formally come into being during February. Negotiations with the Landowners, new and prospective, are continuing, and the new access agreements should be in place soon after. Access by members to all CCC controlled caves should therefore continue without any noticeable change.

Graham Mullan

Nigel Wallace, Loess and Atlantis

A belated but necessary comment, for which I have not done any research. My recollection of the occasion to which he refers is as usual rather imperfect. I would not like to swear an oath that I did not say what he says I did, but I have been unable to think what Irish megalithic tomb might have been involved, though I have a nagging feeling that there may be something behind the story.

What I think I am likely to have said, on the basis of what I can remember when I've not just had dinner with a lot of old Spelaeos, would suggest that he has compounded three separate sets of evidence.

The first would be the discovery some years back, when John Evans of the Archaeology Department, U.C. Cardif, cut a section through the bank round Stonehenge, was that the old soil beneath it was developed on a layer of wind-blown loess, which is likely to have been deposited late in the last major cold phase, the Devensian, before about 13,000 yrs ago. Such loess, essentially silt with smaller components of clay and fine sand was probably blown out of the major river valleys of the region, and spread like a blanket over the landscape. Much of it may have survived on the chalkland of Salisbury Plain away from valleys, until Neolithic farmers began the process of forest clearance. This would mean that the soil and environment these farmers met would be very different from that present now, where 5-6000 years of farming and natural erosion has completely removed any loess, almost all the soil and maybe as much as a metre of chalk. They would have met a rich humic forest soil overlying an only faintly calcareous or even slightly acid subsoil, stone free and relatively free draining, totally different from the residual highly calcareous soils surviving today, often virtually bare chalk. These soils would have been much easier to clear and cultivate and much more rewarding than those of today.

The second discovery is from Brittany, where on the north coast thick deposits of loess, probably blown out of the valley of the English Channel river by northerly winds, are exposed in coastal cliffs very like those of the Brean Down sand cliff. Such loess is virtually restricted to the coastal zone and is unknown inland, except that some Early Bronze Age barrows as much as 50 km south of the coast turn out to be built of almost pure loess, showing that the loess there also must once have been much more extensive than it is now.

The third must I think be the Early Neolithic Portal Tomb at Poul nabrone which stands on the almost bare limestone pavement of the Burren in County Clare (the scene of Linda's mini-megalithic replica building spree - there were about 50 of these around 1990!). Excavation showed that this tomb had been built on a thin soil layer, which has since disappeared down the cracks where not protected by the tomb, so the environment when it was built was very different (there is plenty of other evidence to confirm this), but alas for Nigel's thesis, this soil wasn't loess. In fact though I have a nagging feeling that something unexpected turned up in Connemara, I can't remember (which doesn't necessarily mean very much) any loessic material from Ireland, though of course wind blown sands of glacial age are a very different matter.

And sorry, Nigel, I don't believe that Plato's Atlantis had a real existence, I think he was just using shadowy folk memories of the disasters which overtook Thera and Minoan Crete as a peg around which to weave his utopian fantasy - and not really a very nice one either. But Nigel is right to say that we should be looking for the unexpected - there are wind-blown sands on top of Scottish mountains - and it is such discoveries which can radically change our understanding of the environments which prehistoric people faced and exploited. Nice try.

Arthur ApSimon

GOUFFRE BERGER

Mick McHale

Despite the attractions of Northern Spain and the more exotic temptations of South East Asia, the Vercors region of Southern France has a magnetic lure for the Speleo. Of the many splendid systems in the massif the most renowned is the Gouffre Berger. At 1122 m it remains not only one of the deepest caves in the world but one of the classic sporting trips.

A long standing personal ambition to bottom the system was thwarted in 1987 when the mysterious disappearance of Alex Pitcher closed access to it during my first visit to the Vercors. I made plans to return in 1988. Access to the system is strictly controlled, not only due to its popularity but because its resurgence, the Cuves de Sassenage, is a public water supply. In addition like many Alpine caves it has its own natural access control – winter snows and autumn floods render it impassable except in the summer months.

Clubs may join a two year waiting list to gain a seven or fourteen day booking for the hole. The system is administered by the Mayor's office in Engins, a small village nearby. I visited Monsieur l'Maire in 1987 and while he refused to allow me to enter then, he did supply the names of a number of British clubs who had bookings for the following summer. Only *bona fide* clubs are allowed entry and they must supply a full list (in advance) of members intending to do the pot; each of whom must have adequate (normally BCRA) rescue insurance. In addition they must maintain a permanent sentry at the entrance to prevent unlawful access and to monitor cavers passing in and out of the system.

