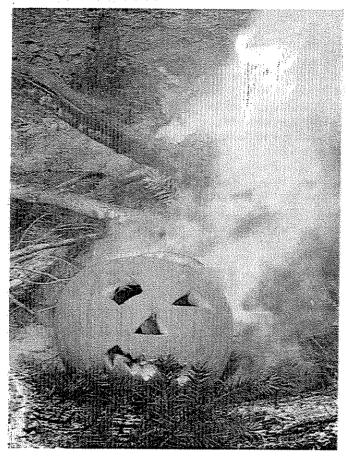
U.B.S.S. NEWSLETTER AUTUMN 2002



Welcome to the Autumn/Winter edition of the UBSS newsletter. It being such a bumper crop (many, many thanks to all contributors and cheers Trish for formatting it) I will keep the editorial brief!

It has been a great term for the UBSS with several large hut weekends of which Bonfire weekend continues to get larger (and more exciting – outdoor fireworks are supposed to be outdoor!) and excursions to Yorkshire and South Wales with an eager band of novice cavers. I have been asked by Si Lee to draw your attention to our website which has many interesting bits and pieces including a regularly updated photo gallery (especially good if you only have hazy memories past about 6 pints of Butcombe on bonfire night). It can be found at: http://www.bris.ac.uk/Depts/Union/UBSS/Home/Home.htm

The membership card you find attached is due to some caves (Dan-yr-Ogof in particular) needing proof of public liability insurance so keep it on you when heading out caving. Students will need to find Sam Smith to get hold of their cards and get them signed. Keep checking your emails for a list of trips, talks and general gubbins next term, Have a great holiday and hopefully see you underground in 2003, Ed

THE OLIVER LLOYD MEMORIAL FUND

Linda Wilson

This Fund was set up in 1986, at the instigation of our then President, Professor Bob Savage, in memory of Oliver Lloyd who died in 1985. Oliver had for many years been greatly involved in the running of the UBSS, had been Treasurer and Editor of Proceedings and had contributed in a great number of ways to the Society and to the world of caving in general and especially cave diving.

Oliver was a great character, and people either loved him or (occasionally) loathed him, but he certainly never bored anyone. He was passionate about all his interests: caving, caving diving, music, fine wines, botany. The list could go on and on. He lived in a house in Stoke Bishop that was almost as interesting as he was, having been built in the 1940s to demonstrate "modern" architecture and technology. The original heating system was of ducted hot air, which left behind it a series of holes in the ceiling, around the edge of each room. Oliver used these for storing his collection of wine corks, as each one neatly filled a hole. By the time I

first saw the house, the holes in the ceiling of the through lounge/dining room were almost filled up. The corks also aided and abetted the spinning of webs by numerous spiders. In Oliver's own words, when questioned on this: "I indulge in spiders". Answer enough for anyone who knew him.

His garden was of equal interest.

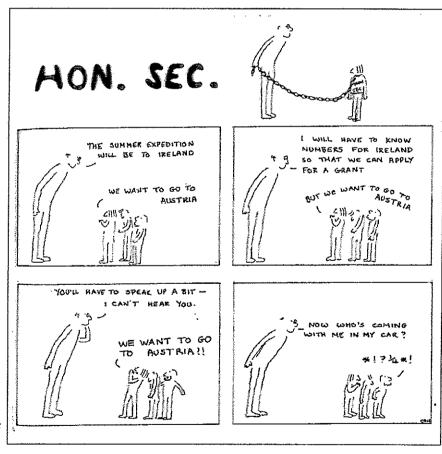
Overgrown in the extreme, to the extent that on one occasion, his more tidy-minded neighbours complained to the City Council that the garden was causing a nuisance. He drafted in his brother, gardening expert Christopher Lloyd, who pointed out the number of rare ferns and other notable plants, and the City Council troubled Oliver no more.

Oliver's death left the Society without one of its most well known characters, and it took at least three people to take over the various roles that he had filled with such energy and enthusiasm. Some months after his death, Bob mooted the idea of a Trust Fund in Oliver's memory, to support the publication of *Proceedings* and other publications, a subject with which Oliver had always been greatly

involved. Bob was looking at a possible future where the University grant would no longer be available to finance *Proceedings* and he wanted to secure its future, if possible. The response to donations for the Fund was very good and so the Oliver Lloyd Memorial Fund was set up, independently of the UBSS, so that it could be run as a private Trust, with the UBSS as its sole beneficiary and with the objects of supporting publications and ancillary purposes. The original

trustees were Bob Savage, Desmond Donovan, Trevor Shaw and myself. Clive Owen joined us, following the resignation of Trevor Shaw and Arthur ApSimon became a trustee following Bob's death. The latest recruit is Andrew Atkinson who became a trustee in September this year. The Trust is treated as a charitable trust by the Inland Revenue and so can obtain tax rebates on donations, through their "Gift Aid" scheme.

In the years since it was set up, the Trust has contributed to the costs of producing *Proceedings*, when needed and has made other grants for ancillary purposes such as the binding of journals in our library. However, in the last couple of years it has become clear that publication costs have dropped as a result of the use of computers. This has reduced the need for grants from the Fund for the purposes originally envisaged. At the same time financial pressures of other kinds have arisen. Students now have less cash to fund their activities. Travel has become more expensive. A modern



Some would call Oliver autocratic!!

world has started to dictate different standards of comfort, even for cavers, as becoming more the norm. Gear is more expensive etc. etc. Andrew in particular began to float the idea that it would be for the long term benefit of the Society to see if we could attract more and larger donations to a fund that was more widely drawn for the benefit of its general

activities, not just publications. The Trustees of the Oliver Lloyd Fund agreed with him and spent time considering whether the ambit of the Fund could be changed and how, and following legal advice, the objects of the Trust have been widened to cover the funding or assisting in the funding of the aims and activities of the [UBSS] which include the discovery exploration and study of caves and their contents, the study of Archaeology, the publication of its Proceedings

and other publications, the maintenance of its museum and library and its Field Headquarters and for such ancillary purposes as the Trustees shall in their absolute discretion think fit. Andrew was also asked to join us as a Trustee to help us take the OCL Fund on into this millennium, and so that he could do some work as well, as after all it was his bright idea! He agreed, or rather, in time honoured UBSS fashion, he didn't hit me with a brick whilst saying no, so that was taken as an acceptance.

So here you have it, folks. A new, re-vamped Trust Fund with a much wider remit. Just think of it, the future possibilities are endless......all we need is more dosh! At the moment, the Fund is producing an income of around £650 per year, so we haven't got cash to burn.

But if this can be built up, the projects that we can become involved with grow considerably as well and the more resources we have the more we can support our members. As an example the BCRA were recently left a very large sum of money, over six figures (!) by one of their members. Think

what we could do with that sort of money. (Answers on a postcard suggesting enormous parties at the Hut are not needed, the Trustees are bright enough and addicted enough to drink to have thought of that one already!!)

What we need to do now is raise the profile of the Fund again and raise cash as well. Not an easy task, and to be honest the best ways of doing this are still under discussion. This article

is simply a start, to remind/tell people who Oliver was, what the Fund is and to start you all thinking about what the Fund can/could do for the Society as a whole. Any one who would like to send any money now is encouraged to do so. Cheques can be sent to any of the Trustees, payable to the Oliver Lloyd Memorial Fund. The next step is likely to be a personal appeal from the President....

One hard fact has come home to all of us, whilst thinking about the process....there don't seem to be any non-tacky ways of asking for money, so you'll have to forgive us all in advance, after all, we are trying to do this for the benefit of the Society as a whole, so, tacky or not, here we go......!

And don't forget, the Trustees need input from the student members and the active cavers in the Society to

suggest ways in which the fund could be used to help their activities - remember this is for things that the Society's normal funds cannot cover. Over to you all!!



I HOLD THE FUNDS OF SEVERAL
ORGANISATIONS IN BANK ACCOUNTS
BEARING MY NAME AND FIND IT
A VERY CONVENIENT ARRANGEMENT

- O C.Liová

Oliver was involved in running the Council of Southern Caving

Clubs and the Cave Diving Group, as well as the UBSS!

Cartoon by courtesy of the Wessex Cave Club

TREASURER'S BIT

Graham Mullan

As is boringly predictable, I have to give a list of members who have yet to pay their 2002/3 subscriptions. It would help my workload a great deal if the following would a) pay up and b) consider paying by bankers order in the future:

Ed Bailey (£12) Adam Goulding (£12) Jez Newman (£12) Roy Vranch (£24) Ruth Charles (£24) Simon Grace (£24) Marco Paganuzzi (£12)

Andy Currant (£6) Tim Lyons (£24) James Tooley (£12)

Less predicately, there are a number of students (mainly medics) who I would have expected to have rejoined but who have yet to be seen. Anybody know where Hayley Evans and Christina Hoskins are?

Applications for Grants from the Tratman Fund

This Fund originates from the bequest to the University by the late Prof. E.K. Tratman who died in 1978. 'Trat' had been a member of UBSS since 1919 and was our President from 1948 to 1972. In his lifetime he led numerous caving expeditions and archaeological excavations and was generous in encouraging exploration and research by younger members.

The arrangements for the Tratman Fund stem from proposals made in 1979 by the late Prof. Bob Savage, President in 1977-90 and by the late Dr Allan Rogers, Hon. Sec. in 1939-40 and a member for over 50 years. As modified in May 1996, these provide for one-tenth (previously it was one-fifth) of the annual income to come to the Spelaeological Society to make grants available to encourage spelaeology and cave archaeology within the University (the rest of the income goes to the Tratman Scholarship which funds a postgraduate studentship in Archaeology, Geology or Geography, with an emphasis on studies in the Bristol region).

Current Arrangements

Applications should be made to the Society's President, Mr ApSimon, either directly (address below), or via the Hon Treasurer, Mr Graham Mullan.

Applications for grants for 'fieldwork' for the Christmas and Easter vacations and the intervening period should reach the President by 15 November, those for the summer period by 1 April.

Application for grants to assist publication in the Society's *Proceedings* of research by members should normally be made by 15 November.

Applications for grants

These must be neatly typed and signed by the principal applicant(s). Applications for fieldwork grants should contain/cover the following aspects:

- a concise note of the relevant geographical, geological, spelaeological and/or archaeological features of the project area;
- its location (Lat. & Long. if outside the British Isles);
- names of principal caves or sites to be visited;
- · description and aims of the proposed work;
- reference to previous work and relevant reports;

- names and relevant experience/qualifications of the leaders/organizers;
- names and membership status of persons taking part (undegraduate, postgrad, staff, senior, outside);
- a breakdown of the funding requested and whether other funding is available/is being sought;

For foreign expeditions we may ask for a reference (or name and address of a referee) from a UK based or locally based person or organisation covering:

- the potential value of the project:
- its feasibility without undue safety risks, given the experience and competence of the applicants and team;
- possible co-operation with and acceptability to local researchers.

As a condition of any grant, we ask for on completion:

- a short written report or informal note for publication in our *Newsletter* detailing the activities of the expedition/project and the results obtained:
- sight of the expedition log and appropriate documentation of expenditure.

Depending on results and conditions which may be imposed by other funding bodies we would expect that where appropriate a report suitable for publication in our *Proceedings* would be offered in due course.

Processing applications, arrangements for payment

In considering applications, the President consults Senior Officers/members of the Society and external referees if necessary. Weight is given to the archaeological or spelaeological potential of the project. Other things being equal, preference will be given to applications from student members.

The Hon. Treasurer distributes grants to the principal applicant(s) who is/are responsible for allocation in accordance with the terms of the grant.

