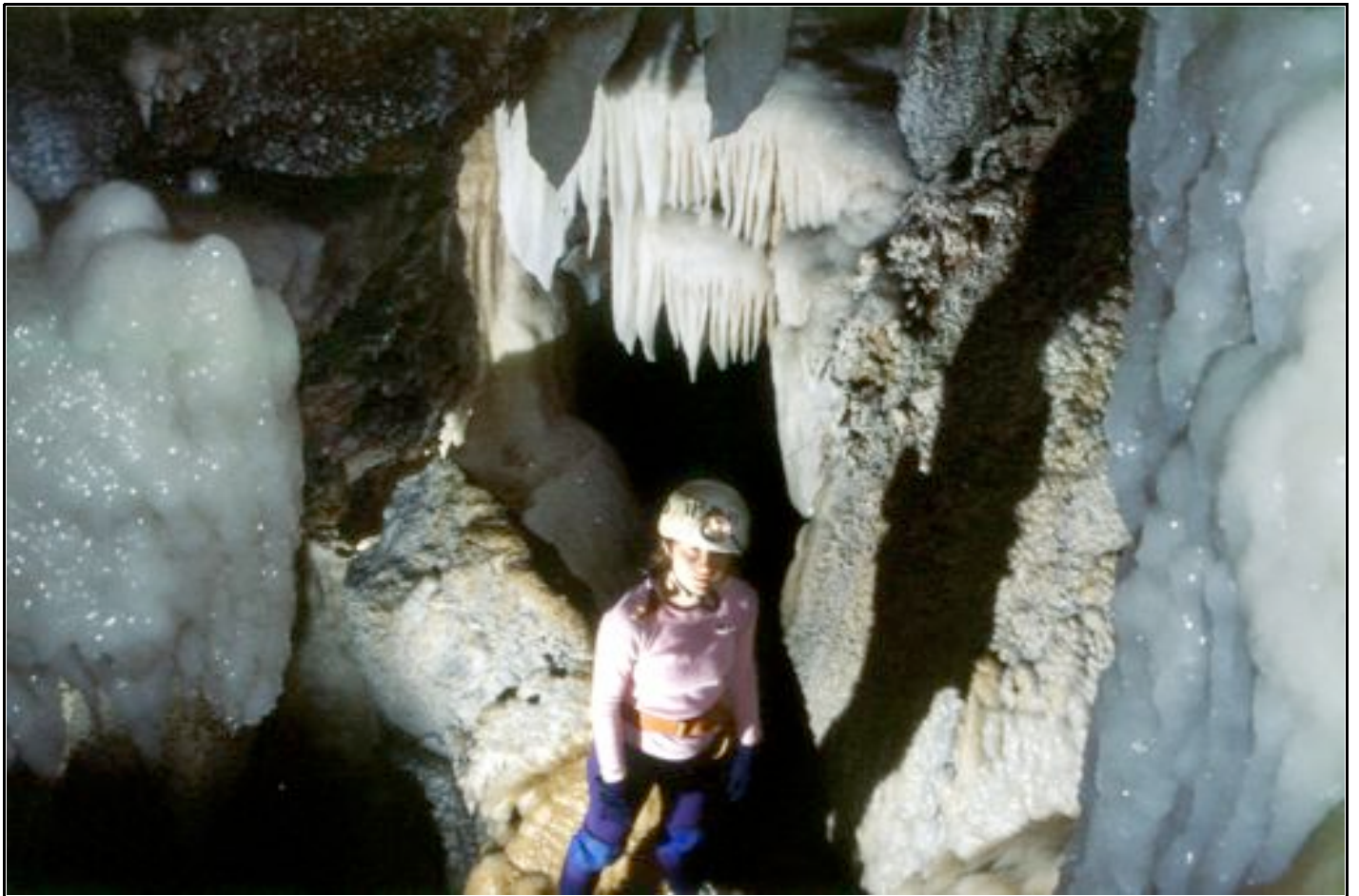


# ***SUSS BULL 41(1)***

***APRIL - JUNE 2001***



Proudly sponsored by



---

## SUSS BULL 41(1)

---

### TABLE OF CONTENTS

<i>News And Gossip</i>	<i>1</i>
<i>SpeleoSports 2001</i>	<i>4</i>
<i>Max Headroom</i>	<i>5</i>
<i>Walli</i>	<i>12</i>
<i>Cliefden</i>	<i>14</i>
<i>New Discovery at Bungonia!!</i>	<i>15</i>
<i>Converting your Petzl Zoom (or other torch) to an LED Torch</i>	<i>18</i>
<i>Chaotic Car Catastrophe at Colong</i>	<i>19</i>
<i>Cave Related Abstracts</i>	<i>21</i>
<i>Cave Diving At Jenolan</i>	<i>22</i>
Imperial Resurgence, Blue Lake	22
Downstream Imperial	22
Upstream Imperial Streamway	22
Pool of Cerberus	22
Pool of Cerberus to River Lethe	23
Setup	24
Slug Lake Dive	24
Cleanup	25
Site description and future prospects	25
<i>Photo Gallery</i>	<i>26</i>

### SUSS COMMITTEE 2001 - 2002

Well, we had our AGM back in April, and elected the new years SUSS Committee. In an unusual move (which is a sign of the times, I guess), we currently have a job-sharing arrangement at the top of the club. Sushila Thomas and Verity Morris are nominally President / Vice President respectively, however, this is with an agreement that their jobs this year will be fully shared between the two! The rest of the positions have been filled as follows:

- Lorraine O'Keefe joins the committee as Secretary,
- Matthew Ridley has taken over the tough role as Treasurer,
- Steve Contos continues on as Equipment Officer,
- Greg Holmes has taken over the position of safety officer (without first having done anything particularly unsafe...),
- Megan Pryke is our Minutes Secretary,
- David Connard is again Editor of this fine (?) publication,
- Ken Anderson will looking after the SUSS Library,
- Kevin Moore has taken on the always entertaining role of ASF Councillor,
- Shannon Crack, Tim Moulds and Martin Pfeil are serving as General Committee Members.

Noticeably absent this year are two former committee members - Chris Norton and Phil Maynard. These two have given the club many years of dedicated service on the SUSS Committee, and deserve to be thanked for putting up for so long with what is so often a thankless task... So, from all of us on the current committee - *"thanks guys!..."*

More details of the current years committee (contact details, embarrassing photos, etc., etc.) can of course be found on the SUSS Website, at:

<http://ee.usyd.edu.au/suss>

- DAVID CONNARD

### IMPORTANT KARST CONSERVATION WIN IN WA

In *SUSS Bull 40(2-3)* we told you about the ASF's opposition to a series of applications to mine 82km<sup>2</sup> of land at Cape Range, in Western Australia. The ASF's objection was heard in the Mining Warden's Court over many days last year, with many speleologists giving expert evidence about the importance of the Cape Range karst and associated caves, that would be impacted upon by the proposed mining.