A letter, a 'phone call and a £50 contribution secured me a place on the joint CPC/Wessex booking for July 1988. Now to find a partner, Mike Bertenshaw, keen to match his ascent of Mont Blanc with a similar descent, was an enthusiastic team mate. As with all modern Alpine systems, a team of 2 or 3 is ideal.

Getting to the Berger is relatively easy, situated as it is above Grenoble, a 12 hour drive from Calais. However despite telephoning most of the CPC/Wessex we were unable to find a carspace. Fortunately Grenoble is served by an excellent motorcoach service from Victoria Station which takes a little over 12 hours, including ferry. This is overnight and the perils of French bus drivers can be slept through unless they wake you up to translate for them at British Customs!

From Grenoble a local bus service wends its way up through the Alpine karst to the village of

Autrans. This idyllic spot is almost sufficient to keep one on the surface. During the winter it is a popular cross country ski resort and it contains the summer homes of the wealthy Grenoble. The atmosphere is only spolt by the pale bearded British cavers over-indulging in beer and haggling with the shopkeepers in broken French. The more refined Bergerbasher will camp in Autrans and drive to the cave. In typical British fashion, most people camp at a free makeshift site higher on the mountain at the top of a forest track. This is La Molière, some 4 miles from Autrans. The Alpine meadow here was abuzz with the sound of flies feasting on the combined odour of fifty or so cavers.

This part of the Vercors, known as the Sornin Plateau was the prospecting ground of a number of Grenoble cavers in the post war years and the tradition is continued to this day as alternative and higher entrances to the system are sought. Water draining into the plateau was known to emerge several thousand feet lower in the aquatic cuves de Sassenage, a local tourist attraction. In 1953, during one such prospecting trip on the heavily wooded plateau, a local caver, Jo Berger, located a promising hole which, after an initial freeclimb, he described as having a "whole little system of caves to look forward to". Little did he know that this system would make his name famous in the annals of speleology.

A stiffish walk of an hour leads from La Molière to the entrance. We had planned our arrival to coincide with the expected time that the second rigging party would have bottomed the cave and early enough to avoid the initial rush of photographic team and "short trip tourists" who might hold up our descent. The entrance, a rather uninspiring shaft, lay in a sunlit clearing on the limestone pavement, so it was that we made a leisurely change with the prospect of a ready rigged 1100 m+ deep trip awaiting us.

Like the early explorers, who had made non camping trips lasting over 50 hours, we had decided that bivi gear would not be necessary. The Berger demands a similar attitude to Alpine mountaineering, in that one can plan for an overnight bivouac and carry food, shelter, stores etc., with their added weight and time penalty or aim to move light and fast with a consequent risk of being caught out by weather changes. We opted for the latter and decided to carry a minimum amount of gear namely a few spare clothes and some food. We had a small, fit team and a ready rigged cave and hopefully no queues. Larger

parties and those taking photographs might well opt to bivouac at Camp 1.

So loaded with chocolate, sugar sweets, carbide and fags we began our descent. After an initial climb (by handline) we reached a rickety wooden platform used as a lifeline stance by our electron forebears. The cave rapidly drops past the pure white limestone to Cairn hall. A faded bunch of flowers on top of the cairn was a poignant reminder of Alex Pitcher who had disappeared near this spot the previous year. Again it was here in 1953 that Ruiz, a Spanish member of the first exploration team had taken a fall when the ladder sheared. We were more fortunate, the cave had been well rigged with 11 mm rope in classic Elliot fashion. The only disconcerting feature was its stiffness when using a Petzl stop.

Despite the chill atmosphere we were already hot and sweaty as we set off along a horizontal rift known as the First Meanders. This has awkward but straightforward bridging ending at a traverse line over the fine Garby's Shaft (38 m). Somewhere not far away was Alex's body. He had gone off route in the meanders, entered an unstable area and pulled a boulder onto himself. There he lay until his discovery by the French CRO in 1989.

More traverse rift reaches Gontard's Shaft, again named after one of the early explorers who had spent the winter months making 100 feet electron ladders to further their summer explorations. Three short but annoying ladder pitches follow, then give way to the superb Aldo's Shaft, at 42 m on of the longest in the system and a spectacular abseil.

On leaving Aldo's the early explorers were rewarded with their goal, for at this junction the whole nature of the cave changes. A short scramble opens into the vastness of the main cave at the Petzl gallery. Snaking between muddy banks was the long dreamt for "Starless River" which they knew would lead them into the depths of the plateau on its course to the Cuves de Sassenage.