Since the total sum available in any one year is not large members should be prepared to get only a proportion or even none of the sums applied for.

> Arthur ApSimon President Mansell Cottage, Swanmore Road Swanmore Southampton SO32 2QH

UBSS IMPRESIONS

By José Luis Carreon Macedo

Impressions

I am a fresher and I am from Mexico. Caving? One year ago I just had been in warm, relative dry, vertical caves in Mexico. I had enjoyed the adrenaline flowing in my body when I was suspended in long pitches. Maybe those memories made my heart beat when I saw the stand of the University of Bristol Speleological Society (UBSS) in the FRESH fair.

First night in the Pub

Language problems have been something unavoidable but as soon as I realized that some people know more foreign languages than they admit and practice I felt more comfortable. Especially when I received a message in Spanish from Trish (Oh! Captain, my Captain...have you seen "Dead Poets Society" movie?) inviting me to a pictorial presentation of the club at Micawbers Pub. The pictures, the music, the ales were superb so I didn't understand why some people leave the pub after the show. There I learned that the loss of freshers can be like the loss of hair. It could happen very soon in your life.

Mendip Day Trip

Mendip Hills, my first caving in the UK and it was strange, no need of single rope technique (SRT), just helmet, light, suits and wellies. The game that I played: be swallowed by a lobster and, like Jonas in the Bible, escape from its dark interior. Fortunately for that "hell" I had the best Dante's Virgil personified in the couple Rob-Emma. Extra points: As the co-pilot of captain Trish I had a taste of that other maze that takes you throw Cheddar, Wells, Petty and our hut with the excitement of be travelling in a tight one-line-road-for-two-cars or in the "wrong" side of the road (Shit...what's doing in the right line that car approaching!!!..oh!, I see, we're in the left)

South Wales Weekend

Saturday (Fun day)

Go caving and know the country! Yeah! But be sure that somebody reserved a place for you in one of the cars. Ogof Ffynnon Ddu (OFD) cave has a welsh meaning in its name, maybe different to its meaning in my impressed mind: an amusement park. And again with the perfect guide for a pleasant trip according to our kid's curiosity (Louise, Lisa and J.Luis (me)) This cave has muggy passages where, if like me you don't use gloves, your hands could become pottery with little warm. You will be happy in its long tunnels for run, run, and run and run...and fall in the stream underneath if the guide doesn't stop you.

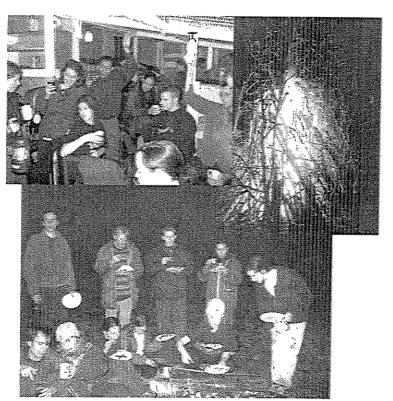
There I also had my first post-caving enjoyment because there's no better place for share your cave impressions that a warm pub for put you fast in the best alcoholic mood. I also learned what sleeping in a hut means but the future deserved me more surprises.

Sunday (Work day)

I joined the Tim's video maker team along with Lou, Trish and Ed Mallon. Following a different trip and comparing with that the day before I felt like visiting the roof of the amusement park, ending the trip with the filming of a rescue practice (some caves are crowded). Of course, the presence of all those rescuers couldn't be ignored and Tim, Ed and I decided to make a fast visit to the stream, flowing with the water, running along those black walls made of razor blades up to a fabulous water fall. There I learned other lesson. Why shoulders were made for in a cave. Thanks Tim!

Bonfire Weekend

It was as promised, a major party with caving extra fun. Do you feel thirsty, do you feel hungry, do you feel cold...don't miss the Bonfire... and be sure that you are not so tired that you will miss the challenges. Just have a look in the gallery of the web site!



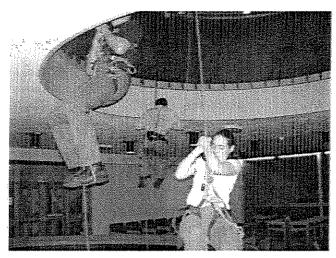
Derbyshire...sorry New Yorkshire Weekend

For several reasons the attraction of York caves gained the next caving weekend in the calendar.

What is worst than a crowded cave?...A crowded cave with ropes. And that's the nature of SRT in a cave. You may have all the fun and excitement that being suspended in a dark high empty space have (and we had all that!) but ask to Emma how cold (not cool!) could be to wait (wet of course) for your turn in the rope.

Besides that now you can say that caving-SRT is cool! And could be the best way to know about yourself. As my leader in Mexico says, what better improvement to your self esteem that realize how able you are to climb (prusiking) 300m of

rope. With practicing SRT in a cave you will be able to know how crazy you could be (that what your parents are telling you every time about your weekends) and if you avoid killing yourself you will also learn where your limits could be. Oh! And you also will learn the difference between a cave and the stairs in the Union Building.



Thinking in all those teachings that SRT-caving has I decided to miss that pub night, take a shower and go to sleep early. (Do I say sleep?) With all the adrenaline in my body it was difficult to sleep and I felt in deep meditations. Meditations that pretty soon were mixed with the sounds of

the jungle.

Personally I never have slept in a jungle but some people say that, depending of the kind of jungle, you can hear the rain, the wind, the leaves falling, the insects jumping and singing, and the movements of the night hunters. Well, Yorkshire is cold and the water in the pipes, in the heater, does strange sounds that came with the movements of drunk people jumping in the bunk beds, hunting for a bed, for a sleeping bag (or for food?).

And there all we were, all together in the concert of the windy snoring, the rainy sounds of our stomachs and noses! I learned then that if you want to be a (sleeping) rock in the jungle you need a lot of ales/beers/ciders before. I paid the price of went to sleep early. Louise hunted me...a bed.

Next day in Lancaster shire I saw in a cave the most beautiful white stalactites I have never saw. They formed to my eyes the figure of a ballet dancer with her partner. That was thanks to Louise's and Pete's curiosity that along with the energetic guidance of Ed Hill (he is like a gnome in a cave, disappearing in front of you to appear behind, above or below you with extraordinaire and contagious energy) made that caving Sunday a great one.

And I'm missing to talk about the training sessions, the Tuesday's Pub with its ghost, the travel-gypsy-dance-music that Si, Pete and I enjoy. But at last all take you to the same. In Mexico or in Great Britain, we, cavers, are the best of the best.

SARDINIA...

(a tale of cat-food, man-eating porkies, endless wine & beer, Thunderbirds and an experience better than SEX). Cert 18.

The Director:

...Got the Sack

The Crew:

Stunt Driver 1 (and cave support)
Stunt Driver 2 (and cameraman)
... Steve Cottle
Stunt Woman (and general mishap)
... Charlotte Hamilton
Lifeguard (and winner of the Beer-Cross)
... Juliet Morse
Narrator (and winner of the Beer-Cross)
... Eddy Hill

Introduction

As has become customary, we have dispensed with a description of the first stage of our travel i.e. getting to our destination. For those interested in the intricacies of caving related air travel, may we suggest you read appendix Zz plural Alpha.

What follows is a relation of the events that took place during the UBSS Easter'02 trip to Sardinia (for those of you who may not have realised). Be warned, the following pages contain an unimaginable mix of horrors, hardships and moments of unrivalled heroism in the face of unrelenting danger and extreme conditions; it should not be read by bible-bashing, faint-hearted, tanned, surface lovers.

Day 1 (Find and island and go to sleep... yeah right!)

Despite our earlier assumption that the entire day would be spent on boring travel, we managed to get into trouble the moment we left the airport in Sardinia. As soon as we had our rental cars we realised we didn't know where we were staving; the address had been left in Bristol. Fortunately, Steve had his phone and in impressive Italian communicated with our landlord to obtain directions to our lodgings. Several hours later and rather bored of driving up and down the Sardinian coastline, following the quite useless directions we had been given, we called again. After all, "call at the office next to the restaurant" isn't quite specific enough... "what restaurant?" "in what town?". A couple of calls later, we finally arrived at what would be home for the next fortnight. Since it was close to midnight and we were starving, we opted for dinner at the resort restaurant. Antipasto starter and Veal as a main course; of course, all washed down with a couple of very nice local wines... as the loudest, littlest band in the world, let rip in what could hardly be described as the background.

Day 2 (Mmmm... food)

Thought we'd catch-up with our sleep and have a late morning before attempting to get some food. We rose at 9:30am and by 10am had set off on our way to town... and then on our way to the next town... and the next... and the next... and then we spotted a fresh pasta and cake shop that was open on Easter Sunday!!!... phew! For a while there we thought we might have to go hungry. We breakfasted on

almondcakes and cheesecakes; better still, we had fresh ravioli for dinner and would not starve over Easter. Anyway, in an attempt to obtain sustenance more fitting with our standing we exhausted our last option and drove to Olbia, in search of a hypermarket. What hope did we have? Sardinia, part of Italy, a catholic country, on Easter Sunday... no hope.

Having said this, on the way back, Charlotte mentioned seeing some wine on sale in the pasta shop (heavenly harp music filled the car as our prayers were answered); needless to say we immediately drove back. Our prayers were answered further as we found the shop next door to the cake shop had opened and was selling spit-roast chickens... yum yum, meat! ... not being particularly religious, we all feasted of the flesh over Easter.

Shopping done with, it was too late in the day for caving so we relaxed on our lawn, before deciding to go for a swim in the sea. It was lovely, even if Ed reckoned the sea was cold enough to make his skin ache.

On a funny note, Charlotte tried to electrocute herself by holding onto a power supply line and a lamppost at once... thus forming a circuit. The sound she uttered as the current flowed through her was worthy of laughter.

Day 3 (Caving... well, almost)

Rose early and had breckie in town. Encouraged by finding a wine, beer, pasta, bread, honey, jam and tomato sauce shop open, we decided it would be worth driving out to the hypermaket in Olbia. Alas, it wasn't open. Easter Monday took its toll and once more we were to be subjected to peasant food.

Since there was no shopping to be done, we went off to find our first cave. At this stage we should mention that this caving area (Lanaittu valley) was about an hour away from our accommodation. On the plus side it involved some rally driving on dirt tracks. Finally in the Lanaittu valley we found the caving hut and parked next to it. It didn't take us long to discover it's no longer a caving hut but is now a trecking hut. Worse still, we couldn't get the key to Su Bentu off them. Not to be deterred, we had a look at Sa Oche (the resurgence to Su Bentu). We then drove a bit further up the valley and parked by the dry stream, before setting on a silly walk along the WRONG side of the valley (ignore the literature and follow the left flank of the valley; better still, the dry river bed) in search of Tiscali. Eventually, we found the exit to the cave (Tiscali) plagued by visiting Sardinians being shown around the cave by the trecking company. The top entrance to the cave is found 85-90 metres above the lower entrance and can be reached by a direct climb up the cliff or by an easier route followed by Juliet and Andrew (but they didn't tell the rest of us what it was). Tiscali had to be left for day 4, due to the number of people in it and our lack of permit to enter a locked cave.

Back at base-camp we enjoyed beer, wine and to our horror discovered that the tomato sauce we had purchased was in fact... well, we don't know what it was but it is best described as jellied meat threads. Sigh! Pesto-spaghetti, and

cat-food, for dinner. That night we dreamt of the goodies we would surely acquire in the hypermarket, once Easter was over.

