



The Grotte de Roffy (Sainte-Nathalène, Dordogne, France)

Graham Mullan

Fig. 1



Fig. 2 Fig. 3

Most tales of caving holidays* talk about visiting vast mega-systems and discovering and exploring mile upon mile of virgin passage. However *Abroad* also has its smaller caves; the accompanying shots come from a short cave in France, a novice trip, more or less, but one that is still quite well decorated. It must have been stunning when first entered back in the 18th century.



Fig. 4

The first two shots show the roof of the main chamber, not that far above your head and completely stiff with calcite. Figures three and four show wider views and more massive formations; you have to remember that this is what remains after the cave was mined for calcite during the early 19th century. It was also, for some years, a show cave in the latter part of that century though there is little sign of development and I suspect that it was simply that vistors were guided - and had to pay for the privilege.



hope Christian does not use this as a model for the project that he is planning! Finally figure six shows that it was a "real" cave; that was the route from the entrance chamber to the main part of the cave.



Fig. 5

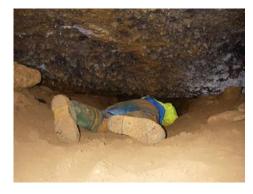


Fig. 6

*What Mr Willis knows as "Expeditions".



Tree, James, Sally, Kayleigh, Ryan, Fay, Edd

Day One - Friday 17th August

Already an exciting day, I woke up this morning at 6.00 and, having only had 3 hours sleep, immediately regretted the exploits of last night. I met Tree at Heathrow and we hadn't been there for an hour before the entire building was evacuated because of a fire alarm. Once we got back in, Tree received an unwanted call from James. He had obviously wanted to add yet more drama to the day by getting the bus from somewhere in Yorkshire, was in traffic, ignored all advice to hop on a train and so was stuck north of Birmingham and it didn't look like he was going to make the flight. He had already made plans to stay in Bristol and cave on the Mendips for the next eleven days! Eventually everyone arrived on time and we boarded the plane. We much appreciated Tree's presence – she not only got us extra free wine, but also acquired free snacks (yes, it was because she hugged all the air stewards...!).

On our arrival in Hungary we met Edd and Cornel (our driver), then bundled into the minibus for the ten hour drive to Closani, a tiny village in South West Romania, our final destination.

<u>Day Two – Saturday 18th August</u>

Upon our arrival at Closani, we met Virgil and Marius, our friendly caving team mates. After dinner we headed up the mountain for our first taste of Romanian caving. The name of the cave translates as "stony hill, little flower". After a 6m S.R.T. pitch we entered a beautifully decorated chamber with long crystal helictites and crystal stalagmite formations. Edd tried to eat a bug.

Day Three - Sunday 19th August

Today we set off for our second cave. It was called Pestera da la Podul Natural, named after the natural rock bridge it is located near. Quite a

Romania August 2007

It took a lot of trips to the pub to organise but in the month of August 2007, six lucky people boarded a plane to Hungary, ended up in Romania and eleven days later seven people made it back. But what actually happened? Well here is your chance to delve in to the secret diaries of these seven people – be prepared for injuries, vomiting, fire, man love and a lot of caving...

Tree

short cave complete with its own toilet (looked like a nice corner to explore at the time...). Famous for its bats it was wide and spacious, with a number of pretties as well as a great deal of mud. Highlight for the trip was Ryan (desperate to keep his new suit clean) and Edd (desperate to get Ryan's suit dirty).

After a beer o'clock lunch we went to Pestera Closani – one of the most breathtaking caves I have ever visited. Closani cave was until fairly recently known as the most beautiful cave in Romania, with one of the two long passages being restricted due to it's beauty and the diversity of the formations. The other passage, although more stunning than most caves I've seen, is used for research and has little museum rooms constructed in it.

Despite the heavy rain we did manage to have our BBQ tonight. After much sausage-related humour, we returned to the veranda to chat and drink.

Day Four - Monday 20th August

Today we went caving in Pestera E.A. Martel. This cave was located by the side of the road with a tiny entrance. A rope free climb, usually a ladder pitch, was "fun" (to say the least!) and the cave was very muddy and slippery until we got to the river. Usually it's passable but because of the heavy rain the night before it was sumped. James and Ryan had a bash at finding a higher level route with no success at all. At least it was entertaining.

That night we tried some caving games. Ryan was convinced to squeeze under a car where he promptly got stuck and had to be rescued. Edd was very ill today – lesson for *everyone!* Don't test to see if your sausages are no longer raw by eating them.

Day Five - Tuesday 21st August

(Day as seen by Edd...)

The hospital was in very good condition – very modern. After examinations by a friendly nurse & trainee doctor (no, my testicles aren't part of the problem), I had an injection in my arse and an ultrasound scan. They said I'd damaged my liver & kidneys. Mainly the liver. They put it down to alcohol and told me to stop altogether. With Marius' help I asked if food poisoning could be the issue, they said yes.

(Day as seen by the lot of us that went caving...) The cave was called Pestera Bulba, and was one of the best caves of the trip so far. It was quite sporting and varied with a few tight crawls and squeezes. In the entrance was what was left of a 2m sump – now a short duck due to the lack of rain. It also had lots of big boulders to climb on, and some exciting opportunities for slipping into peril. Lots and lots of mud. We had originally hoped to do a round trip, but we couldn't find the way on (despite Kayleigh's efforts to dig us a way on).

(Day as seen by Fay...)

A fantastic crumble was prepared by James and I. Whilst food was cooking on the BBQ outside, I went in to get bread only to smell smoke and see the fantastic crumble in flames! Not paying attention in fire safety lessons showed when the only thing I could think of to do was scream 'Fire!' Thankfully everyone came running over and put it out...