Stomping passage of enormous proportions skirts the vast quagmire that is Lake Cadoux. After rain, as on the first explorations, this Paschendale becomes a shallow lake, requiring a dingy to pass it. In contrast, the following passage, Bourgin Hall, is truly splendid. The full meaning of "continental sixe" passage is apparent here, with its 10 m stals and soaring roof. The "Little General" pitch, named after a rival speleologist of the Grenoble team is another awkward ladder, succeeded by a sloping traverse and short drop known as "Tyrolean".

Much of the cave's depth is gained, as in many Alpine systems, by sloping rift passages; the Great Rubble Heap is one of these. cavers pick their way "antlike" down its tumbled slope guided by reflective arrows to avoid the worst of the house sized boulders. Parties can pass on this enormous tip without noticing each other. This was thought to be

how Pitcher lost his colleagues in the first place, resulting in a gruelling search of the slope by the French rescue team.

As a contrast, the Hall of the Thirteen, which follows, is a room of smooth floors and symmetrically shaped stals. This is the most photographed part of the Berger and is also the site of camp 1 and has been so since the early days of exploration. As a consequence it bears the evidence of Man's presence in the form of huge mounds of carbide and detritus. The site does offer some shelter from drips, and freshwater but has little else to recommend it, being a rather squalid affair. Ant attempts at sleep are disturbed by throngs of cavers moving in and out of the cave. We didn't stop!

The cave is virtually dry to this point and warm enough when moving to make even an oversuit superfluous. Beyond Camp 1 some choose to don a wetsuit if they've carried in. The French pontoniers might offer the best compromise for the watery passages to follow.

The Balcony pitch (15 m) drops off the huge flowstone of the Hall of the Thirteen into another calcited zone which necessitates some climbs up as well as down. These finish at the Vestibule Pitch into the water. This area contains a number of side passages and whilst obvious on the descent we managed to miss the route on our return.

The sporting (and draining) potential of the cave was most apparent in the ensuing sections where summer storms make the pitches impassable. During a caving instructors' meeting in 1982, two Belgian cavers drowned whilst attempting to exit in flood and a number of other cavers, including Paul Ramsden formerly of Whernside Manor, were marooned for 24 hours until the water dropped. The moral, as always, get a forecast and *stay out if in doubt*. Further useful precautions are to carry exposure bags, spare food and foam mattresses on which to sit out the flood.

A series of cascades follow Vestibule pitch. They are freeclimbable in the dry. They are linked by a series of wet canals along which are strung lengths of rope in various states of decay. These and some acrobatic manoeuvres allow one to keep relatively dry. The following five pitches and climbs merge into one as memory fades, but all are wet. Claudines is notable for its steel pole, used by the original explorers to avoid the water and ferried in section by section during long trips. Scrap iron decorates other sections, too, notably lengths of fencing wire strung tyrolean fashion over the cascades. The unwary clip onto these whilst descending to avoid the spray, altogether ruining their aluminium krabs. To avoid a tangle and some awkward thrashing on the return they are best ignored and the rope used on its own. Lets face it – how much wetter can you get!

The Grand Canyon, which follows, is, despite its name, dry except in floods. This is another bouldery slope of enormous proportions but slippery with water carried down by cavers. Ragged handlines help avoid a tumble into Camp 2, situated at the bottom. This is again a rather miserable affair but is at least quiet and dry and gives some respite before the final push to the bottom. More watery passage follows, adding to the numbed state of body and mind, however concentration cannot slip as the big pitches are to follow.

A series of small and occasionally wet pitches and climbs follow, culminating in the Grand Cascade (27 m). A short but humiliating passage ensues. Humiliating because it is the only place where one needs to get down on all fours to pass a low roof – somehow out of keeping in this grand place. The passage is increasingly aqueous as it leads to the noisy and infamous Little Monkey pitch. Originally rigged acrobatically whilst dangling off a projecting steel pole – hence the name – a modern but equally apelike traverse over the pitch head gives a passably dry hang for its 45 m length.

The end is nigh but not easily gained. As rigging teams tire so their efforts slacken, hence the roped climb out onto Hurricane shaft becomes an

awkward bellycrawl along a ledge 45 m above the floor. The pitch, well named, is the last in the cave; other inlets join its water crashing down a long steep boulder slope towards the sump which take us beyond the 1,000 m mark.

The water levels off to a pseudosyphon, but more depth can be gained by awkward bridging over deep water to the Diver's Camp. It was here that Britain's Ken Pearce set off alone to explore the sumps in 1967, having bullied his sherpas to the bottom, on ladder. French divers have since penetrated further sumps, but as yet the connection to the resurgence remains elusive.

The sump marks a rather ignominious end to a fine cave, however, unlike many of its rivals there is only one way back, out to the entrance some 3650 feet above. We reached the sump at 11pm after a lie-surly 8 hour descent. The return was to take us in the region of 15 hours with stops at both Camps 1 and 2 for hot drinks. Strangely we felt little like eating, not helped by the abysmal failure of our HotCan to become hot.