Duh! Almost forgot Charlotte's moment. As we traversed the gorge, in search of Tiscali, Char managed to dislodge a boulder the size of an armchair. Shouts of BELOW were retorted to by unintelligible babble from the Italians/Sardinians sitting in the direct path of the tumbling furniture. Thankfully, the armchair/boulder was detained by a tree. To our amusement, Italian/Sardinian voices carried on up the gorge walls for some time after.



Day 4 (Food and caving... HEAVEN!)

We were all glad to find the hypermarket open. Bought loads of yummy food and even more loads of wine and beer. By the way, we had set ourselves a target of not having the same wine twice during our stay in Sardinia. It seemed easier and safer than our other preferred option... not having the same meat twice.

Food safely stored we went caving. Arrived at the Lanaittu valley minus one and a half wheel-trims but for a change found the cave straight away. The lower entrance to Tiscali is gated, although, they haven't done a very good job and access is possible by climbing over the bars blocking a hole a couple of metres to the left of the gate. We had decided, however, that it would be much more fun to descend through the roof of the main chamber. This, according to what little information we had been able to find, requires 75 metres of

rope. Hence, our original plan had been to rig a knot-pass and to this purpose Char had spent long hours (about 10 minutes really) practising on a rig hanging from our balcony. On closer inspection Andrew decided that 60 metres (one rope) should be enough and he set off into the darkness. Several moments later we were disturbed by a garbled message from below, something about... rope short...relonger on торе... ledge...15metres...need...more slings. Steve promptly replied in the only sensible way: "uh! What was that? re-rig? nah!..." and followed Andrew down. 55metres further down the rope we heard him say "oh! I see what you mean" a few minutes later, "rope free". Eventually we all followed and in turn were marvelled by the dynamic duo's latest rigging creation. Since the rope was 6 to 10 metres short. Andrew had tied all his slings to the end, however, he didn't have enough tat on him to make the rope reach. Steve stretched the rope further by adding what he had on him but it still didn't prove enough. And even if it had, without a diagram, none of us could figure out what we were meant to do. Char, in typical fashion, jumped; Ed, scared himself half to death by free-climbing down and Juliet? Ju was strung up for a bit as the whole contraption bounced up and down the wall (most amusing!). Tiscali turned out to be huge, with a rather large fault-wall and massive passage. From the available diagrams it's easy to believe the entire cave consists of the fault-wall and passage leading off but in reality the cave has a lot going for it. We found a whole area of passages and chambers not represented in the surveys. Good fun as a Sunday trip.

We arrived home after midnight but nothing would stop us enjoying our beer, wine, steak, mustard-broccoli, sautéspuds and mushrooms à la Andrew.

Char's moment? She managed to get strung-up four times on two re-belays... it was comedy!

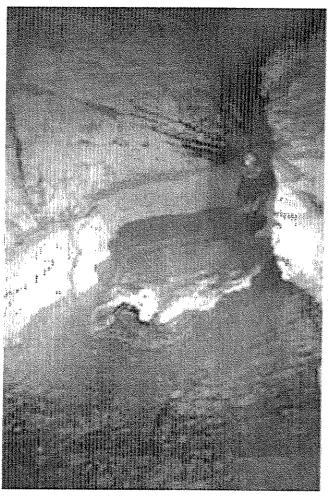
Wildlife note: so far we had seen the fattest two ducks in the world (which we considered eating when we couldn't get any food over the weekend), dung beetles, flumps and a nasty wasp.

Day 5 (Wet, wet, wet)

Following a late rise and leisurely breakfast, we set off with plans of completing three caves... sigh! will we never learn? Anyway, one of the more positive points for the day is that we finally managed to obtain a full tank of petrol. All the open petrol stations we had come across were fully automated i.e. money is paid into a machine in the form of \mathbb{R} 5, \mathbb{R} 10 or \mathbb{R} 20 notes and petrol is dispensed at your chosen pump. This made things difficult, since we never quite knew how much petrol was needed to fill the tank.

Our plan for the day was to take some pictures in Sa Oche; encouraged by our success at leaving Tiscali through the gate, we thought we'd have a look at Su Bentu too. To this end we parked by the trecking hut in the Lanaittu valley. Once there we found our largest sample of Sardinian wildlife to date, in the form of wild pigs roaming the "car park". We were also reminded of Charlotte's fascination with pigs.

When questioned about the whys? of her porkophilia, she would simply reply "they're cute" and wander off after them. In fact, as the rest of us amused a group of walkers by changing into our neoprene's in the drizzle, Char was chasing after a particularly cute piggie and offering it food... the pig's mother in return attempted to eat Char, albeit unsuccessfully.... but we laughed a lot anyway; specially when it bit her. On a sad note, Char wouldn't let us roast the pig!



Once in Sa Oche, we found massive passage for the first 60-70 metres, followed by nicely decorated, flooded, two tone red - golden passage. The water was not quite as cold as the sea but cold enough to make one think twice before entering. It was also crystal clear, which made it possible to see the bottom several metres below the surface. The entire cave is only a couple of hundred metres to the sump (which connects to Su Bentu) but to some of us it felt a lot longer; specially as Andrew and Steve insisted we modelled our swimwear up and down the passage as they attempted to take pictures. Eventually we moved on to the end of the cave. At this stage it must be pointed out that without Juliet's good hearing, willingness to swim back and lifeguarding capabilities, our party may be short of it's weaker swimmers. Thanks must also go to Charlotte who carried a tackle bag, Daren drum and a pair of wellies for the swim back.

All photographs and swimming done with, we ventured up

to Sn Bentu (this is best reached by following the path to the left of the hut for about 100 metres). There we found that, short of using high-explosives, the only way to enter the cave would be to dig or get a key. Digging was definitely out of the question; do you perhaps think us mad? By fortune, we met an English speaking, Italian geologist who kindly pointed us to the Gruppo Grotta Nuorese (in Nuoro) for a key. This contradicted what we had been told at the hut; they had pointed us towards the municipal police in Oliena.

Back home after another day's successful caving we feasted with several beers, a couple of litres of Sangria and four bottles of wine (all of it at below \$\mathbb{z}\$ 3.50 and very drinkable). Dinner started with Carpaccio (by Steve) and to celebrate Char's wildlife encounter, Ed prepared his pork, sage, mushroom wrap cooked in wine and served with mash and asparagus.

Wildlife note: Man- well, rather Charlotte-eating pigs and a 3ft long worm... eek!

Day 6 (Today we were organised... it was destined to failure)

Fuelled by our success so far, we rose early and set off en

route to our biggest cave to date; Su Palu... by no means pronounced super loo. We only had two obstacles in our

way. 1. We had to get a key from a bar at a crossroads 2. If they were closed, we had to find the bar Cabiddu in Urzulei. How difficult could this be? The first hint of an answer was given my Steve, who uttered those now famous words "we finally have a full tank; we can do some driving today". We figured the crossroads was about 1 and a half hours drive from home, but this was before we encountered the road of 120 left-right-left turns. Should you lack the imagination to visualise this, read the following... the road turned left, then right, then left again and was promptly followed by a succession of left-right-left-right-left-right-left-right-leftright-left-right-left-right-left-right-left-right-leftright-left-right-left-right-left-right-left-rightleft...etc turns. And if you think that's boring to read, you should try driving it! It was about this juncture we discovered all you have to do if you want to get Charlotte to sleep is sit her in a car. Anyway, finally at the bar, at the crossroads, at the end of the road that goes left-right-left for almost ever, we found the place devoid of life. No problem, we would simply drive to Urzulei and get the key from th'other bar. A quick examination of our map (obtained at high expense from the rental agency) revealed we should turn right at the crossroads... and so we did, to be confronted by what is best described as a stretch of tarmac, ~1km in length, the mountain had been using for target practice. We are still unsure as to what was most impressive; the barriers that had been wiped out by falling boulders or the next. impending rock fall. Suffice it to say that along this stretch of road, the rock-fall barriers had been removed with a clinical brutality that did not augur well for the chances of an automobile. As it was, this was the wrong road. A rather bemused farmer pointed this out several miles on. We should have carried on the main road for about a kilometre and then turned right. Nothing for it, back along the road of moving

obstacles i.e. boulders, cows, pigs and horses; then right at the crossroads and then right once more to eventually reach Urzulei and drive around for about an hour before finding the bar Cabiddu... closed. At first we thought it was for lunch but on closer inspection, a note on the window revealed that "Giorno di chesura: Giovedi" (day of closure: Thursday). Needles to say, it was Thursday; of all the days to take off?!?!?! Nevermind, as an organised group we had an emergency back-up plan; we would visit the show cave. Bue Marino sits at sea level, at the base of a cliff and can only be reached by boat. Best of all, it was on the way home, past that stretch of road that goes left-right-left-right...etc. As we sped past the bar at the crossroads, our hopes were rekindled; it was open. A quick conversation in English/Italian revealed that they no longer hold a key. Bugger!! Back on the road we reached the ticket office (for the show cave) in about an hour. There, Juliet was informed that the near mirror like sea was in fact too rough to sail in. SIGH!! This should go down in history as the day we persevered in our unsuccessful attempts at going caving. That evening we drowned our disappointment with several beers and the last four bottles of wine. Situation dire; must go shopping tomorrow. Dinner was mixed salad followed by pasta with a two meat bolognese sauce. And we still hadn't had the same wine twice.

Wildlife note: Besides the pigs, horses, cows and bull, we saw a leaping worm... yuk!. Tonight we've seen an owl hovering over the tree outside the house.

Almost forgot, by the road on the mountain that chucks rocks at you we found Goat caves... full of poo and stinky they don't deserve a visit. On a more amusing note, Charlotte scored another injury. She may have sat in the car, asleep, for most of the day but when nature called... she had a nasty encounter with a nettle. The nature of this injury is better left for the pages of GRAVEL though.



Day 7 (no plan, no caving, no problem)

Easy day, no caving involved so nothing could go wrong. We went to the Gorropu gorge for a walk/boulder hop/swim. On out way we stopped at Dorgali to purchase a map that showed all the right roads and Steve, who had been feeling quite frustrated, was presented with some postcards of local beauty spots. We enjoyed the long walk to the gorge. Then

the boulder hopping and some of us enjoyed the swim in the crystal-clear, blue, cold water of a pool set in white limestone... very pretty. Char and Ju reckoned this was the coldest water encountered to date but Ed thought it was considerably warmer than the sea.

Not much to say for day 7, after all, nothing went wrong. Obviously, on the way to the gorge, rather than follow the clear, 5ft wide, signposted path, which had to be wrong by virtue of being too obvious, we chose the rabbit run, culminating in a steep traverse for some and a climb for others, before rejoining the path. But this was to be expected.

Day 8 (... and then there were 4)

Steve returned to England disappointed at only managing to visit two little caves. We were sure we would miss his sexually incited, weird, dream stories.

Yeah!! Just found the original manuscript, written while in Sardinia, now I can transcribe the rest of the tale from the original, rather than try and remember what happened.

Today we rose early and set off to Urzulei and the bar Cabiddu, where we finally obtained the key to Su Palu. This was an unexciting event. Contrary to what seems to be the case with the rest of Sardinia, if one wants access to Su Palu, one needs do no more than ask the barman for a key. He then requests you complete a form detailing club, name and number of members of party, date in and date out of cave. On completion he hands over a key. He also declares his surprise at our claim that we will be back with the key before mid-night. It seems most parties take 14-16 hours to complete the cave and it'll be nearly midday when we enter. Nevermind, key in hand we drove to the cave, along a road where boulders really beat the living daylights out of the barriers! Leaving the car safely parked behind a tree at the end of the road, we followed the stream for ~500 metres before turning right up a scree slope to the cave entrance.