The Mining Warden ultimately rejected 9 out of 10 of the mining lease applications, finding that the proposed lease areas were to be located in an area *"which is outstanding on a world scale...I accept that, in its present state, were the Cape Range karst system to be nominated by the state of WA for World Heritage listing, it would be listed"*. The Warden accepted that if the leases were granted it would be less likely that World Heritage listing would be achieved. The Warden agreed that Cape Range was a unique karst system, outstanding on a world scale in terms of its location, geological structure, subterranean fauna inhabitants and its integrity.

The Warden recommended that a mining lease should only be granted for an area of 0.2% the size of that for which the applications were; and that this lease should only be granted if the Environment Protection Authority would that the proposal to mine is environmentally acceptable.

SUSS members donated funds towards the costs of the ASF's representation before the Mining Warden, and SUSS also lodged formal objections with the WA Environment Protection Authority against the proposed mine which were upheld in part.

This is an important win for karst conservation in Western Australia. The ASF's victory was a result of contributions from cavers from all over Australia and is an example of how the organisation can best be used to protect caves from the ever-present threat of mining.

- CHRIS NORTON

### IS THIS THE CHRIS NORTON YOU KNOW?

Thanks must go to Don Matthews for bringing this fine web-site to our attention. To quote from "Chris Norton's bio":

***Occupation:** Pharmaceutical sales, nude massage therapist, aspiring adult film actor/producer, and professional chick magnet. I also have my own company, Chris-co Inc. I'm also the co-founder of Speedos United, an organisation dedicated to bringing the speedo back into style.*

Check out the rest of him (!) at:

<http://www.mycrappysite.com/users/chris/>

- DAVID CONNARD

### CAVING IN THE NEWS

Well, perhaps not exactly "*in the news*"... but in mainstream print media, anyway. The latest (August) issue of *Men's Health* magazine has a two-page write up on caving, by an old university friend of Chris Norton's. It covers in brief a few of the caving areas around Australia and New Zealand, and has a good (if I may say so myself, haha!) photo of a caver abseiling Harwood Hole, NZ (also in the photo gallery of this Bull). However, I must wonder if Chris has been leading the author just slightly up the garden path when it comes to the wild caves at Jenolan - the following is an extract of their description of Jenolan...

*The main system is over 20 kilometres long, and new sections are still being discovered. Getting into them usually involves abseiling through a sinkhole and onto the mainly horizontal former river beds below. Depending on the section, you'll be discovering features like those in the tourist caves. For example, Spider cave has crystal-blue water that scuba divers have found to be more than 90 metres deep.*

I must have missed the connection between Mammoth and Spider Caves via this nice solution tube abseil entrances into horizontal river passages...! One day, hopefully this will be true...!

- DAVID CONNARD

### 2001 AUSTRALIAN WILDERNESS RESCUE NAVIGATION SHIELD ONE DAY EVENT

SUSS members recently participated in a team in the NAVEX 2001 Rogaine event. They came in at a very respectable second place. More information on this event can be found on:

<http://www.eng.uts.edu.au/~glennh/navshield/>

**The team:** Carol Layton, Alan Pryke, Megan Pryke and Peter Hayes

The NSW Cave Rescue Squad one-day team got a shaky start, having only plotted the control points moments before the starting siren sounded. The hurried plan made for the first three points was executed as the team's navigational skills warmed up. They overshot the first two control points that ironically had lots of people milling around them! After that, the overall strategy was decided upon that would get them a maximum of 700 points.

The event was wholly within Abercrombie River National Park except for the base camp. The terrain is hilly but with sparse overgrowth, thus no scrub and fairly easy navigation. They crossed rivers, ascended and descended over sixteen hundred metres, walked over thirty kilometres, managed a few decent breaks and got their gear audited twice. Their chosen route took them back to camp along a fire trail, a sensible idea for travelling in the dark. Only one control point was not found. It was dark at the time of looking and the team decided that it was not worth risking a late penalty. They arrived back at base at 7:06pm, the cut off time was 7:30 after which late penalties would apply. Upon inspection of preliminary results issued at 7:15pm the team was in first place with 650 points. Elated for a brief time until whispers of a team with 700 points were heard, if only they had stuck out a few more minutes looking for that 50 pointer in the dark! The team that narrowly upstaged the Cave Rescue team was Mudgee Bushwalkers, having arrived just before 7:30 with 700 points! Nonetheless, with forty-eight teams competing on the day it was a great achievement to come second. In fact the score was higher than most two-day teams.

- MEGAN PRYKE

### URBAN BAT CONSERVATION

Bat colonies are alive and well in many of our urban environments. Bat Conservation International is an organisation dedicated to protecting bat habitats and encouraging bat-friendly architecture. Information on this group can be found on the following website (there's even a live Bat-Cam, for those of you who haven't set eyes on a bat for a while!!):

<http://www.batcon.org/>

An interesting recent study by this group on bat roosts in bridge rooms, and how bridge architecture can be made friendlier for bats can be found at:

<http://www.batcon.org/bridge/index.html>

- BRENDAN HYDE

### TRIP REPORTS (OR THE CURRENT LACK OF)

There have been very few trip reports submitted over the last six months (ie. only four or five). Please, please, please can everyone at least try to ensure that there is a trip report written and submitted for every SUSS trip that occurs. Although it is technically the trip supervisor's responsibility to see to it that this gets done, can other trip participants *please* take a more active role in seeing these get written...

The size, quality and relevance of the *SUSS Bull* is really beginning to suffer due to the lack of material.

- DAVID CONNARD

### WHERE IN THE WORLD IS STEVE TIDMAN??

*For those of you who have been wondering where "Tiddles" is these days, the following is an extract from an email report on a recent trip of his to OFD, in South Wales...*

Spent Saturday down in south wales near Abercraf next to the Brecon Beacon National Park. It was a very enjoyable trip. The cave hut was less than a 5 minute walk from the nearest cave entrance. The cave had big bits crawly bits, wet bits and climby (sporty) bits. It is also a very big cave over 16km long with many different levels so if it's raining you can avoid the wettest areas.

There was a group of 6 of us from Reading Uni club down for the day. (the cave area is about 3 hours drive from Reading so within easy cruise). It was decided that a through trip was going to be the best depending on how the stream-way looked. So in we went. The stream was fine but it was very long and very cold. I think the estimate was about two kilometres of hiking up the stream which was about 3degrees in temp and mostly knee deep. Regularly the water came up to the waist and sometime the floor fell away totally so you had to swim for short distances. (almost never could you see the bottom so footing was a bit treacherous) Luckily the rock was coarse so was very grippy. Every one else (but one) had some wetsuit bits to keep them warm. It was the coldest I have ever been in a cave. The wellington boots I was wearing immediately filled with water and acted like lead weights on the ends of my legs. I spent as much time as possible avoiding all contact with the water. This also is very tiring and by the end of the stream way I was knackered. Then we had to climb out which after all this was a major challenge. The trip took 5 hours to complete and was one of the best trips around.