Day Six - Wednesday 22nd August

We headed to the cave around midday and given that today was the hottest day we have had, getting inside was amazing! Although there was not as much water as there was in Bulba yesterday, Lazului was a fun cave with a lot of scalloping. In some places there were holes in the ceiling which simply had to be passed through. Luckily the potential sump was not even a duck, so we could explore the whole cave and enjoy the numerous mud slides and climbs on offer.

Day Seven - Thursday 23rd August

Woke up early this morning to head for Japanesti, where we would be based for the next two nights. There was a fantastic walk over fields to get to our cave of the day but it was very hot. This, however, was the last thing on our mind when we saw the climb down to the entrance. We changed on the

edge of this potential base jump before trying to make our way down. The main route through the cave itself was pretty simple but trips like this are always spiced up by singing loudly (which we did). On the way back we explored some of the obscure passages which proved entertain-



James in Pestera Closani

Tree's 21st today. She was remarkably quiet about it during the day. That obviously changed later on... We surprised her with cake, a card and space hoppers!! Sharky and George (as they quickly became known as) were the basis of much party fun and also the cause of Marius's knee injuries. Later that night Kayleigh twisted her ankle on the way to the toilet (smooth).

Day Eight - Friday 24th August

Unfortunately, Kayleigh's ankle had not improved during the night, so she had to go to the hospital. Today's cave was called Topolnita and is one of the longest caves in Romania. It is gated and we had to get special guides to let us in and show us round. The entrance we went in to was huge and caverny with many formations. About three thousand bats roost in this cave during the winter and I swear we found where most of them like to go to the toilet. Honestly, someone with a mean sense of humour named that bit of cave 'Wonderful Gallery'... But, by far the highlight of the trip was a feature called Crystal Lake. It was an incredible little chamber that was pure white with crystal clear pools of water on the floor. It was without a doubt the most beautiful feature I have ever seen in a cave.

In the afternoon we went to a lower entrance. This passage is home to a massive streamway through which we had to wade and, in parts, swim along. As we exited the cave the water was deep enough for some diving (either straight jumping or back flips if you had that sort of coordination). This is possibly the best cave I have been to in the *world*!

That night we did some paintballing. Tree still has the bruise on her bottom from where Edd shot her!

<u>Day Nine – Saturday 25th August</u>

Today we left Jupanesti and stopped off for our penultimate cave on our way back. Ponicova is a short cave with an exit on the Danube. As we were going to be swimming, the outfit of choice was a bikini and furry. There was a bit of caving to reach the water, where it became obvious I had made the correct clothing decision - it was nice and warm. Edd swam in his boxers. We had a frolic in the water before leaving the cave and setting off for Closani.

Drinking games ensued later that night. There was this particular one James taught us that involved some complicated talking. Ryan must have given up trying at some point as he kissed James to shut him up, an experience James enjoyed substantially more than when Tree tried the same action.

Day Ten - Sunday 26th August

Our final day of caving took us down Children's Cave. The entrance is miniscule and we'd passed it on the first day where I'd jokingly set it as a pound challenge for Edd! It was pretty short, but quite sporting, with two SRT pitches.

That night Edd, Fay and Tree found some Romanian children who took a fancy to Sharky and George. They were called back by their mum one by one to be washed and changed into better clothes – all to play with the British cavers.

Edd and Tree in Topolnita



<u>Day Eleven – Monday 27th August</u>

Today was a rest day and a chance to see some of the country before going home. This started with a trip to the monastery up in the mountains at Tismana. There was a lot of interesting history about it and the paintwork and decor was incredible.

Once we had finished at the monastery, we headed to the gorges at Sohodol, where we went swimming and I even managed to do a spot of caving by going through a tunnel in the river.

Having looked at pictures of the week's trip, we then gave pressies to Virgil and Marius before tickling James so much he threw up!

<u>Day Twelve – Tuesday 28th August</u>

As 3am rolled round, we said our goodbyes to Marius and Virgil prior to piling into the minibus for the 10 hour drive to Budapest. Once everyone was comfy, Edd began his bedtime story of 'The Happy Little Pig', inspired by the sausage that'd been bought for brekkers a few days previously. For some of the weary travellers it was a 34 hour journey back but well worth it. Had a fantastic time and would love to go back. Hurrah for Romania!!

(Just about) caving in Tenerife Charlie Self



ne of the things about having a family holiday is that, with

a little cunning, it is possible to choose a destination that has caves. Not necessarily limestone caves, or caves of great length and beauty, but that still leaves a large number of under-appreciated holes in the ground that might be described as "interesting".

So off we went to Tenerife, one of the volcanic Canary Islands, to look for sun, sea and lava tubes. A great way to travel around Tenerife is by the local buses, which are cheap, comfortable and air-conditioned. There is even a bus that climbs up more than 2000 metres to the huge volcanic crater of Las Canadas in Mt Teide national park, roughly in the centre of the island. The bus arrives at 11 am and will return at 4 pm, in theory leaving plenty of time for exploration. This is

when the smell of freshly made coffee hits us, for the bus has stopped outside the local equivalent of the Burrington Café. Apart from a small pale pink church, it is the only building for miles around. Well, we're on holiday, so why not be tempted by a really good cuppa, sitting at an outside table with the stupendous view of the volcano Mt Teide looming another 1700 metres above us. From our table, we can even see the particular lava flow that is our destination.

ome time later we start our walk, which follows a popular tourist track around the Roques de Garcia. At the far point of the circuit we need to strike off up the nearby lava flow, which is shimmering in the heat. So we decide to have an early lunch in the shade of the last of the Roques. This is where the undergrowth suddenly comes alive with lizards. They really love ham sandwiches and are bold enough to be fed by hand. Great excitement and photographs! And more time passes.

eluctantly, we say goodbye to the lizards and move off onto the pahoehoe (ropey lava) flow. Our guide is Noel Rochford's "Tenerife car tours and walks", an excellent little book that I found in Bristol Central library. According to Noel there are 16 caves, the first one about 10 minutes walk up the flow. About 4 minutes from leaving the main trail, we find our first lava tube - a through trip with short side passages. The walls have a characteristic pale brown "glazed" surface, contrasting strongly with the black and bubble-filled lava itself. The roof is surprisingly knobbly with small lava stalactites.

he second cave is supposed to be about 5 minutes further up the flow and is "one of the larger caves, extending some 1000m back into

the slope". The second cave we find is only about 2 minutes away, descending steeply to a mud choke. The roof is covered in very sharp, blade-like stalactites with serrated edges formed by some sort of corallite encrustation. Wrong cave again, but not according to Ga-Iva and Antonia. This cave was just right, cool and with a refreshing humidity: they are happy to chill out here if I want to go off exploring on that furnace of a lava flow.