For a detailed description of the cave read the relevant literature, we are just going to say that the wet crawl is just that, wet and a crawl and excellent! And nowhere near as cold as our reading had led us to believe. The rest of the cave is dry until the White Nile is reached. This is an active stream, mainly white in colour and very nice. It flows into the sump lake, approximately 100 by 50 feet and very, very deep. Along the right hand side the Blue Nile flows into the lake in the form of a waterfall. The Blue Nile is indeed blue... at least as far as we went along it. In this part of the cave we had split into two teams with Andrew and Char reaching Disneyland (almost the end of the cave) and Ed and Ju going as far as Llilliput and enjoying a kick-around at El Alemain. On a more serious note, the 100m traverse is rigged so DON'T carry the darn ropes! By the way, the traverse is only 30m long, not 100m. The 10m pitch (immediately after) is also rigged and can be free-climbed. Egress took 50 minutes less than we had thought. Mainly because we didn't roam around in circles trying to follow the multitude of blue, black and red painted arrows that seem to indicate the way on, or out, or something but in general are a nonsense that would seem to serve no other purpose than to

deface the cave. All in all a very good cave with some excellent features... even if it is plagued by sharp, broccoli growths that snag you at every opportunity. Total time of trip: 10 hours. Made it to the bar before our call out and got home at 1:30. We are planning and easier day for tomorrow, with perhaps a couple of caves and who knows? We might even get a key or two!

Wildlife note: Very dead cow (or was it a horse?) near the cave entrance... perhaps stoned to death?

Day 9 (Sunday...showcave)

Today's plans included trying to find the HQ of the Gruppo Grotta Nuorese (GGN) and see if the'll lend us a key to Su Bentu. This would avoid us having to deal with the police. As an alternative to Su Bentu we would try and visit La Grotta di Bue Marino and find out if we can cave in the non-showcave part of the Grotta.

After walking around Nuoro, eating yummy melon flavour ice-cream, for about an hour and asking in a couple of shops, we finally found GGN HQ. Needles to say it was closed, even though it's listed as a museum. At least now we knew where it was and could return to stalk it at another time. Right now, however, we had to race to Cala Gologone if we were to make it to the showcave on time.

The boat ride from Cala Gologone (CG) to Bue Marino takes about 15 minutes and travels south, along the limestone shoreline. North of CG the terrain becomes basaltic. La Grotta di Bue Marino means 'the cave of the sea ox'. It was named so because local people, on hearing an emperor seal in the cave, mistook the sounds emitted from the cave for those of an ox. A couple of hundred metres before the entrance, Andrew pointed out the old staircase and ramps leading from the top of the cliff to the old showcave. The new showcave can only be reached from the sea but the old one could obviously be reached by land. Bue Marino is nice as a showcave. Progress is made by foot along a path and, on occasions, along terraces over the water. In brief, the cave is a streamway with the first 750 metres occupied by the sea and the next 7.5km being fresh water. We were all impressed enough to want to see the rest of the cave. After enquiring from the nice lass, who had told us about the cave and the strange petroglyphs of men with 3 legs, Ed returned with news that we would have to obtain permission from the town hall and get a local caver to come with us. But that is a task for tomorrow, tonight there's wine drinking to be done.

Day 10 (run around)

We must go shopping for food today, a cursory inspection of the fridge reveals we have a ridiculous amount of beer to drink in the next four days (thanks Steve) but no food. First order of the day though, is to return to Nuoro to see if we catch the GGN at home; maybe we'll manage to get a key to Su Bentu after all.

Once in Nuoro we found the museum open and Char, Ju and Ed shot in to be confronted by what later turned out to be just a few specimen jars but at first impressions was doctor Frankenstein's lab. Not impressed by the display they turned their attention to the doctor's good son (or at least he looked a lot like him) and enquired about a key for Su Bentu. Impressed by their utterances in Italian, they prepared for a positive response, just to be over run by an unintelligible barrage culminating in "NO" "ritorni... secretario... otto aquesta sera". Nothing for it, we'd have to return at 8 to see the secretary.

Not to waste the day, we set off to Dorgali, where we hoped to obtain a permit for a long swim in Bue Marino. After following a rather unconventional route to Dorgali, we arrived at the town hall about 30 minutes before lunch. A few steps and a secretario later, we found ourselves in the correct office, dealing with a secretary who couldn't be more apologetic for not speaking English. What a chance! Ed is right in, two words in Italian and eight in English managed to convey what was needed. It was obvious that she was far too embarrassed at her lack of English to argue about the fine detail. Indeed, she explained that all we needed to do was present a written request. "In Italian?" asked Ed cheekily, "no, inglese" she replied. Could it be that we were going to obtain a permit to go caving? Of course not, as the situation was about to be resolved, her office companion entered the scene and the best laid plans of Ed and mice were thrown out the window. Her office mate spoke very good English and was not so happy about us caving without an escort. As the conversation progressed, it became clear that the issue was not really one of safety but one of getting us to employ a guide from a trecking company... welcome to cave tourism! As we all know, English is the only language were two positives make a negative i.e. YEAH RIGHT! and in this spirit we walked away. We've tried to do it their way, Ed's even shown patience with the bureaucracy, but now we'll have to do it our way. Andrew has a plan, we are going to walk to the old Bue Marino and see if we can access the new one from it. En route, Juliet spots a van packed with caving gear; we're quick to halt and she jumps out, eager to enquire if they are Italian, and do they have keys? They are French and know even less than we do. Nevertheless, we go to Bue Marino with Frederick, Fabrice and Erick (from a group in Grenoble that is, apparently, better known for its love of wine and food than caving; go figure!). There we find the connection between the two caves and decide to return in a couple of days to do this trip and screw the bureaucrats.

7:30pm and we sit outside GGN HQ, 7:50pm no show, 8:00pm no show, 8:10pm no show, 8:15pm Ed's going to purchase a hacksaw and break into the cave. He's also going to write a nasty article about how crap caving in Sardinia is. 8:20pm and a really really nice man arrives and between English and Italian explains that we should have no trouble obtaining a key from the municipal police but that unfortunately they don't have one. He furnishes us with some of their publications describing Sardinian caves. A bit later, Giovani arrived and gives us the address to an ice-cream parlour where, with a nudge and a wink, we can obtain a key. Ed may write a nice article after all. This Italian rules caving is more to his liking; nudge-wink get a key is fine by everyone else too.

Wildlife note: Of concern to all present is that there are no live hedgehogs in Sardinia. Doh! damn and other printable interjections, Ju's just seen a live one. Loads of lizards. Char is not impressed that the pork escalopes we're having for dinner belonged to a local, cute pig... but now they're ours. Wildlife in a jar (as viewed at GGN HQ) included vipers, scorpions and moths so large you'd need a shotgun to put down.

At this stage, those of us still attempting to reduce the beer lake in our fridge (i.e. Ju and Ed) would like to point out that (a) Char hasn't self-inflicted an injury for the last three days and (b) why is no one else helping with the beer? or with the wine? which is still very nice and different every night.

Day 11 (International rescue... F.A.B)

Today we caved with the French chaps we met yesterday. We agreed to meet them by the crossroads above Urzulei and we went to S'Edrea. This is one of the deeper caves in Sardinia and is strangely reminiscent of Mendip caves but with pitches. Things didn't go according to plan and the tale is told from two different points of view, Char's and Juliet's.

<u>Charlotte's cave</u> (this is to be read in a strong scottish accent)

It hurts and Ed cuddles pigs, but only when he's cold, but tonight he's going to cuddle the octopus he's just made.

After a couple of hours of strangely mendipish cave, but with pitches every so often, we finally got to the streamway Whoppee!! For a while I did at least try to keep out of the pools, then a rather dap one appeared. After attempting to climb round it I gave up and jumped in, cold but refreshing. Having got wet there didn't seem much point staying dry anymore so I stomped forward, eventually ending up at another deep pool. By this time, I had cooled down enough to try and climb round it, this turned out to be a big mistake. A few moments later I was hanging by my arms from a rather slippy stal, a metre or two above the floor, but unfortunately now past the water. After a while, trying to get a leg up, I finally fell onto hard rock. Surprisingly it didn't hurt much. I was just expecting a few bruises the next morning. As we went on my knee got gradually worse and I begun to trust it less and less, more or less subconsciously. I begun to slip and fall a couple of times but put it down to the fact that so much steam was coming off me and I couldn't see much. By the time we'd got to a rocky streamway my knee was really annoying me. I mentioned joking about heading out but was persuaded the end wasn't far away, so I continued on along to the end of some traverses. The twisting in the traverses really hurt and at the end Ed, Juliet, Fred and me turned back. Within a few minutes, somehow I fell from the traverse. I'm not quite sure if the rock broke or my knee gave way but anyway, I got quite a shock when my knee complained violently and I ended up back down in the stream. Up 'til that point I hadn't really considered that getting out would be hard but trying to traverse with only three limbs is a tad tricky. About 15 minutes later we hit the boulder choke and we lost Ed. Although I was expecting him to appear at every corner. Then a few minutes later it dawned

how far we hadn't come but how long it had took. Now I was scared. Shortly after, Andrew, Fabrice and Erick turned up. While Andrew was trying to concoct a carrying mechanism, Fred started trying to feed me some rather disgusting food, still not quite sure what it was, but my stomach was adamant it didn't want to eat anything, let alone that. I finally was persuaded to eat a Mars bar. Eric and Fabrice disappeared off ahead while Andrew attempted to get me on his back - it didn't work. By this point, although I was worried, it all seemed a lot of fuss over nothing, but before I could think about much more, Andrew had grabbed me by the back of my harness and was relentlessly frog marching me out. At the pitches I was yanked upwards. As the hours went by I gradually got tireder, colder and more dejected. There was still no sign of Ed and I had visions of him lying at the bottom of some pitch 'cos his light had failed and he hadn't seen it. Fred and Juliet had gone to find him but came back without Ed. Some time later I was being told that I was almost there but by then I didn't care, everything hurt, not just my knee. Next thing I knew Ed had arrived in front of me, somehow. Then I remember seeing a tree and thinking 'that isn't normal'. I had expected it to be brilliant sunshine so when the tree turned up in the dark, I was a bit confused. It took a while to dawn I was out. It wasn't until I was shivering in the car later, it really sunk in. I was very happy to be out and very grateful to everyone, despite having protested most of the way out that whatever they were doing hurt.

Wildlife note: Donkeys on track and albino woodlice.

Juliet's cave

Met up with French at the café that wouldn't give us the key to Su Palu (Super Loo). Cave was along the lines of Swildon's but with pitches. All was going swimmingly, pitches were all rigged with dodgy looking knots. Charlotte spectacularly fell off a climb and slid to the bottom but then got up and kept walking. Sometime later Charlotte's knee was beginning to complain so we eventually decided to turn back. Progress was quick to start with but then extra falls and twists meant she slowed to crawling pace. We lost Ed, expecting to find him round the next corner for some time we continued, then Andrew caught up, having turned round. I explained the situation and discovered he hadn't seen any sign of Ed either. Shortly after Eric and Fabrice also caught up and we hatched a plan to speed the exit of all from the cave. At this point Frederick and myself went back to look for Ed at the point we lost him, whilst the others continued out of the cave. Lots of shouting down unfeasible holes in the boulder choke and further down the stream, revealed no sign of Ed. Dejectedly we decided there was nowhere else to look and he must still be ahead of us, so we headed out. We were surprised at the speed at which the others had obviously progressed, as it took us some time to catch up. Frederick tried to reassure me that Ed was a 'wise' man and would have gone to the surface for food and beer! I laughed at the idea of Ed being considered a 'wise' man. When we caught up with the others, Ed was not with them, this caused considerable concern. We decided to exit the cave ahead of a bruised and miserable Charlotte to see if we could find Ed.