- STEVE TIDMAN

### ON-CAMPUS CAVING GEAR

Finally an adventure store on campus! *Recycled Recreation* on level 3 of Wentworth, stocks a wide range of new caving gear from sleeping bags to zooms to racks and even 4.5V batteries. They also have old wetsuits from \$25 - ideal for canyons. Any if they don't have it, ask Gavin to order it for you, or call him on 9566 2544.

- ANNALISA CONTOS

### THE ASF AND PUBLIC LIABILITY INSURANCE

In the recent insurance industry shake-ups, one of the casualties has been the ASF's public liability insurance policy. The company previously providing this cover to the ASF (and the ASF members who chose to accept it), has now decided that it is no longer willing to do so. To date, the ASF has been unable to negotiate an acceptable replacement policy, although we are assured that negotiations are still under way with a several companies.

This, however, does not affect most SUSS members. SUSS trips are usually run under a public liability policy held by the University of Sydney – and hence we, as a club, have chosen to opt out of accepting the ASF policy in the first place. The implication of this is that - SUSS members who run or participate in private caving trips (or, who go on caving trips with other clubs) are only covered for public liability if they have their own policies, or, if they have chosen to pay full ASF membership separately to SUSS (which of course, then attracts a reduced membership fee to SUSS). In the current situation with ASF, these trips are not covered in any way (for public liability) until the ASF manages to negotiate a new policy. SUSS members taking part in these types of trips should be aware of this.

- SUSS COMMITTEE

### CONGRATULATIONS JOHN

At the recent June General Meeting, John Oxley announced his engagement to Beate Wiegand (well, actually, Carol Layton announced it loud and clear before John ever got a word in!!). So – congratulations, and all the best! (*...and, I don't suppose you fancy the job as Editor next year? engagement seems to be a pre-requisite for the job these days...*)

- DAVID CONNARD



**Saturday, September 8 2001**

Off Culloden Road, Macquarie University

# Speleosports

Start 10 am at gym wall

From all around the region, Cavers meet for a battle quite like no other. They squeeze, climb, swim through tests of caving skill to attain the highest goal of caving inspired assault course prowess.

Yes! Who will be this year's ultimate champion?

Who will wear the badge of true cave-aholic-ness?

All NSW Clubs are encouraged to submit a component for this year's challenge.

Who can forget the 'Revenge of the Stalactites', 'The Tunnel of Terror', 'The Septic sumps, and the treacherous rope spider web tangle.

Be a part of Speleosports 2001. Enter as a club team or individual for a sky high, down to earth challenge.

For more info, contact: Joe Sydney, jsydney@choice.com.au

- Phn: 02 9875 1887

## Trash & Treasure

Yes, someone is bound to need what you don't any longer. Bring along that trash you want to see go to a good home. Buy, sell, swap, bargain!

## Cavers Dinner

You are invited to the Bi-Annual Cavers Dinner. Recuperate and socialise with fellow cavers, friends and partners. RSS will be providing a feast for the body and entertainment for the mind.

Information and bookings: Email Peter McDonald at [swprint@bigpond.com](mailto:swprint@bigpond.com) or phone him on (02) 9756 3266.

**Sponsored by: Eastwood Camping**  
and others  
**TBA...**

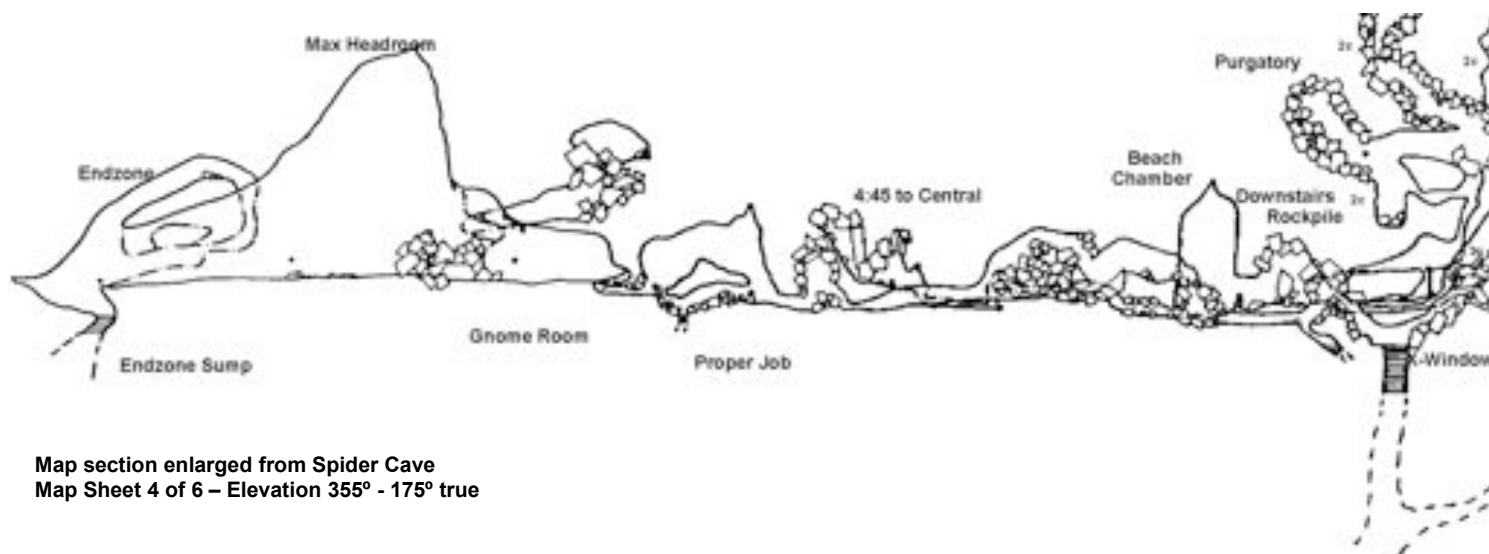
---

## MAX HEADROOM

---

*After the Spider Cave Bull was finally published several months ago,  
one of the remaining leads in the cave - 'Max Headroom' - has now been pushed...*

BY MARK STARAJ



Map section enlarged from Spider Cave  
Map Sheet 4 of 6 – Elevation 355° - 175° true

### PART 1: MAIN CHAMBER, SPIDER SECTION, JENOLAN SYSTEM DATE: APRIL 26 1997

**Participants:** Keir Vaughan-Taylor & Motley Crews.

Wet and cold. So cold. And so tired. So bloody tired.

Keir gazed blearily around and ate yet another jelly baby. Maybe he was going off Jelly Babies. He remembered fondly a time years ago when jelly babies were worth anything to have. And to hold. And in Ice Pick Lake that had been the very issue hadn't it? Jelly Babies, clothes and car keys had slipped over the edge and sank in a stream of bubbles out of sight into the lake. He had been wet and cold then too. Naked and up to his neck in icy water, he and Pat Larkin had dived repeatedly in vain. But it was the loss of the jelly babies that had really hurt. Maybe he couldn't care for a jelly baby because today he was so completely exhausted. Or maybe he no longer had the energy and hunger of 10 years ago.