Re-reading Noel's guide, it seems obvious that I am not far enough up the flow. From cave no 2, the pink church should be centrally aligned between two small outliers of the Roques de Garcia, but the view back from my second cave is obstructed by a ridge of aa (blocky lava). Two minutes further up the flow and the pink church comes into view, as does another cave. The entrance is a vertical squeeze and the ways on both uphill and downhill look uncomfortably tight. I probably still have not gone far enough, but I am now running out of time. Noel mentions a second large cave near the top of the flow, but I am beginning to suspect that the two large caves are the same. In another publication,



SMCC Journal 9(2), there is a description with surveys of Cuevas de los Roques, the main cave running downhill in two branches for a little over 1000 metres. The location is given as near the top of the flow, with the pink church aligned between the Roques. By now, I am still only about halfway up the flow and there is no time left to reach where I think the main cave actually lies. Carefully retracing my route, I relocate the crack in which the girls are hiding and after a brisk walk, we are just in time for the bus.

t is certainly possible to visit the Cuevas de los Roques using public transport, but there are so many caves that it requires a well-organised search to find the right one in the time available. I am not convinced that there is any large cave in the lower part of the flow, but if Noel's substantial cave no 2 does exist then it should be in the middle part. It may (or may not) align with the church. On balance, there is probably only one large cave and it is as described in the SMCC Journal. Maybe we'll check it out on another family holiday.

A discourse on ROPE for caving, abseiling and prussiking Adrian Wilkins

Note: Please do not infer any criticism of previous purchases of rope by UBSS members. I quite understand the constraints of budgets and safety concerns, and if (as rumoured) there has been pressure from the student union to adopt "dynamic" climbing rope rather than "static" line. However, having experienced the joys of bouncing up and down on the new 10.5mm UBSS ropes in Yorkshire last month, I have to say that in my opinion this rope is not optimal for SRT use. The amount of elasticity for a "heavy" caver is quite extreme. I weigh a little over 100kg, and the bounce at the bottom of the Swinsto big pitch was several metres. Likewise, when jumaring up the main pitch in Alum Pot I had to prussik up 3 or 4m before my feet left the ground. I hate to think what it would have been like on (say) the final pitch in Juniper Gulf, or on the 190-metre free-hanging pitches we did in Slovenia in 1972.

ynamic rope is designed for rock climbers, and in particular for lead climbers. Should the lead climber fall from a vertical face 2.5m above a running belay ("runner") he actually falls 5m before the rope starts to go tight. During this fall he has been exposed to the Earth's gravity at a full 1g acceleration, or 9.8m/s². At this point (after 1s as it turns out) his velocity has reached nearly 10m/s. Note that this is independent of the climbers weight, as all objects accelerate at the same speed under gravity if air-resistance is ignored. More to the point, he has accumulated kinetic energy "e" calculated at 1/2 m.v2 which has to be absorbed to bring him to rest (m is the climber's mass, and v is his velocity. The energy in a climber falling IS proportional to his weight.) Elasticity in the rope is required to decelerate the climber gradually. If it were not elastic there would be an instantaneous shock load, which would damage or break the rope, or its anchors, and hurt the climber. The greater the fall the higher the final velocity, and the energy goes up by the square of this. Accordingly, climbing rope is designed to have an elasticity such that an 80kg weight will extend the rope length by 8% in a static situation, and the same weight dropped 5m will stretch the rope by up to 40% without breaking. This extension is reversed when the load is removed, i.e. the rope regains its previous length.

or the most part, other forms of climbing, like top-roping, fixed lines, and glacier work, do not require any elasticity, and static line is preferred. In industrial situations ("rigging") static line is always specified. For cave abseiling (or "rappelling") and prussiking, dynamic rope is contra-indicated. I would go further and say that in some situations it could be awkward or even potentially hazardous. The following come to mind immediately: bouncing around under an overhang, or on a pitch with loose rock; chafing of the rope at a friction point if an abseil is not rigged completely free-hanging; prussiking up a pitch starting in deep water; and, as mentioned above, very long pitches where "motion sickness" might start to come into play.

So, what is the best rope for SRT use in caves?

We asked his question prior to the UBSS expeditions to Slovenia and Turkey in the 1970's when UBSS bought many, many hundreds of metres of rope. It soon became clear that many factors were involved, particularly: the material from which the rope is constructed, and the method of construction.

he material predominantly affects elasticity - the ability of the

rope to absorb energy. As concluded above, a low elasticity is indicated for SRT and so polyamide ("nylon") which has a high coefficient of elasticity was disregarded, even though it has a high (230°C) melting point which might have some bearing with a hot descender! Natural fibres were also eliminated at an early stage due to their preponderance to rot, swell, shrink, twist, etc. Fortunately there are many man-made alternatives to nylon, including polyethylene, polyester (such as ICI's Terylene), courlene, aramids, etc. New polymers come onto the market regularly, and one such is Zylon PBO (p-phenylene-2, 6-benzobisoxazole). The material used also determines to a large extent the breaking strain, the wear-and-tear characteristics of the rope, its weight, how much water it absorbs, its flexibility, and resistance to chemicals or UV light.