And if not call the rescue. I sped out of the last few metres of the cave and virtually crawled into him, before I realised the blue boiler suited figure in front was alive and kicking, if slightly cold, Ed. My words were along the lines of "Bloody Hell, you're OK"

Day 12 (... by starlight)

We took our time this morning. There was no rush to do anything, after all, Charlotte was in considerable pain and Andrew was still sore from carrying her out of the cave. Besides, today's plan was to visit Bue Marino and this could only be done under cover of night. So, after a leisurely start we wandered off to have some ice-cream in Oliena and hopefully with a wink and a nudge we would get hold of a key to Su Bentu. Since we wouldn't make it to Oliena before lunch, we stopped to have a look at one of the many Dolmen in Sardinia... Char hopped along dejectedly. We arrived at the ice-cream parlour soon after lunch and after a quick conversation found that nudging and winking would normally work if it wasn't for some misterious reason which meant their key had been removed. If we wanted a key, or an explanation, we would have to go to the police - so we did, but they were closed!! Asking in the council revealed they wouldn't open again until tomorrow at 11am!!

Back home we prepared for our evening sortie and tried to avoid talking about it, since it was obviously winding Char up... 'cos she couldn't come and play in the wettest of caves.

We arrived at the old Bue Marino just in time to rush into the entrance and see the last boat leave the new Bue Marino. We changed in the entrance of the old cave and then progressed into the show cave, climbed around the gate, raced to the end of the platform, jumped over the rail into the water and disappeared around the corner into previously unseen cave. If what we had seen up to then had been very nice, for a show cave, what we encountered now was indeed impressive. Passage 25-30 metres high and as wide. Sections up to 200 metres long flooded with crystal clear, warm water. Majestic columns, composed of radiating curtains, reaching to water level from the ceiling. Communes of straws up to 4.5 metres in length. Some of these had suffered an identity crisis during their development and for a time decided to be helictites, before returning to strawness. The bottom 30cm of most straws transparent. White sandy beaches and much more. We followed on some distance past the obvious marks left by the tour guided caving groups but when confronted by our third section of flooded cave, this one longer than the previous, we decided to head back. We left the cave clad in neoprene and rushed to the top of the cliff under cover of night (quite exciting really). During the drive home we couldn't stop talking about the cave but we realised this would wind Char up no end so we decided to have steak for dinner and just say the cave was fine. Back home we found Char had hardly made and indent into the beer supply and... well, we couldn't help but rave about the warm water, and the beautiful passage, and the formations, and yes, it did wind her up no end. On a cautionary note, the stairs down the cliff and the rampart along the cliff face are in a state of disrepair and could be dangerous.

Worthy of mention is the heroic effort by Ju and Ed to reduce the beer pile to a more manageable level. They stayed up late after everyone else had gone to bed and managed to halve the stockpile. Now there's only 13 bottles left for tomorrow... and about a ton of Parmesano... don't want more cheese, feel like a mouse.

Day 13 (...last chance for an experience better than sex)

We only had one thing in mind. Today we were going to obtain a key to Su Bentu and despite Char's hobbling protestations, we were going to delve into it's deep, dark, moist recesses and experience something better than sex. To this end we returned to Oliena and were outside the police station minutes before 11am. The hour came and went and the municipal police hadn't arrived to open the office... never mind, watching the old (and not so old) village blokes gawping at Char as she hopped up and down the street was rather amusing. Eventually we decided to give her a break and we sat in a caff across the street from police HQ. They arrived at 11:48 and Ed run over to get the key. He returned about 20 minutes later without one. It would seem that the head of the municipal police was happy to give him a yearlong permit and a key from next week onward. Until that time, the chief of police was waiting to receive the new regulations from the council. Without these he didn't know what the new situation was regarding cave access and he couldn't give us a permit. The new regulations were being drafted because there had been an incident in the cave. Ed wouldn't be told what the incident had been. After 2 weeks of trying to get into this cave, we were defeated by bureaucracy. Should anyone want to check on the availability of keys and permits for Su Bentu, the address to write to is:

Polizia Municipale Corso Vittorio Emanuele II 7 Oliena, SARDINIA We were surprisingly unaffected by not being able to visit the cave we had come to visit. We had grown to the idea that it wouldn't be possible to visit the cave over the past 12 days and had we obtained the key, we wouldn't have been surprised to see the entrance collapse as we approached it. By the way, to whomever wrote that caving in Sardinia is an experience better than sex (apparently referring to caving in Su Bentu), caving in Sardinia is very good but... YOU MUST BE DOING SOMETHING REALLY WRONG IF YOU THINK IT'S BETTER THAN SEX!!

No caving so we went to see some more old edifices. Once home, we found a set of rules and regulations pertaining to our behaviour in the complex; needless to say we had broken all of them within the first two days.

Ed and Juliet finally managed to finish off all the remaining beer... it hurt, and they had no help, but they took pride in their work.

Day 14 (... no more cheese, please)

Travelled back. Tried to finish the Parmesano but failed miserably; it's much harder to eat when there's no beer.

Overall view

Caving in Sardinia is very political with the caves falling under the responsibility of the commune they're in. Some communes are fine and allow open access to caves. Others require you to join a tourist group. Having said that, if we'd managed to get a key to Su Bentu, we would had visited all the caves on our list.

We definitely recommend Sardinia as a caving destination but future visitors would perhaps consider finding accommodation closer to the caves. We sometimes drove for 2 hours to get to them.

Light Emitting Diode (LED) Light By Bill Miners

Good things about LEDs?

- LEDs should never burn out lifetime of 100,000 hours.
- They should be more rugged as they have no incandescent filament which can be broken.
- You can adjust the power of an LED so have a light which can be bright or dim depending on passage you are going through.

Bad things about LEDs

- High cost [LEDs can cost up to 3 pounds each though in latest issue (49) of Cave Radio and Electronics Journal it is said that bags of eight are available for 12 pounds from Stuart Kirby.]
- LEDs can damage sight if you shine your light for a long period into another persons eyes.

Design points about LEDs

As the voltage across an LED increases, the current through increases, but they are diodes so a small increase in voltage can lead to a large increase in current. eg: 1mA at 3V, 10mA at 3.3V, 20mA (max permitted continuous) at 3.5V and burn out quickly at 4V.

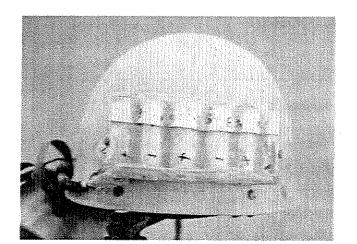
LEDs are more efficient at lower current levels, for example to get twice the light you get at 20 mA you need to drive at 50 mA, if your goal is to get as much light as possible out of a battery you are better off with lots of LEDs at a low current.

If the LEDs get hot their efficiency decreases. So the design should try to keep the LEDs cool.

Different design scenarios

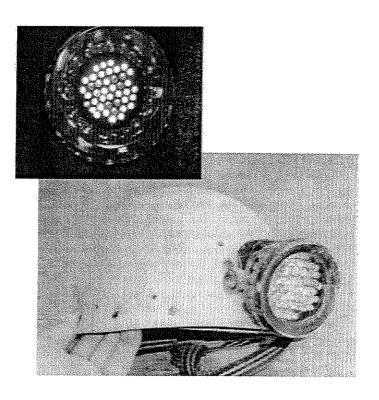
- 1) Have LEDs supplied directly from battery this can lead to something called thermal run away, the diode gets hot, draws more current and can get damaged.
- 2) Have LEDs supplied via a series resistor from batterythe series resistor can control the current, however the resistor wastes power, and the LEDs get dimmer as the voltage from the cells decreases with use. (For a alkaline battery the initial unloaded voltage of 1.5V and an end of life voltage of 0.9V)
- 3) Have a power supply that converts the decreasing voltage from the cells into a steady voltage fed to the LED ... this can be by a step up or step down circuit. There are quite a few designs around for this now. The one I used was a design by an American, Garry Petrie, in an article he wrote entitled: "The Perfect LED light" (http://www.resurgentsoftware.com/perfect_led_light.html)

It uses 42 LEDs (his Mega design), a combination of 33 white LEDs and 9 Yellow LEDs in order to make the combination produce a pleasing light. The power is regulated by a step down voltage regulator that is 95% efficient. It takes in any voltage between 4V and 14V and gives an output that can be varied between 3.6V (35 mA through each LED) and 2.8V (20mA through each LED). So the overall consumption is between 5.29 and 2.35 W, this is not very different to the power consumption in a FX / Kirby light with a halogen bulb.



Battery case

I made a battery case out of 20 mm diameter pipe, with row of 6 of these in parallel glued together and attached to the back of the helmet. A single cell fitted into each pipe. Six cells in series gave a starting voltage of 9V and a terminal voltage of 5.4V. There was one contact in the base of each pipe and the lid held the other contacts. The lid was held on by elastic loops.



In use

I used this light in China for 3 weeks, the lowest intensity was perfectly adequate for SRT and small passage with the occasional turn up to maximum to look at large chambers. British bought Duracells would last15 hours on the lowest intensity. However, Chinese brought Duracells only lasted 7 hours. At the end of life the light would start to flicker slightly and I would take that as a signal to change cells.

The biggest problem was the battery case. This was NOT a good design. The case would get knocked and that would disturb the electrical contacts and so interrupt the light. I improved this slightly by making springy electrical contacts using discs of karri mat and sanded beer bottle tops! Also if the battery ran out I would have to change each cell individually. I will be making a new battery where the cells are held inside in proper cell holders. This will ensure continuous electrical contact, and then grouped into a separate battery of 6 or 8 cells, which can be carried easily and replaced easily into a separate waterproof outer case which sits the on helmet.

Cave Radio

Bill Miners

Background

On the trip to China I was responsible for getting a cave radio up and running. The main radio boxes (Nicola Mark II cave radio) had been produced and donated to OUCC by one of their members, Graham Naylor. I had to understand how they worked and produce power supplies aerials etc.

How a cave radio works

My understanding is that leads run out either side of the radio and are Earthed at the ends. The Earth acts as a return path so that a large virtual loop is formed inside which an electric field is generated. This field can then be picked up by a similar virtual loop formed underground.

The parts of the radio

The main working box is 15cm x 8cm x 7 cm, a lead from this goes to the power supply/battery which consists of 10AA cells to get between 12 and 15V. The aerials go off in either direction We only had 50 m in each direction (separation of 100 m) - the ideal separation would have been 1/6 of distance to communicate over ... camp at 700 m so we would have been better with separation nearer 120 m. At the end of the aerials on the surface are tent pegs which are buried into the ground and wetted in order to get a good connection to ground. Underground the ends of the aerials are 10 m lengths of electrical fencing tape which are pushed into puddles / streams. There are three indicator lights on the radio: battery status (red/green), current flowing in aerial (orange), signal being received (red).

Safety

Do not touch the aerial wires /spikes when the radio is turned on as several hundred volts can exist.

Operation

Surface and underground should agree beforehand on the connection time.

The first operation on setting up is to ensure that a current is flowing around the loop. This is done by blowing into the microphone and raising the position of the coupling switch (there are three positions) until the orange LED lights up - so that either 1,2 or 4 transformers are used. I found we were at the highest setting all the time.