No, that wasn't it. Not it at all. Anyone would be tired after 19 hours of caving! It was now something like 4am in the morning and the faces of the other 5 divers and various support crew told the story. It had been a failure. A *grand* failure, mind. But still a failure. Two hundred metres of dive line was now anchored in the EndZone Sump, in large passage heading straight for Mammoth Cave. But there had been no breakthrough. Instead a narrow crevice blocked the way on at 30m depth. Ron Allum had said he could possibly squeeze through. Next time. But no next time for me, the much larger Keir thought gloomily. I can't squeeze through that. Heck, I never even got to *see* it. Confusion, loose anchors, hours of delay and a silt-out meant that he and Greg Ryan had had to call the dive without even so much as dipping a fin into the sump. Ron had thought he had heard his bubbles break surface. That's where I could go next time, Keir mused.

Next time. Keir drifted off. In his mind's eye, Keir's gaze wandered sleepily across pack after tank after pack of equipment. There was the video camera. Spools of brown murk. Another waste of effort and time. Twenty-six cave packs had gone to EndZone and most were piled up still inside the cave, waiting for the support crews to retrieve them. Or was it twenty-seven? That question had bugged them for most of the trip. Was there a missing pack and what vital equipment would it prove to have? In the end it had hardly mattered.

Another joyless jelly baby and Keir and the others began to stir themselves for the final climbs. Jarn led the way with a vigour Keir could only distantly envy. After all Jarn had spent the night asleep in his car. When at 3am the divers had still not returned he raised the alarm and ventured in with a packet of life sustaining jelly babies. Just in time to find them at the bottom of the entrance climbs. Time. Maybe even now, not even out of the cave, Keir knew in his heart that there would be no more diving trips to EndZone. That they were already out of time.

Vaughan-Taylor, K. (1997): To EndZone and back. *SUSS Bull.* 37(2):75-79.  
Vaughan-Taylor, K. (1984): Ice Pick Lake Follies. *SUSS Bull.* 22(?)?:??.

**PART 2: EndZONE, SPIDER SECTION, JENOLAN SYSTEM.**  
**DATE: JUNE 24 2000.**

**Participants:** Mark Staraj, Greg Holmes, Verity Morris, Simon Goddard.

I squeezed on once again in the tight rift and chimneyed into the short passage. No one had followed me into this painful rift and I was now well out of earshot of the others. I could hardly blame them for staying away and it didn't matter. I had been here before in July 11 1998 exploring with Andrew Matthews. That day, when my head had drawn level with a passage I hadn't seen from below, I had gasped with excitement. For a brief moment I thought I was onto something. Today I knew better and soon stood under the rocky shaft a few metres on. I was looking for a way up. A way up and over the EndZone Sump that would make diving a thing of the past. There was a stream inlet here that probably came from a sink in the river bed 40m above me. And there was definitely an airflow. But the blunt, jammed rocks 4m above me only told of one story. It was a dead end after all. Wherever the air and water came from no human would ever know.

§

I was looking for a way up. I shifted my position on the boulderpile with care and craned my neck. My light was not strong enough and I wanted to see some evidence that the top of Max Headroom aven was more than just a roof hole. Fifteen metres up it seemed that on one side it was definitely a chamber or passage. Not just a cavity from which the rocks had fallen out. Or was it? There was no way of climbing there. And this was the last "dry" lead left.

For an alarming instant my balance was lost and I teetered precariously. Quickly I threw out my hand and steadied with a grip on a large rock. Then it slipped out from under my hand! Past the receding outline of the boulder I could see the figure of Simon standing nearby, 3m below. I yelled at him to get clear as my arms grasped the rock. It paused an instant as Simon scuttled to safety then vanished. An instant later dust and rock shards exploded upwards from the floor where it smashed into pieces. Not the most reliable of handholds, I concluded.

Angry shouts from Greg and Verity demanded to know firstly what was going on, and belatedly if everyone was okay. *Yes!* I called after a slight delay. I was distracted. My ears still rang but the rock was already forgotten. I was instead entranced by another rock in this pile. This rock had one face coated in 2cm thick flowstone. It had been sheared through. So it had formed on the rock before it fell out of the ceiling. But flowstone would have formed on the floor. When this rock had been a part of the roof. And also a floor. I looked back up. That *was* an upper level up there! I was looking at a way up after all. And just maybe a way over. Would scaling poles get us up there?

Staraj, M. (1999): Splash Down! (11/7/1998). *SUSS Bull.* 39(1):15-19.

**PART 3: HAIRY DIPROTODON, SPIDER SECTION, JENOLAN SYSTEM.**  
**DATE: AUGUST 5 2000.**

**Participants:** Mark Staraj, David Connard, John Hawkins-Salt, Michelle, Max Midlen.

I don't think I even realised I was falling. In silence I pitched forward at full length, head first, into the opposite wall. I picked myself up off the rock. Instincts had saved me, my outstretched arms arresting my fall with my face scant centimetres from impacting the ledge. But there was no shock, no sense of immediacy. It had all felt like a dream and still did. A dull sense of panic stirred in me. Was I coming down with the 'flu? I caught up with David Connard a few metres on by the river. After a brief chat I decided to continue on. After all it had been my idea to bring the scaling poles. *And* I was the only one who knew the way to EndZone. We were roughly almost half way there already. I would take it easy and see that I did not get any worse. We would keep going...

§

I felt much better by the time I got there. After laying the poles somewhere secure (we hoped) for erection on the December trip, I showed the others Max Headroom. Max's light was bright. Look at that! At last we could see details. A visible wall of the upper level was dun brown instead of limestone grey. Out of it protruded large cemented cobble stones. A wall of lithified cave fill – either conglomerate or palaeokarst. This was even more exciting! Not only was it an upper level but this level, as hoped, is a part of the fossil river level series of galleries that is last seen 80 or more metres to the south in Upstairs Rockpile/Purgatory. If it continues northwards then there may be a way past the EndZone Sump after all! December could not come soon enough.

Hawkins-Salt, J. (2000): Scaling Spider. (5/8/2000). *SUSS Bull.* 40(2-3):26.



**PART 4: PIRATES DELIGHT, SPIDER SECTION, JENOLAN SYSTEM.**  
**DATE: JANUARY 13 2001.**

**Participants:** Mark Staraj, Abby Plant (SUSS UK), Verity Morris, Megan Pryke, Simon Goddard.

December came and went with the floods turning the entrance series of Spider into a series of sumps. Although we had the leisure of a week, we had been denied a permit for the cave and so bailing was out of the question. When the January trip loomed we arrived at Jenolan to hear that a recent trip confirmed Pirates Delight was still sumped.