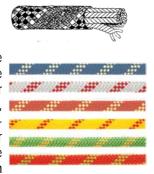
As for method of construction of the rope, there are three main types: hawser-laid, kernmantle, and plaited.

awser-laid basically means three separate strands of cord twisted together in a single direction. Although strong and elastic, this type suffers from kinking, and they are difficult to coil neatly. Worse,



despite many manufacturers' claims to the contrary, and however they might have been "stabilised" during manufacture, inevitably an abseil down a free-hanging pitch causes the climber/caver to spin as the load causes the rope to "unwind" to some degree. This is known as the "lay" of the rope. They also give a "knobbly" abseil with some abseil devices, especially with figure-of-eight descenders. It has long been the opinion of climbers and cavers alike that laid ropes are unsuitable for SRT work, although they have generally been the least expensive.

Kernmantle ropes, sometimes called "double braid", consist of an inner core (the "kern") of twisted, elastic impact-absorbing fibres round which is wrapped a sheath (the "mantle") of braided strands. These ropes have excellent qualities for climbers: they are supple, stretchy, have no built-in lay, and with a closewoven sheath have good wear resistance. This is what UBSS have bought recently. But it is the opinion



of the author that the elasticity is just what makes them unsuitable for caving. There is also a theoretical problem that the sheath may, over time, loosen and become detached from the core: the possibility arises that on a long pitch the prussiker might be climbing up the sheath which is itself slipping down the core. Worse, one can imagine an out-of-control abseil where the descent is governed solely by the friction between sheath and core until the abseiler drops off the bottom of the rope together with the entire sheath! This is known as "socking" and has occurred; it is recommended that the bottom end of an abseil rope is always knotted to prevent this. In truth, the author has only experienced socking once in 40 years of caving and climbing, and even then it was not a total rope failure. Kernmantle ropes must be carefully examined, both visually and by feel, to detect possible damage to the core which might result in the rope becoming dangerously weakened.

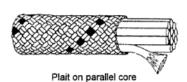


Plaited ropes are made by plaiting separate strands together, just like girls pig-tails or "plats", except that the number of strands is very much higher, as much as 24 strands. The higher the number of strands the more "perfectly round" the cross-section becomes and gives a smoother abseil. This also increases the flexibility of the

rope, making stowing in rope bags easier. As the plaiting is symmetrical, there is no inherent lay and thus there is no untwisting or spinning under load. It was this type of rope that UBSS opted for in the 70's, and indeed it served its purpose very well for many years thereafter. The only possible downside is that every strand at some point rises to the surface of the rope and is therefore subject to abrasion and wear. Such ropes therefore need to be regularly examined. However, it might be said that visible wear or damage is better than invisible damage to the core of kernmantle ropes where a defect might go undetected by casual visual inspection alone. It is also reported (but to my knowledge no destructive testing has been performed) that plaited ropes have excellent strength-retaining properties with age. Since caving rope tends to "age" faster than any other environment I can think of, this might be a factor too.

he so-called "dry treatment" which reduces the rope's ability to saturate with water, and to an extent improves wear-resistance characteristics, seems to be an option on all rope types and most materials used in its construction. The benefits of this in the caving environment are obvious.

 ${\sf A}$ s with everything in life, the choice of good SRT rope is a matter of compromise. The author believes that plaited rope made of polyester fibre, with as many strands as possible, probably represents one of the best options. There are those who disagree. Indeed Dr. D.F.Merchant in his book on cave rescue ropework (ref. 3) slates plaited rope as dangerous, quoting that "modern SRT devices ... are specifically designed for kernmantel rope meeting the requirements of EN1891 and EN596." I suspect that this is in part because SRT devices were designed for climbers, and climbers use kernmantel ropes! Also, the plaited/braided ropes he quotes as "being in use by the fire brigade and other agencies" are undoubtedly those made with just 4 double braids as used in the yachting business, and are thus coarse and susceptible to jamming in a descender. Plaited ropes with 12 or more braids are barely distinguishable in appearance from sheathed ropes, and do not jam; I have climbed several vertical miles of them without mishap. Regrettably I have to say from personal experience that kernmantle rope is also susceptible to jamming in Jumars, as Andy Atkinson will bear witness to.



Another possibility is a newer form of nylon rope called Kernmantel Static Line. This has a similar construction to the sheathed types mentioned

above, but the inner core is not twisted but made of parallel fibres.

ypically the extension under 80kg load is below 3%, often down to 1%, and so this does not suffer so much from the bouncy-bouncy drawbacks referred to earlier. But, it is much stiffer and therefore has poorer handling characteristics. And it still potentially suffers from socking. Nevertheless this too represents a further possibility for caving SRT.

What is certain is that 10mm rope is too small. Although it may cost less, and weigh less, many jamming devices were not designed for rope of such small diameter. Notwithstanding that the breaking strain may exceed apparent requirements, the elasticity of a 10mm rope is significantly more than with an 11mm or 12mm rope. After all, a thin elastic band is stretchier than a wide one. Indeed many rescue organisations specify a minimum of 11mm (e.g. The Australian Standard AS4142.3 (1993)).

No doubt this article will provoke the usual arguments and discussion, and why not? Over a few jars in The Red Lion, perhaps. Let me know if you would like me to join in; there is more to contribute than I can fit into this article.

What knots to use on SRT rope?

And the subsidiary question, how much weaker is a knotted rope than an unknotted one?

ortunately some research has been conducted on this topic (see reference 2 below) by the Cordage Institute in Texas USA, as reported by the National Speleological Society. Eight different knots were tested on both 10.5mm dynamic climbing rope and 12.5mm static line. Under the test conditions used and 25 measurements for each rope type and knot combination, it emerged that the two most common knots used in caving - the Butterfly and Double-Figure-of-Eight - are actually the best. The double fisherman is included in this extract for completeness in case anyone wishes to knot two ropes together for a long pitch.