In our case the underground set was at the campsite so it was easy for the underground group to have the radio turned on at a low volume and waiting for the surface to transmit. If the volume was turned down the presence of a signal could be identified by the red signal received LED illuminating this worked underground. However, on the surface there was so much static that the red LED was lit all the time. There is lots of background noise on the surface (Lightning from distant storms) - so reception was poor and underground would need to phonetically spell out everything in order for it to be heard on the surface. Sierra, Unicorn, Mike, Papa — It was useful to have notebooks to use on surface to record this. Reception underground was often better and they could usually hear what was coming from the surface, if necessary the surface just said everything twice.

We had the best communication with the surface set near the entrance to the cave, it is thought that maybe the large vertical shafts going down helped propagate the signals. The campsite was about 500 m away from the base of the shaft series. An alternative location directly above the underground camp had power lines going over and also there was the presence of shale and was no good.

The best pattern seemed to be doing the radio check in the morning, however due to the long caving trips underground their days would go out of sync with the surface and they would have to wake up specially in order to make the call (but it was little trouble for them as they had the set in the campsite). While the cave entrance was a 20 min walk away on the surface from the farmhouse and the aerials had to be laid out in a farmers field each time so it was time consuming for the surface.

A trip to the Vercors

(Ju and Andrew's summer holiday 2002)

Most of the trip was spent in the Vercors, a region with many caves and canyons just south-west of Grenoble. We

camped on a farm campsite in a small village just south of St Martin. This was fairly central for both the Bourne Gorge and caves in the Chapelle area. The last two days were spent in the Jura (or thereabouts), we stayed on a campsite near to Baumes Les Dames, which is to the north-west of Besancon.

Grotte de Bournillon

Easy to find, just follow the path, which is not in the least bit dangerous, as the signs lead you to believe. Large entrance (biggest in France if you trust the guide), with a lake in it, so we decided to take one of the alternative traverse entrances (the one nearest to the footbridge entrance), no need for a rope as the traverse really is just a walk along the side of the passage a few metres up. Followed nice big passage until we were stopped by rapids coming from the direction of the sump. Took a few photos on the way out.

Grotte de Ramat

Decided to visit the cave we found on the first day. The cave entrance is a small porch on the right bank of the dry stream bed. Followed route, the climb up has metal steps so no need for a rope, though someone did a particularly bad job of positioning them, making coming back down slightly more tricky. Climb down is free climbable but a bit slippy, so a rope is helpful. shortly after the climb down we were confronted by a sump...hmm this wasn't supposed to happen for a few hundred more metres. Turned around and took some photos on the way out. High water and photos on the way out were beginning to form a pattern, one that I'm not overly keen on.

Trou d'Ague

Time to try and do a slightly more serous trip, this one sounded just the ticket, three entrances; two at the top and the resurgence at the bottom. A through trip was possible but given the levels of water we'd been experiencing we didn't even consider this, to be honest we were expecting to have to turn back somewhere in the stream way.

We set off up the track for 2 km until we found the resurgence, then continued for a bit until we decided we'd missed the turning off the main track to find 2nd entrance, so after much tramping through undergrowth with the assistance of a GPS and a map eventually found entrance. Just as we finished changing the two Swiss who we'd seen as we were leaving the car arrived. They enquired as to whether we were doing the through trip. Hmm we thought do they know something we don't know as we replied that we were gong in and out the same entrance. They nodded, looked at us as if we were slightly mad and said the bottom entrance is clear, we've checked it and we've done it three times before. We mulled for a while, looked at our heavy tackle bags, and all the expensive electronics that probably shouldn't go far underground even if they did have waterproof cases but it seemed like a good idea so we joined them and descended the first pitch (digital camera, guide book, map, GPS and all).

The pitches were very loose the first one (I think it was about 8m) consisted of metal tube embedded in a roof of loose sand with large rocks in it. One of the Swiss dropped a large rock on Andrew's shoulder, not a good start. The second pitch was when we became rather glad that we weren't going to be prussiking out; it was populated by huge numbers of flies that seemed rather keen on flying up your nose. On the third pitch (60m) the other Swiss guy knocked a rock down that hit Andrew in the collar bone (I was beginning to think they had something against him), nothing was broken and in fact there was no evidence other than a

small red mark, but apparently it hurt lots. You get a bit wet on the final short pitch (well I did anyway) and then you have to dangle yourself from a very worn piece of rope in order to get over a slightly too deep pool. The streamway was lovely and quite fun mainly traversing above it so you don't have to get that wet. The way out is marked by a cairn on the left that leads into a low bedding plane with water flowing down it at the start, this continues for around 100m then opens out to the entrance. A very pleasant trip and thanks to our Swiss companions for saving us the return journey.

Gour Fumant

went in larger rockier entrance to the north (Faux Gour). Lovely SRT, with a superb streamway at the bottom. A long traverse takes you to the duck without having to swim, but as the description of the passage beyond is small and tight we did not see the point of getting wet. Also looked at the Dragon Chinois, a big pretty passage.

Canyoning - Le Leoncel'

Canyoning 'Le Leoncel" at last with only a few clouds, no rain and you could escape anywhere. Very fun with lots of smallish obstacles to get back into the swing of it. It's amazing how waterproof you can make a digital camera.

La Pissarde

Big pitch time, 80m waterfall in a canyon, La Pissarde. Shame the cycle to the top was so up hill. A very technical canyon, the pools at the bottom were too shallow for anything but using a rope. The big pitch buzzed with a stunning view over Grenoble.

Christien Gathier

Pre rigged due to Speleovision in Chapelle. The pretty bit would be stunning but it is covered in mud, the stream although short was wonderful. The big chambers at the end were big and black, but what do you expect.

Pentagon cave (its not really called this but I cant remember its real name)

bloody hard walk but stunning entrance. Spoilt by a group of kids practicing SRT in an oxbow, and the last pitch is fun but only leads to a blind prettyish pot

Grotte de Bourdon

Berger was abandoned due to rain so went to Bourdon instead. The gate had obviously improved since the guide. No just going over the top. There is a squeeze past the gate on the floor for skinies (Ju) and 4m up for fatties (Andrew) Nice river, played in the boat on top of icy water, as Andrew was trying to get out on the first narrow bit that had a traverse line on the boat punctured and he was forced to make a rapid retreat holding onto the hole to slow down the deflate speed and therefore avoiding the nasty swim

Goule Blanche

Lots of rain threatened so looked at Goule Blanche (hydro in a cave) and went to Expe for stuff to fix the boat and a guide to commet for a cave on the way home

Grotte de Gournier

The boat crossing is fun and an 80m rope is only just long enough to use as a return rope. The fossil passage is huge and pretty but a little tedious. Tried to delay going down holes as long as possible but still went down one about 50m too early, it gets to the river but you cannot get along. Is this the old first way down and the boulder choke is now collapsed? Who knows. The stream was excitingly high, and the wire traverses are f****d. One, (a high one of course) was easy to pull out at the far end. A very few have been replaced by 1cm diameter steel bars bolted at each end, very strange. It is still possible with the wires missing but by the time we got to the 12m pitch our nerves were not up to it and we turned back out. At the traverse near the lake our rope was gone, but another in its place, (very worrying as both my cameras and wallet were in the tackle bag) It turned out that a French guide was about to take 30 adventure cavers across and did not want to confuse them with two ropes (we were very glad not to meet them on the traverse). The guides obviously recognised it was not the normal practice and repeatedly apologised.

Lisine du Champ Guillobotr (Jura)

Pot in the middle of a forest, difficulty finding it due to having changed grid region in driving north, but when we had the GPS set right it turned out that we were parked nearly on top of it. Nice pitch into slippery and okay for decoration chamber, nowhere could we find the remaining 40m of pitch.

Riviere de la Baume Park 118582

Big(ish) entrance visible from the track, nice starting passage with a small river to follow. Not that interesting so gave up and came out.

Grotte De La Malatiere

50m from the end of the road, excellent. Short pitch, take a ladder not SRT. Big passage goes for a while then a mini maze ducking through from one chamber to the next before reaching the Metro. Aptly named rounded ceiling passage that you stomp along for around a klick. Muddy extension that leads to more of the same. The Galerie du Nord is well gated off, with a gap just smaller than a stop body that Ju slipped though but Andrew could only just get his legs in. Picked some sloes and when back.

Mendip Musings

Andy Farrant

Things seem to be happening on Mendip... after years of not much being discovered, several digs appear to be yielding results. Having established a reputation over the years as someone who knows a thing or two about caves, I seem to get asked to give my geological opinion on various digs. So, during the so called CSS Mendip weekend back in late July, I took the opportunity to visit a couple of sites, which are described here, along with some other sites of interest.

I turned up at the Hunters Lodge on the Friday night, with the intention of meeting Chris and Judy at the Hunters. In the event, they weren't there, so I got talking to J'Rat and arranged a trip down his latest dig. John Cooper turned up later, along with Barry Weaver. However, after leaving the Hunter's Lodge, I turned up at the Shepton Hut to find it locked up and no sign of Chris who had organised the trip and arranged the hut booking. Mel turned up after a short while, but by this time it was 12.30 am and still no sign of Chris... Luckily, Henry Bennett was still up at the Belfry next door, so we stayed there. Sat am, still no sign of Chris and Judy, so after a tour of likely sites, Mel and I decided to go for a walk instead, visiting Templeton's Pot. Sat night, still no sign of Chris so we decamped to the MCG hut (far more salubrious), who were having a members barbeque weekend. Sunday dawned with still no sign of any CSS members, so we had lunch at the Hunters and had a look down Hunter's Lodge Swallet.

Hunter's Lodge Inn Swallet

Mel and I took at look at this new discovery on Sunday afternoon, (so convenient after a pub lunch) with J'Rat and a

one eyed, incontinent, rather large 60 year old bloke with a pacemaker (to be fair, he had just been drinking in the pub...)!

This dig was started during the Foot and Mouth epidemic in of all places the pub car park! Given the lack of access anywhere else, and the presence of storm water runoff sinking in the corner of the car park, it seemed an obvious, and very convenient, place to dig. Preliminary excavations revealed a narrow rift which was widened using explosives (detonated from the comfort of the bar and shown live on a web cam – it could only happen on Mendip!), until in late July, the dig unexpectedly broke through into a large passage.

The entrance passage is small, but not tight and obviously takes a lot of water in wet weather. This descends to a rather mucky boulder ruckle where the water disappears, before fortuitously popping out in a large relict phreatic passage about 2-3 m high extending up and down dip. It is very reminiscent of Nhasa Gallery in Manor Farm Swallet. Updip it terminates in a boulder ruckle just a few metres below the field immediately south of the car park, and a tapping connection to the surface has been established. Given that the field had held a wedding reception only a few weeks before, it's amazing it had never collapsed! Down-dip it terminates in a boulder collapse which is currently being dug. The passage is very well decorated with some excellent pristine white formations, although there are some unstable boulders in places. The water that sinks at the entrance in wet weather disappears into a smaller rift that is currently being dug.

However, what the cave lacks in oxygen, it makes up for in mud. Getting out, following the large one-eyed incontinent bloke up the crawl (bearing mind he'd had a few pints in the pub beforehand) proved interesting. Crawl two metres, pant

pant ... crawl two metres... pant pant... 'hurry up - I need to breathe!'... pant pant... All I can say is good effort, there aren't many people in his condition who'd go digging with J'Rat!