Unperturbed I awoke fresh at 7:30 am and before the others had stirred decided to take the novel step of having mine & Verity's lunch made and packed before I'd even sat down to breakfast. We would win out today!

"So, aren't you going to set up the tape?" called Megan. She was referring to a 3m climb down to the Main Chamber that a lot of people found difficult on the way out. I paused for a moment, not really wanting to lose more time. We had already had to wait for Ian Cooper to arrive hoping he would have a spare shifting spanner as I had only packed one. "Its OK. We can set one up on the way out if we need to. We can always boost at least one person up the climb." This was an obvious solution but I somehow had a nagging feeling, like a premonition, that this minor decision would prove significant. I ignored the misgiving. There was no rational reason for it and we still had a whole day's effort ahead and time was a-tickin'.

With that now sorted out we pushed on. It was hard work. The first two squeezes were empty of water but had not dried out. The result was extremely sticky mud that made wriggling and pushing packs arduous. Even later on the way out, which was down slope, it was necessary to pull the packs the whole way whereas normally one push would see it slither all the way to the bottom.

In due course we reached Pirates Delight. There was maybe 4cm of airspace and a cold wind blowing through it. We set to bailing it and after an hour and good progress we broke for lunch.

§

Eventually I realised I could blame Abby for the debacle. After all her reputation was expendable. "If Miss Shabby here, had turned up for this trip even half prepared, with a container for her lunch, then our lunch would be here too," I said emphatically. I used my this-is-so-obvious-you-can't-argue-with-it tone and looked Verity in the eye. It was not working.

"Ok, I stuffed up. Its not Abby's fault she's disorganised and nor yet your fault because I gave it to you and you put it back on the microwave instead of in the pack. It's my fault because I did not ensure it got packed." I hung my head and furtively glanced at Simon to see what he had to eat. He was engrossed in a close inspection of his food in an effort to see whether it was leftover from the last trip or the one before. He had just started to puzzle over the appearance of a large moth, when Megan spoke up. "I could drive my car back up to the hut and get it for you."

"What a fantastic idea! Could you. Could you, please?" There was no chance of an EndZone trip on an empty stomach. "I could," she said. "But I recall someone saying not to rig a handline on that 3m climb." She was looking at me.

How had I known? Meanwhile Simon gleefully predicted the trip was doomed, reminding me of the missing spanner, the sump and the forgotten lunch. And now the tape. Secretly I was pleased. Spider was desperate to protect her secrets and each obstacle had been overcome. The more obstacles, the more precious the secret.

"Ok, I'll go back with you." For penance I would now have to do Dingo Dig and Z-Squeeze an extra two times. I was slow. Progress was sticky and I conserved energy. Also I was feeling vaguely unwell. By the time I got to the Main Chamber Megan had given up trying to climb it. I bridged up and rigged a handline. Then I joined Megan outside the cave for a breather and to draw up plans. I felt there was a good chance that Pirates would be passable when I got back to the others and so I agreed to meet Megan in Glop Hole Gallery after testing out Megan's memory of the Rockpile route, as she would be doing it solo.

She left and I paused a while. I felt a bit better and set off inside. I was beginning to suspect that the hardness of Jenolan water had begun to affect my gut these last few trips. It's impossible to be enthusiastic about a long, hard trip when your guts threaten rebellion every half hour. Next time I would drink only bottled water beforehand. After a while I was marching down Helictite Chamber feeling a lot better and positive of our prospects. I was smiling.

As I approached the crawl I was slightly surprised to see all three cavers collected together, packs in hand or on shoulders. Body language can tell one a whole story. There was a hurried muttering when my approach was spotted and at least one refrain of “Damn!”

I left the smile in place, set hands on hips, and blocked the way out. “Ok. Which of you is the ring leader?” I demanded.

It transpired that there had been a misunderstanding and they had awaited my return before bailing further. I was only supposed to be 15 minutes but instead was  $\frac{3}{4}$  hour. By this time they were understandably cold and fed up. They were just about to leave. After a discussion it was decided that  $\frac{1}{2}$  hour more would be spent bailing and if then we could get through we would and at least show Abby the inner delights of Spider. So far she had been unimpressed, declaring Spider as “just like caving back at home!” Somehow, like the weather, caves were supposed to be more hospitable in the colony of Australia than back in the UK.

Megan turned up then with our missing lunch and that settled it. Lunch was taken, the sump was bailed, and lo! The waters had (de)parted and we forged through. A wet, slimy Pirates proved very hard indeed and half the crew gratefully accepted Simon’s help to be hauled up the other side. Thus warmed up and with Pirates behind us we almost decided once again to strike out for EndZone but sanity prevailed and the packs had been left behind anyway. No one considered climbing up Pirates a second time!

Thus the exploration trip turned into a tourist trip, mostly for Abby’s benefit. She noted that The Rockpile was still very much like caving in England except that we would be sharing crawls, squeezes and drops with a freezing cold stream. I assured her we had one of these too and took her downstream to Rubble Trouble, site of the connection to the Jenolan System. Thence upstream to Pike Lake Sump. Of some curiosity was the state of the paper note recording the discovery of this section in 1979. I had first seen this piece of paper lying flat with a stone holding it down, atop a rock in the midst of the river. This was only a couple of years ago and by its state it obviously had not been subject to any flooding or other exposure to water. Nevertheless it was starting to look fragile. This time it was actually folded over itself in an upstream direction.

It seems to me unlikely that a caver would have done this intentionally or inadvertently. If you assume this and given the direction it was folded over I would guess it was due to a gust of air. I can only think of an air shock wave due to the big floods late last year. I think this was also the first trip into the cave since the floods. As access to the cave is blocked during floods we have very little evidence for what occurs inside Spider during one. There may be some interesting speculations one can infer from this gust. I didn’t think the gust would be that strong in sizeable walking passage.

From here we returned to look at Khan Passage, Whales Throat and The Eyrie. Abby was by now suitably impressed.

When we returned to the Cottage Ian asked: “Did you have enough bolts? There’s an awful lot left here in the bag.”

“What? Of course, a bracket for each join, and two bolts for... I see what you mean!” I had counted one bolt per join and so we had packed only enough for  $\frac{1}{2}$  the poles. 5 poles. Maybe that would have been enough but what would I have said if we’d got there and it hadn’t been. Could I have given Abby the blame for that too? I glanced at Verity and knew I was being silly.

Simon was positively gloating! “See, it was doomed!”

In the meantime Chris Norton had lead a trip into Mammoth Cave and laid some survey markers. Some work was done by Ian and Phil Maynard in Wiburds to remove a survey error in Henrys Dig loop. The last likely entrance to Wiburds was relocated. However J229, like J237 before it, was explored, surveyed and found not to connect at all with Wiburds. J56 was looked at thoroughly and a pulley would be needed to shift a large rock to get at a hard but strongly breathing dig.