So, for 10.5mm Dynamic climbing rope strength is reduced by around 30% for either knot, and by less than a quarter for the 12.5mm Static rope.

Knot	Breaking strain as percentage of normal		
Knot	10.5mm Dynamic	12.5mm Static	
Butterfly	70.8	80.6	
Fig. Of 8	69.9	77.5	
Double Fishermans	73.4	78.2	

Of interest is the fact that a Bowline – the knot used for lifelining prior to the introduction of harnesses - reduces a rope's breaking strain by as much as 37%.

NB. The Butterfly Knot is also known as a Butterfly Loop, Linesman's Loop, a Glacier Loop, an Alpine Butterfly and others. A Double Figure-of-8 is also called a Figure-of-8-on-a-bight.

References:

- 1. BMC 2001 Rope marking explained Available at: http://www.thebmc.co.uk/Feature.aspx?id=1440 [Accessed online October 2007]
- 2. Richards 2005 *Knot break strength versus rope break strength Available at:* http://www.caves.org/section/vertical/nh/50/knotrope.html [Accessed online October 2007]
- 3. Merchant, D.F. 2002/2003 life on a line Available at http://www.speleo.no/redning/Life%20on%20a%20line%20part1.pdf [Accessed online October 2007]

Turks and Caicos Islands September 2007

Gina Moseley



oing a Ph.D. really is one of the best kept secrets, especially if you choose the right one, as you get to go on field trips to nice places. Originally I had intended to go to Mexico but obtaining scientific research permits and visas proved to be a small nightmare. I did eventually get the permit after 12 months of trying by which time the project had completely changed direction and I didn't need to go anymore. I decided to go to the Turks and Caicos Islands (TCI) instead. The islands are located southwest of the Bahamas and are a British Overseas Territory, making obtaining permission far easier. And so it was, I obtained a permit on the 20th August and with a couple of very very frantic weeks and long days in office I found myself leaving Bristol at 4 am on the 4th September, heading for Heathrow. Having never made it outside of Europe, I can honestly say it was quite daunting and I felt somewhat apprehensive as I set off on my own on that very cold morning, laiden with caving kit and various instruments to do my work.

hrough the power of the internet I had managed to find the Caicos Caves Project, a friendly group of guys who took enjoyment in cave diving! (Though I think even I could see the appeal in the crystal clear waters of the Caicos Caves). The first two nights I spent on Provo with John in his lovely villa and generally just relaxed and enjoyed myself and did a bit of preparation for the trip ahead.

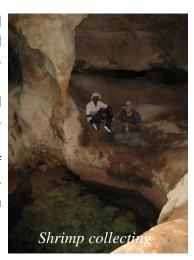
On the 6th I flew out from Provo to Middle Caicos and spent a day acclimatising to the area, the heat and the mosquitoes. The day after Pete caught up with me and we set to work in the Conch Bar Cave system, the largest sur-

veyed subaerial system of either the Bahamas or TCI at over 5km. The cave is really amazing and has three very distinct sections. The west is completely dry with huge breakdown entrances, the stals are old and corroded, the floor is covered in guano and you have cockroaches for company. The middle has deep trenches in the floor full of water which drain completely with the tide. The east is wet, extremely beautiful and requires either wading, swimming or in some cases diving in the chambers. It is also very noisy thanks to the hundreds of bats.

We spent two days working in Conch Bar and then spent a day on East Caicos. This part of the trip proved most definitely to be one of the highlights. I wanted to look at the caves on the uninhabited island of East Caicos to see if they'd be useful for future work. Involved in this trip were also divers John, Mark and Kim who wanted to check out the underwater sections of the caves, archaeologist Brian R, conservation officer Brian M and Judinel who was on board to lend a helping hand. Cardinel was our boat skipper for the day.

On arrival we made progress on foot with those in front hacking a track. I was put in charge of marking the track for return which could have been a mistake but it turns out I did an ok job as we made it back alright. The first cave we came to was like a huge maze. It was dry, full of bats and signs of

guano mining remained. '1883' was found inscribed on one of the walls and old bits of wood, possibly mortise joints, were found. Shrimp were collected from a pool near the entrance for identification. On leaving the cave one of our party who I won't embarrass, managed to sit on a cactus obviously providing much enjoyment for the rest of us.



he second cave proved to be very similar to the first except that passages were generally larger. A small lake was also found though there were no underwater leads. This cave had the added interest of a pile of rat and bat skeletons inside

the entrance of which some were collected for the TCI National Museum.



he next cave required more of a trek to get too though we mainly followed the old causeway used by the miners and plantation workers. To my relief we had a really short heavy shower

which cooled me down somewhat. This however added an interesting hazard - the Manchineel tree. Sap from this tree is extremely nasty, causing very severe blistering if you get it on the skin. We therefore avoided being dripped on at all costs.



he third cave, named Edison's Cathedral Cave after the guy who discovered it a couple of years earlier, proved to be absolutely spectacular. The entrance was a slippery muddy slope down to a water filled chamber. A small walkway extended out to an island where the divers proceeded to get kit-

ted up. The rest of us waited while John, Kim and Mark went for a snorkel around the cave. They returned, having found an underwater lead which they wanted dive gear for. Pete and I now decided to go for a swim through the cave, trying desperately not to kick up silt though how successful we were I do not know. The cave loomed above us in the shape of a cathedral. We swam through and explored a couple of side chambers before rejoining the main passage. Turning a corner at the back of the cave we were greeted by the most spectacular site as the sunlight shone through a skylight chamber in the roof highlighting the cave. The breakdown pile underneath once again had lots of bones on it, including some large mammal. The underwater lead went to a small dry chamber and then stopped. As time was pressing on we



didn't spend too long hanging around. We headed to our final cave, Martin's sinkhole. A large circular collapsed hole which was accessed by climbing down tree roots. The dry bit of the cave didn't go very far but John and Mark followed some underwater leads. One proved more successful than the other as John's dive reel



came to an end before the termination of the passage. However with time pressing on we had to get back, Cardinal would be waiting for us in the boat and a trip back in the dark I guess would not have been fun.