The ascent was notable for the tedium of the boulder climbs and the never ending pitches of the entrance series. With carbide and muscle power at a low we emerged at 3 pm into strong sunshine – truly Bergered!!

LOGISTICS

Provisions

We used dried food at the surface camp which has a water tap. Fresh rations, showers and amenities available in Autrans, a half hour drive from the Molière camp. There are two family camp sites in Autrans.

Trips

20 -24 hours allows for a comfortable pace. A bivi at Camp 1 could add anything up to 10 hours to this time. Photographers spent up to 52 hours in the system, a solo caver (Dalek of the BPC) bottomed and out in 10 hours! An introductory trip to Camp 1 is about 5 hours.

Equipment

Clothing: Medium weight pile suits suffice to Camp 1 whereafter oversuits are recommended. In wet weather a full wetsuit or longjohns may be best for the lower cave, but adds bulk.

We carried food and spare light in a small BDH container and personal STR bags. Dextrose type sweets are more palatable than chocolate. A survival bag, a balaclava, a spare sweater for stops are sensible precautions, as is a personal spanner to tighten bolts. A steel krab should be carried to avoid wear on aluminium ones.

Lighting: Most people prefer carbide. Be prepared to carry a considerable quantity – the passage size demands a large flame. Dumping spent carbide should be discouraged. Carbide can be purchased at Pont en Royans in large lumps only.

REFERENCES

1. The Crewe Pot Hole Club Journal gives a most exhaustive account of a Berger Expedition.
2. Des Marshall's recently published book Vercors caving contains a useful description of the Berger, and other excellent trips in the area.

A MODEST SUCCESS AT BOS SWALLET

Graham Mullan

This story begins early in 1994, when I spent a couple of days assisting in the resurveying of the surface around Bos swallet, as part of Arthur ApSimon's reassessment of the archaeological work undertaken by the Society in the 1950's. Naturally this aroused an interest in seeing what lay underground here, and when we were repulsed from our then current dig at Tynning's Great Swallet by moving walls of rocks (we will return!) it seemed like a good place to investigate.

In the years since anyone else had shown an interest in digging there, two things had occurred: The arrival of powerful and portable Bosch drills has revolutionised blasting techniques and the entrance had fallen in! The latter problem, the blocking of the first squeeze by fallen rocks, was solved for us by Bill^{my} & Tim who nobly hauled them out one weekend (thanks lads) & we were ready to start. No we weren't, 'cos I couldn't fit through that squeeze! A couple of severe hits later and we re-entered Disappointment Chamber, the then bottom of the cave.

The obvious place to dig was the narrow draughting rift that dropped from the middle of the chamber. Drilling and banging the hanging wall of this proved very straightforward, and in no time at all – six evening trips, we had passed this and arrived at the head of a pitch! Another bang was required to open this out, and then on August 7th we made the first descent of a 7 m pitch into a nice round, decorated chamber, with a pile of boulders on the floor.

They way on was under the boulder pile and through yet another squeeze into a short piece of canyon ending in yet another constriction and needing yet more bang. Progress continued to be ridiculously easy notwithstanding Hugo's attempt to set fire to Dr. Boycott's drill batteries, and a couple more bangs saw us descending a second pitch, this one of about 5-6 m.

Around the corner was a junction, right and up lead into a small chamber with no ways on, down and right to yet another tight draughting rift. This is the present limit & requires more banging. Work stopped at around this time, for several reasons, not least that the cave is now slightly too long to comfortably work of an evening – especially when having to lug heavy drill batteries in and out – and that the presence of a wet weather stream makes the end somewhat sordid and cold in winter. Work will restart in the spring, however.

Our first attempt at surveying the extension was less than successful and has yet to be repeated, but the grade one additions to the 1951 original in the sketch section shown here give the flavour of the place. It now seems to be about as deep as the neighbouring Drunkards Hole & Rods Pot, but unlike those two is still going & still draughting strongly.

Geomorphologically, it is formed in the uppermost beds of the Carboniferous Limestone, right on the contact with the overlying shales, and some bands of shale are prominent within it. It appears, subject to survey, to show the same phreatic levels as can be seen in both Rods and Drunkards, though less well developed than in those caves, and is obviously tributary to/an alternative sink for the same system – but as it is still going it has a much greater chance of reaching the cave beyond. Roll on next season!

The bolt belays for the pitches, there are no natural ones, have been removed until work starts again, so anyone interested in a look would be best advised to contact the diggers, myself, Tony Boycott or Julian Walford.

BOS SWALLET