On the way home I thought about Max Headroom. This trip may have been doomed but I was convinced we were onto something. It was an omen we were onto something big. Maybe even a connection to Mammoth Cave, I daydreamed. The sump in Pirates was now gone. The way was open and in my mind’s eye I felt the breeze again like a promise of virgin cave to come.

But did Spider have any more tricks to play?

**PART 5: MAX HEADROOM, SPIDER SECTION, JENOLAN SYSTEM.**  
**DATE: FEBRUARY 23 2001.**

**Participants:** Mark Staraj, Max Midlen, Verity Morris, Phil Maynard, Simon Goddard, Eric Tse.

The February trip was already full and I could not make the March trip. I didn't dare wait long enough for the rains to return and refill Pirates Delight. I hatched a plan for a weekday trip.

It would be Friday 23<sup>rd</sup> February. I anxiously waited for confirmations to come in from the likely crew that they could get the day off. I checked weather reports and saw that while big falls were had 100km to the north, Jenolan remained unscathed. I checked with the Guides daily hoping the permit would be approved in time. I planned to drink only bottled water.

By Monday of that week I had 6 confirmed takers. The permit was approved. In my in-tray at work a parcel appeared from the USA. It was my copy of *The Longest Cave* – the story of how Mammoth Cave, USA was connected to Flint Ridge to become the world's longest cave. Well then, how is that for an omen! Could a Spider Cave to Mammoth Cave, Jenolan connection be on the cards? If that wasn't food for thought then the following coincidence was almost too good to be real. Unbeknownst to me when I set that date, SUSS divers Keir Vaughan-Taylor and Al Warild had booked an attempt from the other end in Mammoth Cave. Al was intending to complete an aid climb in Gargle Chamber and check off the last dry lead heading towards Spider. This is reached after a 40m deep dive in Slug Lake. Two teams working from opposite ends on the same day without even coordinating their attempts! Spider would never have been connected to the Jenolan System if this "twin-attack" approach had not been adopted back in 1988. Maybe, by accident, history was about to replicate itself in 2001.

The Spider team arrived late Thursday night and awoke fresh early on Friday. Three of us paid a visit to the Guides Office to collect keys and drop off a copy of the Spider Bulletin. By chance we found the Mammoth crew newly arrived, with tanks, climbing gear etc. They numbered three. Not really enough for a cave diving trip I thought. However there was no chance of sparing them a member as we had packs of brackets, bolts, tapes, spanners, rope etc to take in, and 8 scaling poles in addition to bring out. By order of the SUSS Committee.

Keir looked wistfully at the scaling pole crew. You could tell he thought we had a big chance of finding something. You could tell he wanted to come.

*"You know Pirates is still probably sumped."* Keir was trying to sound helpful. Instead he came across as the cagey con artist he is. I saw a vision of my crew carrying dive tanks, and later a glimpse of Keir climbing a scaling pole. I squared him up.

*"It was. We bailed it out in January."*

*"Oh!"* Hope faded from his eyes.

*"You know, Keir, I'm not really sure what you are trying to say to me but I'm still feeling really good about this trip."*

When we returned to the cottage we found that the industrious Max had organised the cave packs. I'm a notoriously slow starter. I supply the grand plans and recruit others for their energy to make them happen. For this trip I had both Phil and Max. And shortly we were all ready to go. Eric, Phil and Max set off with a collection of ½ sized packs containing all the necessities for setting up the poles. A short time later Verity, Simon and myself set off with a full-sized pack and a slightly smaller one with spare lights, clothing, food, water bottles etc. The trip in was uneventful for both parties. Pirates Delight had dried out totally. When we arrived at Max Headroom it was to find that poles had been set up on one of the alternate climbs. Max was belaying Phil who had just reached the top. This didn't go so I pointed out the actual Max Headroom lead that is reached by climbing up the 3m high talus pile of boulders. The pole was brought over, braced on the pile, and it was seen that 5 poles would comfortably bring one to the upper level. Well that's speaking for the poles. The ladder was another matter! I had suggested he bring the 15m ladder to give us extra leeway if we re-rigged the climb. Phil had actually collected a 10m ladder instead but decided it would all work out. But the bottom of the ladder was swinging 5m off the floor and 2m out of reach! He had packed a 5m ladder! Simon started prophesying, reminding me that a shortage of helmets and battery belts had almost cost us one starter. It did cost us spare lights as Eric's helmet had no light bracket and the FX-2s needed the belts.

A careful climb on some nearby boulders and Phil threw himself forward and grabbed the ladder. Up he went. We waited expectantly. At the top he cursed a little at some loose earth and rock as he grappled for a position to raise himself over the lip. He set himself and then stopped.

*"What is it? Does it go?"*

*"No. Nothing. Just a muddy alcove."*

*"How about a lead? Not even a dig?"*

*"Nope. Dead. Looks just like the high stuff Keir and I found off Gnome Room."*

*"But aren't they cobblestones in that wall behind you?"* I was a little desperate at the thought I had totally misread the signs. Five people had taken a day off for this venture on my persuasion. Maybe they think it was just a con to get someone to help bring the poles out.

Phil turned around and looked at the wall behind him. "Sure are. It must be Permian," he declared in reference to the presence of palaeokarst at Jenolan. Apparently caves had formed in the Permian Age, had been infilled with sediment and then reburied with the infill turning into rock. Much later the limestone was folded and faulted and tipped on its side and the current caves formed. At places the modern caves intersected and exposed the ancient fossil caves of the Permian. Unfortunately these caves can never be explored unless you are a rock drill. We were just a few hundred million years too late for this lead.

And the flowstone? The answer for that was nearby. About 3-4m above the bedrock floor can be seen the remnants of a false floor. The rocks had probably fallen to the old floor level and there were coated in flowstone. Later, a stream had scoured out much of the sediment, undermining the boulder pile and causing the rocks to slump. When the rocks fell again the flowstone was sheared and tipped onto its side.

For the sake of completeness we shifted the poles to the other side to gain access to a rift. Max climbed up the ladder this time and eased carefully past an attractive set of translucent white shawls and stals. After a few minutes he returned. The rift pinched out.

That was it. The last dry lead was now officially crossed off. We packed up and headed out.

Eric had not been very far into Spider Cave before and prior to the trip there was a concern over how he would fare with the squeezes. They proved groundless. However in the throes of the Rockpile he foundered.

*"I'm stuck! I'm caught by my thigh and I can't move my leg."* I manoeuvred in the narrow crawlway so that I could turn around and come back to him. His light had faded to a sickly glimmer. Ahead beyond a narrow canyon I could hear Max sorting through one of the packs for a spare. There was concern on Eric's face. He had been trying to free himself but had got nowhere. He was in a narrow chimney. At the top it opens into the low crawlway that I was lying in. The corner is too tight to get around but near the top a gap past a blade of rock lets the caver slip a leg far enough in just the right direction to make it straightforward. Eric had done this but perhaps not shifted his leg far enough around. When he had pushed off it to negotiate the corner his thigh had slipped back in to the gap, slid down to where it narrowed, and wedged tight. This was a bad spot for getting caught but usually it trapped the unfortunate on the way in. Now it had a tired Eric in its grip. He could not turn his head to see where the problem was. Too far up the chimney for his feet to push upwards. Not far enough up to push off his forearms.