The cave is developed within the Black Rock Limestone. replete with nice fossils including the coral Caninia just inside the entrance. It trends south-south-east, down dip. parallel with the neighbouring Hunter's Hole. It is currently heading towards Alfie's Hole, close to the Hunters' -Rookham road, but as yet there is no connection with either cave. Quite why the passage is there is a mystery. It clearly is very old, formed at a time when the local water table was above 250 m OD, and may be genetically associated with Hunter's Hole. The large phreatic scallops are rather vague and ambiguous but the water appears to have flowed downdip. It probably once functioned as a stream sink draining a once more extensive cover of Jurassic and Triassic strata. remnants of which can be seen a few hundred metres to the north-east in Chewton Warren. Similar other high level. phreatic cave remnants can be seen at White Pit, Sand Pit, and Twin Titties Swallet, perhaps focussing on a palaeoresurgence at Westbury-sub-Mendip. Here a large, sediment filled, phreatic cave exists at approximately the right elevation which is at least 780,000 years old. Only digging will prove this hypothesis! The entrance streamway is genetically unconnected with the relict passage and following this may also prove fruitful.

Templeton's Pot

Not far away, between the Hunter's and Ebbor Gorge is another interesting dig site, which we visited on the Saturday. Following a collapse in an otherwise featureless field when a tractor subsided into a hole, Dave Morrison et al began to dig a shaft with the blessing of the landowner. However, it soon became clear that the shaft was unstable. so rather than abandon the site, Dave took to clearing the entire depression with a mechanical winch! To date, the crater created is about 15 m across and 10 m deep with traces of cave development in the base, and an enormous spoil tip. In doing so he has created a roost for a solitary bat! A calcite vein crosses the depression, but there is no evidence of any Triassic or Jurassic neptunean dykes. Given the location half way between St Cuthbert's Swallet and Wookey Hole, this site has some potential, albeit a long way down! The possibility of intersecting old relict phreatic passage associated with the postulated Hunter's Lodge -White Pit - Westbury system must be quite high.

Carcass Cave, Axbridge Hill

Further afield on western Mendip, Carcass Cave is an Axbridge Caving Group/Bracknell Caving Club/MCG find just a few metres away from Shute Shelve Cavern on Axbridge Hill. Originally the site of old ochre workings, the site has been dug over the last few years, at times using a compressed air chisel. This has revealed several hundred metres of rather interesting, but somewhat scrofulous and contorted passage. I took the opportunity of visiting this site whilst down on Mendip earlier this year. A dug tube leads to a series of small phreatic chambers developed along a couple of minor fault planes, some of which have intersected pre-

existing calcite lined geodes. There are some entertaining Alison Moody type squeezes (thankfully now bypassed) which proved challenging even for Eley Hodge, the UBSS squeeze supremo, who can almost get through the Whitewalls loo seat (detached of course). Its very well decorated in places with some excellent calcite crystals. It's also a fantastic place to get a Mendip suntan – who needs a foreign holiday when red ochre does the job!

The terminal choke in Shute Shelve Cavern lies directly below the end of Carcass Cave, and they are probably genetically linked; Shute Shelve was the main drain, feeding water from the Lox Yeo Valley south to a palaeo-resurgence near Axbridge. Carcass Cave may be a series of solutionally enlarged fault planes and joints linked with the main drain.

Another site higher on the hillside is also being investigated by the ACG. Here, a large phreatic rift, 5 m wide, at least 20 m long and 10 m deep has been mined for ochre. Vague phreatic scallops suggest flow westwards, but what this cave relates to is anyone's guess. Its location, high on the hillside, coupled with its ochre fill suggest is of considerable antiquity, possibly even Triassic in age. There may be some interesting similarities between the ochre filled caves on western Mendip to those of the Forest of Dean. All three of the sites make a good evening trip and are certainly worth a visit. Alan Gray (ACG) has also unearthed some fascinating information about the history and characters behind the ochre mining on Axbridge Hill.

Gough's Cave, Cheddar Gorge

Chris Castle has had a minor breakthrough in Damocles Rift in Gough's Cave. This is an intriguing site beyond the Showcave. It is essentially a large phreatic rift filled with collapsed boulders, not dissimilar to parts of Reservoir Hole. In 1990, a straight tusked elephant rib bone was found in the ruckle, suggesting a link to the surface, over 100 m above. Some progress has been made digging up through the ruckle, in the hope of finding something similar to Golgotha Rift in Reservoir Hole. So far just more loose unstable 'chambers' have been found, but it's a promising site.

Also in Gough's, Rick Stanton has made some progress in Sump 3, finding a small airbell. A breakthrough here would be really exciting, give the huge catchment area for the underground River Yeo.

Other sites

Progress is also being made at Tynings Great Swallet, Spar Pot in Burrington and also at a site at Charterhouse, close to the activity centre where one of the mineral veins is being reexcavated. As yet not much has been found, although it's an interesting site.

There's loads more to find, so get digging...!

Epilogue

Turns out Chris missed his train, so decided not to come and rang JC, who had left home by that point. The hut key was hidden near the hut, but shame no one told Mel or I! Many thanks to the MCG for their hospitality.

The deepest cave in China? Bill Miners

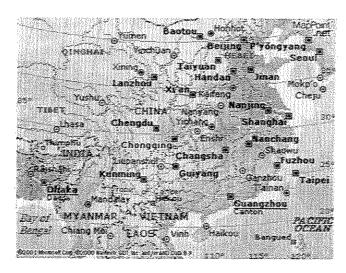
Area

Tian Xing is a small village about 1 km above the town of Jiang Kou in the municipality of Chong Oing.

Background

In 1994 the China Cave Project (ref 1) group were invited to extend a show cave called Furong Dong near Jiang Kou. They returned to the area in 1996, however this time being based on top of the mountain in the village of Tian Xing exploring systems leading down to the show cave.

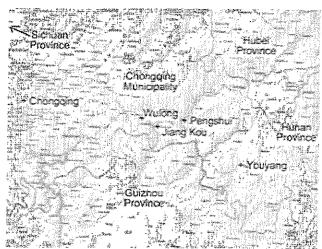
More recently Erin Lynch (exCUCC, Red Rose, Hong Meigui) (ref 2) has spent over a year in China working with numerous cavers who travel out for short periods. In the summer she and others pushed a cave called Qi Keng Dong (Misty Wind Cave) near Tian Xing to a depth of -707 m, finding horizontal development, a sump, then a sump bypass and finally km of passage leading to a master stream way. At this point an email went out asking for more help to come out. That's how I ended up in Tian Xing in October 2002.



Getting there

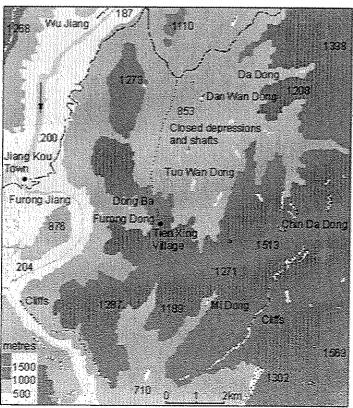
I met Chris, Martin, Lenik, Andy and Harvey in Hong Kong from where we took a coach across the border to Shenzen airport where we fettled gear between hold and cabin baggage before flying to Chong Qing. There we were met by Erin and bussed into town to a hostel were we all crammed into a small dormitory room. The evening was spent in a restaurant with members of a local Chinese explorers club who were trying to convince Erin to let them go down Qi Keng Dong. However, not at all sure about their competence she would only let one of them come out and be stewarded around by us. In the end none of them turned up in Tian Xing.

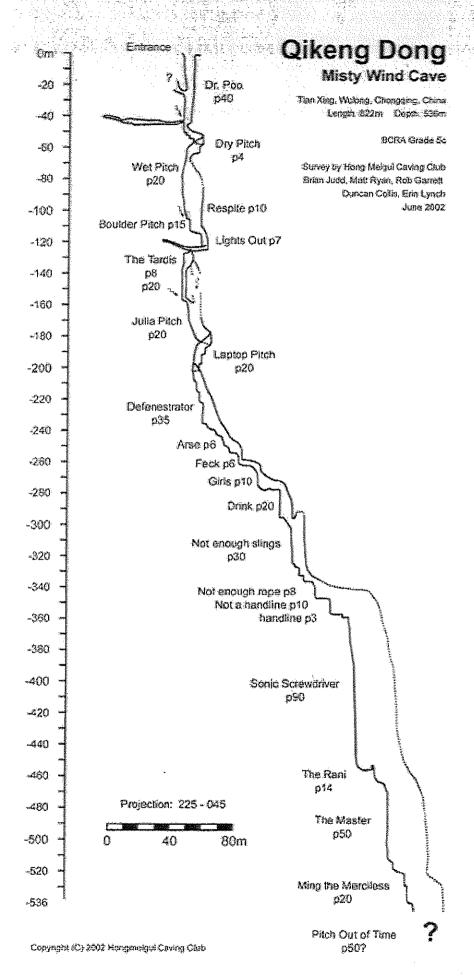
In the morning we rushed down to a coach station and had very bumpy 6 hour drive as the main road was being repaired. We arrived at Jian Kou late afternoon and waited with the bags while Erin went off to register us with the police. Then we took a small mini van for the two hour journey up to Tian Xing. This was one of the scariest parts of the whole time in China with a huge drop off to the side of the bumpy, narrow road.



The village

Tian Xing is surrounded by hills dotted with small fields, in which the main crop is tobacco. Around the village there are many caves. We were in a farm house looked after by Mrs Wei and her daughter-in-law Hong Mei, who provided rice and spicy dishes for every meal. Mornings would start with the village bus honking its horn for ages at 6.45 am followed by the call to breakfast at 9.30 am. The best dish was thinly sliced potato for which they would chop away with a cleaver for ages. We could help ourselves to beer and bottled distilled water and best of all it was all paid for by the local





big tourist company. This company ran the show cave Furong Dong and hoped we would find extra attractions for them.

The house did have a problem with rats, so at one point poison was put down. However, they got the last laugh as a week later one evening one of the beds was found to be covered in maggots due to a rat having died in the ceiling.

Already at Tian Xing were Matt, Duncan, James and Taco (Canadian). Matt had a laptop, so as soon as any cavers returned to the farmhouse their survey notebook would be grabbed and the data typed into Survex (a cave survey program) so we could see what was happening to the cave.

A five day caving trip

A couple of days after arriving the first big trip into Qi Keng Dong was arranged, four of us were to go in: Erin, Duncan, Chris and myself. As we left the village we acquired a crocodile of intrigued school children who accompanied us for the 20 minute walk to the cave entrance. They then hung around dangerously close to the edge of the first 60m pitch as we started our abseil in.

The rigging of the cave provided my first experience of thru-bolts. A hole is drilled into the rock, with an electric drill or handheld drill bit hit by a hammer (rock pecker) then a threaded bolt is hammered into the hole, leaving about one cm projecting. A hanger is placed on it and then a nut screwed on. As the nut is tightened it tries to pull the bolt out of the hole which is resisted by arms that come out of the bolt and grab the sides of the hole. The cave had been rigged mainly on 9 mm rope with (in my opinion) far too many pitches with a single hang at the top (backed up, but sometimes straight into a rope protector and over an edge). I found it all a bit scary, so was checking the nuts on all the bolts.

SURVEY QI KENG DONG

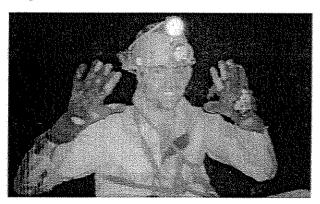
The final drop was "Pitch out of time" which was 160 m deep. From the bottom of this pitch the campsite was about 500 m along narrow passage. Here there was a widening in the passage, a sandy floor and a tarpaulin roof had been put up. We ate dehydrated food from foil packets to which boiling water was added (all donated by the China Caves Project). Water was collected

from further up the passage, filtered through a hanky then had iodine pills added. At the campsite I made the acquaintance of the cave crickets, with inch long bodies and 3 inch long antennas. They were the local top predator, but stayed away from us. The toilet passage was an oxbow with a dried cracked mud floor; lifting any slabs with smiley face symbols on was not advisable in this area.