spent a further two days in Conch Bar doing work before returning to Provo where I had a meeting with the Dep. of Environment and Coastal Resources and National Trust to tell them all about what we'd been doing. They're quite keen for us to go back and survey and document the caves on East Caicos. I know that there is yet more caves to be relocated on the island and I also believe the potential for new cave exploration is quite high. We travelled into the island ~2km and explored four caves however East Caicos covers an area of 46km². I'll definitely need some help if I return so let me know if you're interested in joining me.

caved till the end which ended up with me checking in with guano all up my leg. John kindly showed me Airport Cave before I left Provo. It was a lovely little system filled with crystal clear water that I could see the columns extending down to depths in. The roof was also full of bats that didn't



appear to like my invasion too much so I didn't linger too long before heading off.

had a fantastic time in the TCI and really hope to return one day. The people are lovely, the caves amazing and the weather really rather good.

I would especially like to thank John Garvin, Mark Parrish and Kim Mortimer of the Caicos Caves Project for diving and logistical support on East Caicos, Middle Caicos and Providenciales. Thanks are extended to Brian Manco of the TCI National Trust and Brian Riggs of the TCI DECR for guidance and expertise during the visit to East Caicos.



Slovenia 4th July - 15th August, 2007

Edd Willats

I was going on a bear hunt and I wasn't scared, however it was beer by my side and real bangers too. I was in Ljubljana for six weeks over the summer on a work placement and had found a caving club out there – one of the deciding factors for my choice of Slovenia.

Over Easter a Google search and a few e-mails had put me in touch with Jamarski Klub Železnièar and an offer to meet them in their city-centre bomb shelter. On my first Thursday this yielded a couple of beers, a lift home and a couple of promised trips for my first weekend.

he next day I was off with Milan I (the Slovene) to explore a couple of potential caves nearish to Lake Cerknica. I'd misunderstood what he'd said about a rock over the entrance of the first cave - I'd presumed he'd meant that he'd put it there as a marker. Not quite; it was blocking the entrance. Half an hour of smashing with a large metal (possibly homemade) hammer later - mainly by Milan – and we were in and my first bit of non-Union stairwellbased SRT was to begin. It was over very quickly as despite our expectations it was just a 10m shaft. Similarly, the Sunday big SRT trip was not to be.

I'd noticed at the meetings that the club's bomb shelter was full of warning signs and pictures bearing bears (pun intended), bats and proteus lizards (either white cave

salamanders or dragons depending on your point of view/belief in science). I'd seen bats before so I resolved to complete the set, which seemed fairly likely from the Slovenians' initial behaviour. In the first week, red sticks had been dispensed from a box: they were bangers to scare bears from caves - they're too house-proud to accept unexpected visitors. Additionally. the 8 o'clock at for rendezvous the second weekend's trip, Milan II (the Slovak) was already on the beer, a little early for me, but he taught me an important lesson: beer for bears. If you drink beer you won't be worried about the bears. There was a crate in the boot and I'd caught on by 10.

filan II is an archaeology PhD student and that weekend we were off to some Copper Age sites. It wasn't to be a caving trip as such, more of a trip involving caves. First was Koblarska jama, an important, if elusive, cave which had been a burial site and I think there were still a few bodies under calcite covered tumuli. A large cool cavern followed in the afternoon – a welcome break from the heat. We attacked a 1 x 2m quadrant at the bottom, searching for ceramics. It didn't yield anything but it was an interesting trip nonetheless.

was doing well and caving for my third weekend in a row, with Milan II and Matej the cave-diver again, following up a cave we'd stumbled upon the previous week. It was a 10-ish m pitch onto a mud slope in a large chamber with a few offshoots. I was second down but Matej was already assembling human hips and legs into a semblance of a skeleton. He and Milan II reckoned the body had probably been thrown in by Partisans during the Second World War. Various animal bones (including a bear claw!) were also scattered about. The heat outside meant we weren't bothering with oversuits and I (or my arse) discovered how painful squeezing between pointy rocks can be when dressed thusly.



ran out within the hour, as our second cave was aborted as soon as the stench of rotten meat hit Milan II's nose. If the hunters' who chucked it down there ate tripe they could've avoided sabotaging my trip. Luckily, the day was recovered with beers and plum schnapps and more beer and pizza on the way back. Slovene's have caving trips down to a fine art.



y final trip was with Milan I Vagain. It was to Pucov Breze, a (usually) wet, crawly SRT cave - ticking all the 'good cave' boxes. Sadly the entrance pool was dry but there were still many tight entrance passages with 90° elbows to play in, all the more difficult in SRT kit (and I'm only 5'4" and have a "waspish waist" -Andy Wright). Three tightish pitches followed before reaching

the stream-way and Milan I got me to try my hand at surveying and I got UBSS's name on a second piece of paper (the first was for discovering the cave on my first trip). This proved a little difficult when the inclinometer

steaming up, but I got the hang of it. We headed out on a slightly different route, ascending on top of a rope at 45° to an almost perfectly cylindrical tunnel, whose formation I found more interesting than most of the stal in the other caves, but then I'm an engineer.

Ducov Breze is a very strong L contender for my favourite cave - and I've only seen a tiny

portion – as there's a lot of fun to be had in it. I certainly want to see it with some water in, not at full flow though - at $30m^3/s$ the entrance passages would be a little too sporting.