I looked at Eric. He was in difficulty but little pain. There was not a lot I could do. It would have to be resolved by Eric with guidance below from Simon and Verity. I sent the dynamo pack team of Max and Phil onwards as there was nothing they could do either.

Time ticked on. Instructions from below were only based on half the story as they could see Eric's legs but little else. Eric of course could see nothing and so had to imagine what the instructions meant. In due course it got figured out and a relieved Eric pulled free with little more than some bruising to show for it. The Rockpile is not the forbidding obstacle it was when first conquered in 1979 but I suspect it will continue to pluck its fill from the ranks of the unwary and inexperienced.

Seven and a half hours after entering I trailed Simon at the back as we reached the final climb. We were the last to head out. Simon called back down to me.

*"What's this ice cream bucket for?"*

*"Oh, that's just where you can put the key if you wanted to."*

*"Okay."* I ensured he reached the top of the awkward climb and passed the packs up. He headed off along the crawl and I wedged up the climb. Only a small climb of 3m but its annoying and frustrating when tired. A slip can result in a tumble down the climbs immediately below it for most of the 20m of depth it takes to reach Main Chamber. Like one of the packs almost did on the way in.

After the usual sweaty thrusting I squeezed through the hole at the top past the gate. I cast around for the key. I always leave it up here. Where was it? Only a foot away from my head I spied a very large spider resting on the wall. Eight eyes stared back, creased in laughter. Spider Cave was having a field day and had sent its denizens to jeer us on out of the entrance. I called to Simon, who then crawled out of the cave to consult with the others. Tinged with amusement the reply came back: "In the bucket!"

Bloody hell! Down the climb again I retrieved the key. Once again at the gate I locked it. Glancing up I saw that a second spider had appeared. I ignored the impulse to crush the smiles from their faces.

Outside the others had gathered. They had been laughing too I could see. *"Key was in the ice cream bucket was it? You know, that bucket in there for keeping the key?"* Ha, ha.

I wasn't going to be baited. I'd had enough for this day. My thoughts were already turning to what discoveries the divers might have made as I pushed roughly through the group and called behind me *"Yes it was. Where else should it have been?"*

Within a few metres I could see that the divers were not back yet. Their car was still parked at Playing Fields. Either they were making discoveries or needed rescuing. Neither thought appealed to me.

We lugged the gear up the hill. Sitting in the cottage I heard the divers pull up outside. Keir trundled in and sat down.

*"Well, how did it go?"*

*"We didn't get to Slug Lake. It took us too long to reach Lower River so we decided instead to dive there. We dug upstream and relaid the line. Its opened out a lot but still very hard going against the current. Al got as far as where the cave has plunged down to 23m deep. And I found a Zoom in the downstream sump. So, how did you guys go?"*

*"That was Carol's. Nothing. A big fat nothing."* I said through clenched teeth.

Verity entered and dumped a large bag of lollies and chocolate onto the table.

*"What's all that?"* asked Keir with interest.

*"Help yourself. It was what we didn't get to eat. We'd hoped to be in there a few more hours while exploring"*, she said. There was no accusation. Just a statement of futility.

*"So, it didn't go and there are no leads left."* Keir paused for emphasis.

*"Maybe I should run another diving trip to EndZone later this year."*

A smile played over his face and there was a gleam in his eye.

He reached forward and poked around in the lolly bag.

*"Any jelly babies in here?"*

**PART 6: SPORTS MEDICINE CLINIC, BEATON PARK SPORT & LEISURE CENTRE.  
DATE: FEBRUARY 26 2001.**

**Participants:** Mark Staraj.

As the physiotherapist manipulated my lower back I daydreamed of Spider Cave and a connection to Mammoth Cave. Where could it be? Memories of a loose rockpile surfaced from a tight streamway. A cold breeze fanned my face from upstream. From the north. From the direction of Mammoth Cave. *Dig at the End of the World!*

A sharp pain brought back reality. Whatever am I thinking of? Am I truly mad? Then I saw Keir surrounded by 26 packs of assorted equipment and SCUBA tanks. He was by himself. He smiled deliriously. There was slobber on his chin but he was ignorantly happy.

And they said I was crazy to take scaling poles to the back of Spider! Still, sticking poles up Spider had only made her laugh. Maybe Keir was right. I was not yet crazy enough. You have to be insane to take on Spider and expect to win. I thought of packs full of tapes, shovels, buckets, rock hammers, chisels, G-picks and crowbars. *Spider – I'm going to make you part of Mammoth Cave yet!* I swore to myself. I thought of a mantra. *Must push hard. Must push harder.*

*"Ouch!"* I winced. I suddenly felt nauseous.

*"Sorry! Thought you said 'Harder'. Did that hurt?"*

*"Yes!"* I said feebly and dimly seemed to hear the guffawing of Spiders.



---

## WALLI

---

30<sup>TH</sup> JUNE - 1<sup>ST</sup> JULY 2001

BY ALAN PRYKE

**Participants:** Megan and Alan Pryke, Sushila Thomas, Scott Hall and Carly, Mike Lake and Jill Rowling, Phil Maynard, Ian Cooper and Walli braintrust: Geoff "oh, yes" McDonnell



Sunrise at Walli

*Plumes of steam,  
The trails of which,  
I've not seen.  
Rise up, soundless,  
From underground realms,  
Boundless.*

Oh, bugger, why haven't I got my camera! Too slow, they've disappeared...

Geoff had been watching the steamers of Piano and Piano extension. Steamers. That is, the warm air rising from Walli's caves and hitting the cold early morning air, producing columns of steam.

We, (Megan, Alan and Geoff), enjoyed the crisp cloudless morning as the sun defrosted us. We waited then, for rest of the team to arrive - Scott and Carly; who rang to suggest we hurry up and rig deep hole so it'll be ready by the time they arrive, and Mike, Jill, Sushi, Coops and Phil.

Megan and Geoff dutifully wandered off to rig a deep hole called, not surprisingly, Deep Hole.

Meanwhile, soon after Scotty and Carly had arrived, a mysterious vehicle arrived, complete with four mysterious locals. They pulled up and from the windows said hello and immediately asked where the caves were. Fortunately for us, the only people who knew the cave locations were either rigging or on the way. Well, they then just drove off over the paddocks till stopped by the nice karst sumpbusters. They were not seen again until I arrived at Deep Hole (well, yes, I did sort of know where to look). They spotted me wandering across. The foursome watched us rig, saying they had had a look down a hole already (Horse Cave, I guess), but reckoned they needed a bit more rope. Now, the rope they had was the sort of stuff you wouldn't tie up a dog with (and they probably did). Geoff remarked after they had wandered off that one of them resembled a Viking (well, yeah, I guess he had the build and the flowing beard, but Vikings don't wear mirror sunglasses, and do wear helmets at least (the horned kind, that is...)). They swaggered off, ropes tied around their waists; dolphin torches all round, looking for boundless caves, two-metre crowbar in hand... oh dear...