Asleep, I was in thermals and furry suit, in a sleeping bag liner inside a bivvy bag on a karri mat and was cold. On subsequent nights I had to borrow an extra thermal top and fleece jacket to keep warm. Chris had carried down a small sleeping bag, while Erin and Duncan were using cheaply bought local duvets already at the campsite.

Up at 9 am on day 2, a radio check one hour later failed to establish coms (it transpired that the surface party were set up on the surface directly above the campsite). There were two wetsuits in the campsite left (and rinsed) by the previous inhabitants James and Taco, and two more had come down with us so wearing these all four of us went towards the main streamway, taking two hours, with a few swims.

Chris and Erin were going to go downstream for 500 m, descend the 60 m pitch next to the superb waterfall called Dragon's mouth and start surveying along the stream as it flowed out from the large chamber at the base of the Dragon's mouth.



Duncan and I headed upstream 100 m to a sump and then started to survey a narrow twisting canyon which might have bypassed the upstream sump. This had been looked along briefly on a previous trip, noting it ended in a big aven. But the protocol really should be survey it as you explore it. We spent the day getting our hands really cut up along the canyon - the top was not visible and we came to three avens in series along its length. However, it led to a couple of small inlet streams that we did not bother pushing. We returned to the main stream-way and went down it to see the top of Dragon's mouth. Then we went back to camp arriving at 10 pm in time for a radio check I had been keen to get back for.... however we did not manage to talk to the surface ... it turned out that the surface party had been experimenting with the aerial laid out adjacent to the farmhouse. Chris and Erin got back at 3 am having started the day surveying a lot of high-level passage with the stream lost in boulders far below them, until finally they had descended down into the stream surveying in chest-deep water.

We all got up at midday on day 3, Duncan and I set of to survey at the downstream end of the cave while Chris and Erin planned to follow behind taking photos before starting to look at some of the question marks off to the side. We did not like the sound of surveying in chest deep water so headed for a large question mark where the previous pair had descended into the stream. This led to a large dry chamber containing a few cobwebs with a series of rifts heading off to the north presumably above the stream far below. We surveyed along one of these passages until a traverse looked too dangerous to attempt without protection. Beginning to survey up another, I had a problem with my main light so I transferred to one of my spares (I had four lights with me) and we began to return to camp. As we rejoined the main passage we met the others so with the security of lots of extra lights we joined up and the four of us did a couple of hours more surveying. Initially along the high level stuff then finally returning to the main passage and descending into the stream to add a few legs in the stream way. We arrived back at the camp at 4am.

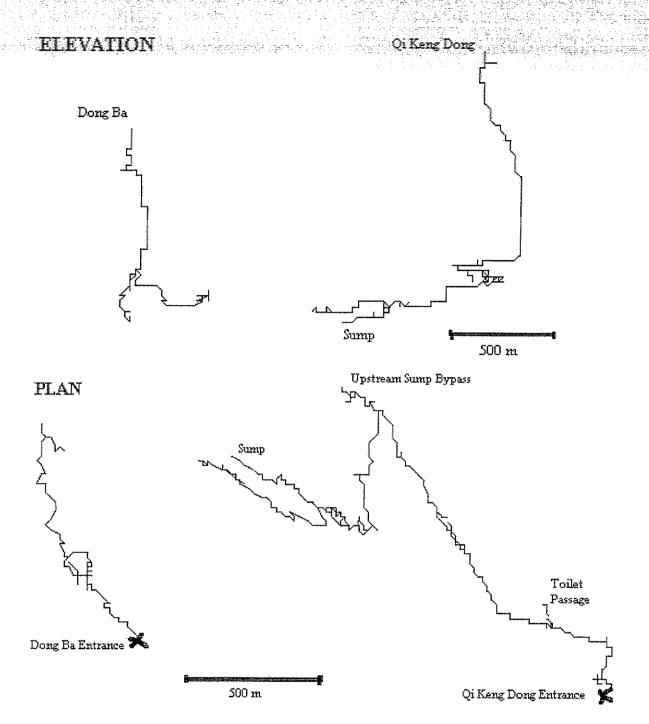
Up 4pm on day 4. The quote in the log book was "4pm is the new dawn". Then all the remaining food was eaten in a massive breakfast. This was despite my objections, arguing we should leave a supply of food for emergencies. The counter argument was that subsequent trips should carry their own stock of emergency food. We then began out of the cave with the first of a series of very long prussiks. I replaced a sling at one point, and wished I had more Snickers bars I reckoned it should be a 5 snicker trip to get out ... we had been on a ration of 3 bars a day when underground but could easily have eaten 4 each day as the days were so long.

One clever trick was that the others had stashed bottles of distilled water on the way down the cave, which they had waiting for them on the way out, so they did not need to prussik with the weight of full water bottles and so could avoid drinking iodine water. You could not leave chocolate as the cave crickets would chew through the wrappers. Another secret I picked up from the others for dealing with chaffing caused by the long prusik was nappy rash cream.

We reached the surface at 5am on day 5, to the sound of the insects and damp smells of the grass. It was only when you got out that you remembered that you were in China ... underground you could be anywhere. We staggered back to the farmhouse to eat cold rice in the kitchen before rushing to bed to try to get to sleep before daylight.

Other trips

I only did one camping trip: the lack of optimism amongst some of the others about successful rescue from depth putting me off spending any further time in the further reaches of Qi Keng Dong. The next group of surveyors, Taco and Matt, followed the stream-way for about one kilometre to a sump. The depth from entrance to sump being 921 m. Then subsequent exploration by Chris and Harvey, followed the high level passages trying to pass over the sump.



I did two trips, with James, down another cave called Dong Ba (Cave of the Flat Land), which had first been descended in 1994. My first trip was the rigging of "Two Crap Lights Pitch" which descended to a window overlooking the top of a huge chamber. Then on a subsequent trip, following a lead out of this chamber which led to 30 by 40 m wide relict passage we surveyed for 850 m. Called the Wet Sunday Series, this passage led to a vast T junction and it is hopped that by following one of these leads Dong Ba can be made to join up with the high level leads above the main stream way in Qi Keng Dong, as they are at the same altitude.

De-rigging

My last trip was down Qi Keng Dong Four people (Erin, Duncan, Chris and Matt) were already down there on the last camping trip and were over 24 hours overdue and had not made any of their radio calls and it had also been raining for a few days. So, after lunch, James and I started down taking 50 m of rope (enough to bridge any broken rebelay) and the first aid kit. We had TSA oversuits and furrys and were OK dealing with increased flow in the cave, many of the pitches being wet and not totally out of the waterfalls.

Half-way down we met the others on their way out. They were wearing cotton boiler suits and thermals and were cold and wet. They had abandoned gear worth £150 below

Dragon's mouth because of the ferocity of the water in the main stream, but were carrying all the bits of the camp. They had been unable to get the knots out of rebelays half way up Pitch Out Of Time (as they were not dressed to spend a long time sitting in a waterfall struggling with stubborn knots) and the rope had jammed while being pulled up. They carried on out and we continued down, with James getting hero points for descending half way down Pitch Out Of Time and sitting under a very large waterfall disentangling the rope which I then pulled up.

We then started to construct a PAELLA (Pull Along an Extremely Long Length Altogether). This was a new technique for me, where each length of rope is tied with an overhand knot (with generous margin of rope) to the next length. In theory an overhand knot will roll over many obstructions. The idea being that you could have a person every 20 m along a passage pulling along the rope so each person is only having to move a small length of rope; involving less effort but taking longer. At pitches the bottom of the rope would be carefully laid in lengths on the ground (flaked) then the top of the pile was tied to the bottom of the rope leading up the pitch. In such a fashion we de-rigged and dragged the rope up the next 2 pitches then started out, exiting at 5 pm. Later that day the others went in and finished the de-rig up to the base of the first pitch. Then the next day we all went along and hauled the rope up the last pitch.

Aftermath

After the de-rig we all had a trip to the show cave Furong Dong which was really well decorated and a large cave - I can't think of any other show cave that has impressed me so much. Very different to the poorly decorated passages we had spent the last few weeks in.

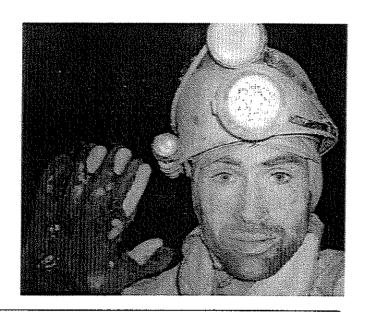
Overall I had an enjoyable time in China and will be farbetter prepared for any subsequent trips of such size. Erin, Duncan and Matt are still out in China and working in Dong Ba to try to get a connection with Qi Keng, I do hope they succeed. Once the two systems are joined there is the chance of carrying on downstream in Dong Ba and getting the additional depth to beat the existing deepest Chinese cave. The current deepest cave in China is Xio Zhai with a depth of 964 m, however the first 666 m is a vast doline (called a Tien Ken in China) and you are still in sunlight at the bottom of it.

References

ref 1: The China Cave Project (http://homepage.mac.com/brianjudd/cavedive/china/china9 4/intro/ali/alintro.html)

ref 2: Hong Meigui Caving Club

(http://www.survex.com/~hmg)



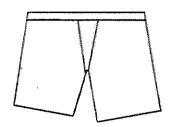
WANTED DEAD OVERSUITS & FURRIES

Give a **new life** to that **knackered** piece of **rag** you have sitting in your **boot**, in the **BOTTOM OF YOUR CAVING BAG**, or even **buried in your garden**.

We have had good luck **repairing and patching** oversuits and **FURRIES** – even the ones **split in the but**, **ripped across the chest**, or with NDN-EXISTENT SLEEVES. Any items donated and repaired will be RESURRECTED & BLATENTLY marked as **Club Kit for use by Ereshers**.

Trish Beddows & Ed Mallon
Patricia.Beddows@bristol.ac.uk
or simply bring the item to the pub on Tuesdays

Cavers' Underwear Revealed



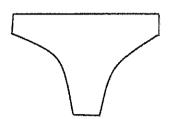
Pant 1: BOXER

Pros - easily available in shops

Cons - no support for vitals

- slow drying

- can (apparently)cause painful wedgies



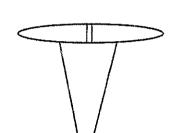
Pant 2: MICRO BRIEF

Pros - cheap and small to pack

Cons - wedgies unavoidable

- seam-line scars during SRT

- fall-down whilst crawling



Pant 3: G-STRING/THONG

Pros - quick drying

- spare fits in inside pocket

- available in leopard print or red PVC

Cons - incredible agony at most times

- flailing buttocks

- humiliation whilst changing



Pant 4: COMMANDO

Pros - helps you breathe more easily

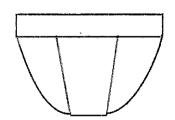
- ease of access (?!)

- great for that fresh, liberated feeling

- no need to wash (grungies)

Cons - terrified grannies in Yorkshire villages

- high risk of tackle-chafe



Pant 5: SUPER SPELAEOPANT

Pros - waterproof gortex bum panel

- extra warm fleecy lining

- seamless elastic waist band with no-drop, no-scar guarantee

 breathable pertex front panel for vitals support

- 'microban' impregnated for anti-fungus protection

Cons - red fleece option leaves residue easily mistaken for embarrassing sores

- fuzzy bum-crack possible in rare cases

- not yet available in the shops!