C o, I failed in my attempts to Ind cave wildlife, but I did have a lot of fun in the process. Slovenia's a great place to go caving: generous and friendly people, cheap beer and food and an awesome landscape. If anyone fancies going there in the next few years, let me know; I have contacts and some bears to find ...

With thanks to JK Železnièar for taking me caving, especially Matej, Milan (I) Ferran, Milan II and Peter Gedei for allowing me to meet with the club.

Swildon's **Boat Race**

On Saturday 6th October, members of UBSS joined in the fun and frolics on Priddy Green. The event was the 'Great Wessex Boat Race' in commemoration of the new Wessex publication 'Swildon's Hole - One Hundred Years of Exploration. Some people arrived in period costume and

others as pirates. Most people board and named their boat the After the race, some people decidbrought a boat of some description with them. There were plastic ducks being ridden by dolls, stealth boats, sailing ships and some people had gone the whole hog and included little battery powered lights on their vessel. Jon and Morgan produced a polystyrene vessel, Graham and Linda a plastic boat and Ben and Gina lashed two plastic bottles together, made a sail from card-



'Bat Out of Hell'.

We all made our way to the Swildon's blockhouse and set our ships to sail in the stream outside before heading to the Water Chamber. Red tape marked the finish line and we all sat eagerly awaiting the arrival of the boats whilst drinking ginger beer. boats soon arrived, though not all complete and some with a little time when 200 years of Swildon's persuasion.

ed to take up the chance of descending the 'Old 40' on rope ladder. The stream had been diverted too so that it flowed over the old route giving it that authentic feel. Afterwards food was provided in the Wessex and fun was had by all!

The I do wonder what people will think of this photo is 25, 50, 100 years is being celebrated? Gina

Bristol Rat Race, 2007

Gina Moseley

OK, so this isn't strictly a caving story but it involves three members of the club, Ben, Edd and me, and starts in the pub (where all the best ideas do).

nce upon a Tuesday evening we were all enjoying a drink or two and Kayleigh happens to mention it's the Bristol Rat Race soon. After the Spanish inquisition we find out it's an urban adventure race involving orienteering and tasks around the city and lots and lots of fun!! Soon we find ourselves saying, 'shall we do it?' and 'yeah, why not?' Looking into it further, we find there is a choice of the prologue event on the Saturday evening or the adventure race which also includes a 65 km course on the Sunday. Not really knowing what to expect, we decided to register for the prologue event (and maybe do the full race next year) under the team name 'The Three Spelunkers' (it took a long time to come up with that one).

A couple of days before we get our kit list via email and basically need lots of water, energy bars, a first aid kit and bike helmet. We met for registration about 12 pm on the day and wandered down to the event village at the amphitheatre on the harbour and were pleased to see it was a nice sunny day. I think it's fair to say we were all very excited and looking forward to the event at this point but a little apprehensive having no idea what lay ahead.

Registration involved filling in lots of forms, having a kit check, being given our Rat Race 2007 tops, team number 165 and an electronic tag each. We then had the afternoon free so went our separate ways, meeting up again ready for the briefing at 6pm. There wasn't much to the briefing really except being told there's a chance to abseil down the gorge if you want, don't knock over the nice people of Bristol and enjoy yourself.

hortly after the briefing, all teams were given the control grid references and estimated time required to do the activity at each checkpoint. The fun began here, we had 45 minutes to plan our route. All the teams had their maps scrawled over the floor with people frantically marking on the check points and deciding where they wanted to go. We had three hours to do the event with quite harsh penalty points for going over the time limit. We chose our route and just thought 'lets go for it, have fun and not worry about the points for each task.'

W e had a 15 minute aerobics style warm up which was itself quite funny watching people

with very little coordination. Just before 7 pm we all lined up at the start, excited and ready to go. Our first point was the circle of benches in the middle of Broadmead and off we went, having no idea what to expect when we got there. We were the first team there and it turned out to be karaoke. We had to sing a few verses of 'We are the champions' by Queen and then off to Castle Park for some parkour which involved jumping and climbing off walls and bridges and playing on the kids park – great fun!

Next stop, the harbour in Redcliffe and here it became apparent why we needed bike helmets. We had some 'caving' to do. We were given a survey (definitely not Grade 5c) and told to go and find four pots of sweets (yummy) and bring them out. Inside the caves we found we really didn't need our caving skills as there were glow sticks highlighting the way. Never mind though, four sweets later and a wander around the caves we were soon on our way to the next activity in the same location – kayaking. Edd and I kayaked back across the harbour to the ampitheater while Ben ran round the other side to meet us. He then kayaked back to the activity start and Edd and I ran back to meet him.

We pursued on to a time check point on a foot bridge in the Cumberland Basin and then on down to Bedminster, running down North Street to a shop called Geronimo which was another time check point. More running later and we were next to the water again, this time at a pontoon near the Cottage. Bike helmets needed again, we had to run across the top of some upturned boats and then off to another check point near the Nova Scotia.

oolishly perhaps, we left the uphill part of our route till nearer the end and at this point found ourselves running up Ambra Vale in Cliftonwood and up the steps near Goldney Hall to a time check on a lamp post. With time ticking away, our next stop was somewhere near the observatory at the suspension bridge however we only had a matter of minutes before this station shut. By this point I have to admit I was somewhat tired and the thought of a flat out run to the bridge did not appeal. Edd and Ben however were still as fresh as a daisy and gave me lots of encouragement to get me there. Unfortunately we missed the time check, sorry guys, and so headed on up to the lookout point on the Downs for abseiling.

We dumped our bags at the top and scuttled down the very muddy slippery slope to the bottom of the gorge, and yes I did fall over – ouch! At the bottom we then had to climb back

up to the abseil start. We waited there for a number of minutes while the groups ahead of us disappeared off the side. Soon we were also going over the side, and heading down the very polished rock of the Avon gorge. The abseil was only 30 m or so and we were soon down in no time. Use of the portway for the race was banned so we made our way back up the slippery muddy path to the top and collected our bags.

We had around 25 minutes left at this point to get back. Originally our intention was to go to the activity at Cabot Tower and also the fountains in the centre of town but we decided to see how we were doing for time whilst passing. Turning up the pace, we ran across the Downs, down Pembroke Road and onto Park Street. Edd met a few friends on the way i.e. Major Brown to whom he said 'Can't stop, in a race' whilst zooming past and then his brother on a night out on Park Street. We decided not to go for Cabot Tower because time was ticking away and that activity took 5 minutes. On reaching the fountains it appeared everyone else had also left this station till last. We all had to find some Bristol quotes which were in the fountain and tell them to the activity coordinator in a Brizzle accent. With about 10 minutes left, the coordinator was virtually in the middle of a huge pile on! A 'gert lush', 'alrite' me babs' and 'alrite me luvver' later we were running through the crowds enjoying a night out on the waterfront trying to avoid knocking drinks out of peoples hands and those lying on the floor who had intoxicated themselves a little too much - nice!

We made it, a couple of minutes to go, we were through the finish line and had our tags checked for the last time. Glad and really pleased with ourselves we joined the queue for downloading the tags and then were off for free food which was very welcome indeed.

Out of the 23 rookie teams we came 12th. Not bad I think for an ad hoc decision made in the pub the week before. I (we) would definitely do it again, it's tiring but lots and lots of fun. It's fair to say we were all aching a little the next day, Edd maybe with the extra pain of a hangover because he went partying afterwards. We all found time for a caving trip though, Edd went to Honeymead and Ben and I to Thrupe Lane which was great fun, if a little slower than normal.

The Society and Electronic Publication

Graham Mullan

For the last couple of years, this Newsletter has been made available online, indeed many of you will be reading this on a screen somewhere as a significant proportion of the membership only receive the electronic version. In addition the more interested of you will have discovered that the back numbers are also available online, back to 1970 when the first "proper" Newsletter was produced. See http://www.ubss.org.uk/newsletter.php This facility has been a great success.

In addition, those of you involved in academia, whether professionally or as interested amateurs will know that much technical material is made available electronically these days. This is one of the issues that we have faced with our own *Proceedings* in that journals like ours are sometimes criticised for being "obscure" or "difficult to find". This is slightly unfair and I could print a comprehensive list of the major libraries who subscribe, but these days, even libraries aren't enough and researchers demand access at their desk top. So we need to move with the times.

The first change that we made was to make papers from the current and recent issues available at a price via the Council for British Archaeology's new download facility "Archlib" at http://archlib.britarch.net/ This will, or should, hold pdf copies of papers from the most recent five years. Individual papers are available or purchase at £2.50 each. This comparable, or better, with the previous policy of ordering paper offprints from Tony and is far more convenient for both Tony and the reader! The Archlib website has taken a long time to set up but should be running properly by the time that you read this.

However, that only deals with a proportion of our material and so an even more radical policy has been put in place. Thanks to a grant from the Oliver Lloyd Memorial Fund, we have had a significant range of back issues scanned and uploaded to our own website. These can be found via the "Literature Search"; if a search throws up relevant papers then "Download PDF" will appear alongside the title; click on that and as if by magic the paper appears.

The broad policy met with approval from those academic users who I discussed it with, but some queried as to whether scanned pdf's were the most appropriate medium to use, or whether OCR and conversion to completely searchable text would be better. Well, no. On the one hand, with only limited resources that was not possible and on the other hand it isn't necessarily the best option. Provided that "author" "title" and either "keywords" or "abstract" are searchable and lead you to the full article then not only does this make searches quicker, but it also prevents erroneous results from Boolean searches. So, not only do-able but more efficient. Result!

We have now uploaded most of the available papers, back to *Proceedings* **12** (2). From here back there are numerous gaps; if any member has earlier issues available *that they do not mind being sacrificed*, as they have to be disbound for scanning, please contact me to see what is needed.

So what of *Proceedings* itself? Why not go over to full electronic publication? No, not yet at any rate. On the one hand I believe that the membership on the whole still prefer to receive the paper copy (OK Juliet, not you) and on the other hand we still exchange publications with a lot of people who are a long way from electronic publication themselves and whose journals we an integral part of our library. We shall probably reduce our print run, however, saving money that may be needed to pay for additional webspace. This combination of print and web publication is quite widespread these days and seems to work for many people; if it makes our work more widely available and thus helps make us a more attractive vehicle for publishing our own work and others then it will have been worthwhile.

Cover Photo: Upper Entrance, Conch Bar Cave, Middle Caicos ,Gina Moseley

A note from the editors

We hope you've enjoyed reading this Autumn 2007 edition of the newsletter.

We'd like to take this opportunity to welcome the Freshers' to the club. From the articles it shows what a fantastic time UBSS has had over the summer, hopefully you'll be joining us on equally exciting trips over the forthcoming year(s).

Please send any articles for the next newsletter to newsletter @ubss.org.uk

Gina & Clive

~~~~~~~~~~~~~~~~~

The specialist & affordable legal choice

Bradley Stoke

01454 204 880

Nailsea

01275 858 515

Weston-super-Mare

01934 413 535

Bristol

0117 929 2811

Portishead

01275 850 460

Worle

01934 428 811

Clevedon

01275 850 470

Staple Hill

0117 943 4800

Yate

01454 316 789

www.wards.uk.com

Moving home

Wills and wealth preservation

Accident and injury claims

Divorce and family problems

Employment advice

Commercial services

Company sales & purchases

Commercial property

Debt recovery

Dispute resolution



specialist solicitors
— local to you