**Sushila arriving into Deep Hole**

The cave rigged, we abseiled in, and Geoff took us on a tour of the lesser parts of the cave, eventually leading us to the huge shale band.

We returned to the ladder to find the rest of the group rigging a second ladder to get the non-SRT people down. We all assembled and headed off to the larger, mazy, decorated areas. There are some quite pretty formations in this part of the cave, in particular, a large cluster of noodly helictites up high. We played around for a while above and below the many false floors, winding our way around, ending up in a decorated chamber. Sushi was quite keen to explore any Sushi-size holes, which she did...

After a good romp around the cave we exited to a setting sun. Some self belayed up, others climbed the ladders with a belay. Carly's belay rope caught under the ladder and became loose, so Megan remedied the situation by lowering down the opposite rope end loop. Carly decided it would be nice to read a book on Sunday.

The Orange people debunked at this stage leaving Scotty, Carly, Geoff Megan and Alan to enjoy a roaring campfire, which we celebrated continually. (ie: "what a great fire", "isn't the fire wonderful", etc....). Geoff added some nice cut logs.

The others had a nice dinner and free games of pool at the Mandurama pub.

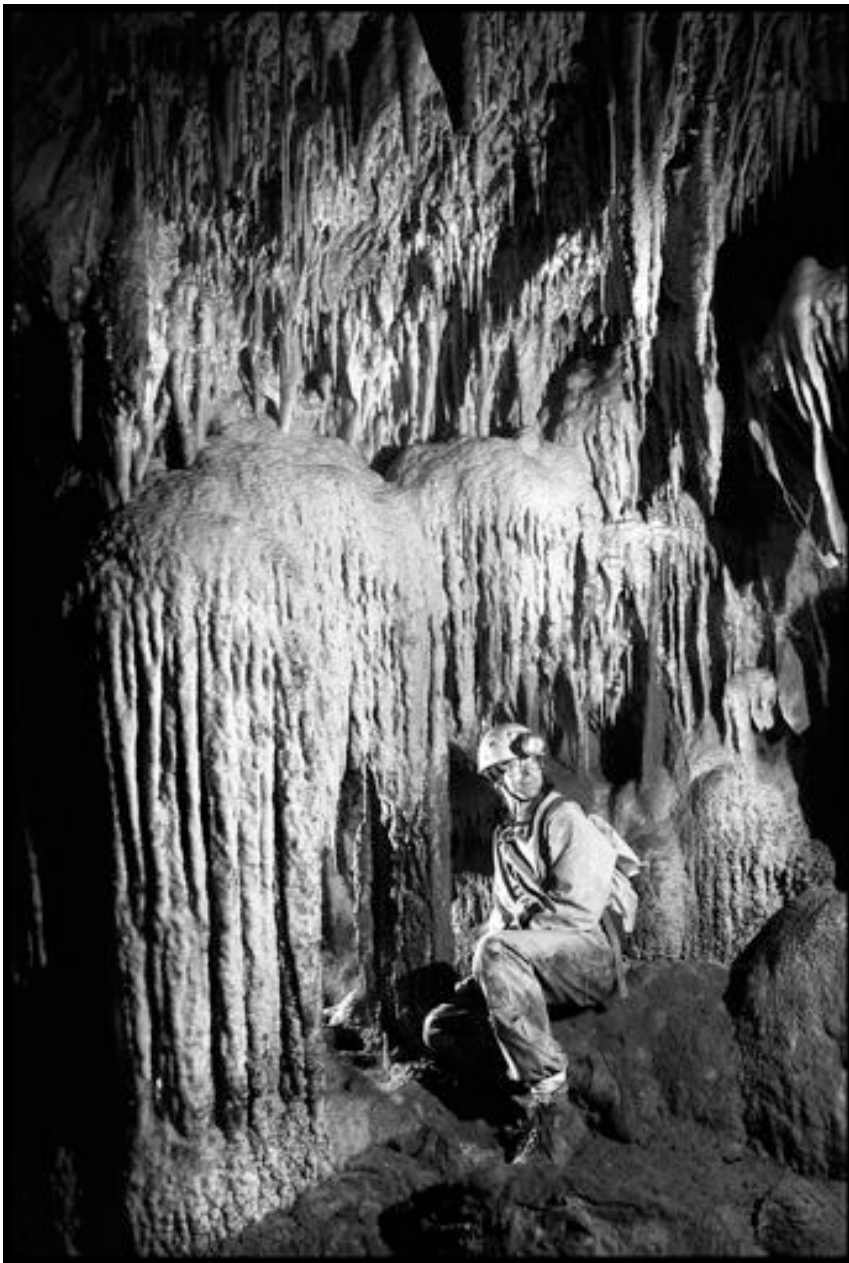


Sunday saw more sun and we waited for the team to arrive back from various points in Orange. Coops and Phil were no shows as they were busy redrawing the Wiburds map. We headed off for Lake Cave W42 as Phil had the equipment essential for the Piano



Extension. Mike headed off with Jill to do some surface work (Mike must have been put off by the cave's name?). Sushi didn't like the exposed rift, so headed out. The rest of us chimneyed our way up and down the maze of chambers, crawl ways and false floors – quite a fun, sporting cave with decorated chambers and some quite unique pool crystal. No lake, though.

We made a visit to Oolite cave heading down more dusty passage into the roomy interior. The oolite shelf still looks good. Three of us crawled through into Stovepipe cave, whilst Scotty had a rest. We then climbed out the alternate exit. I noticed some calcified tree roots on the way out. Next, we zoomed over to Piano cave, and, once inside found Jill analysing aragonite. Megan had a nap in the main chamber, while Geoff showed me the cemented up connection to the extension, and a small chamber with



**Mike Lake in Deep Hole (Walli)**

walls covered with aragonite. Quite specky. We started to exit, and on the way discovered Jill photographing the dolomitic area she had been looking for, a pointed out a high lead. Geoff got excited about dragging scaling poles in to explore, as there were no signs of previous entry to the overhanging window. (Geoff headed back the next weekend with SSS, erected the poles, and unfortunately only found 10m of guano-ey passage.)

We all packed and headed out by 4:30. Scotty and Carly had left earlier, but we caught up with them at the Ivanhoe Pub in Blackheath.

Walli is quite a different experience to Cliefden, despite being just up the road a bit.

---

## CLIEFDEN

---

**16 – 17<sup>TH</sup> JUNE, 2001**

**BY DAVID CONNARD**

**Participants:** Ian Cooper, David Connard, Jenny Mee, Chris Norton, Sushila Thomas, Martin Larsen

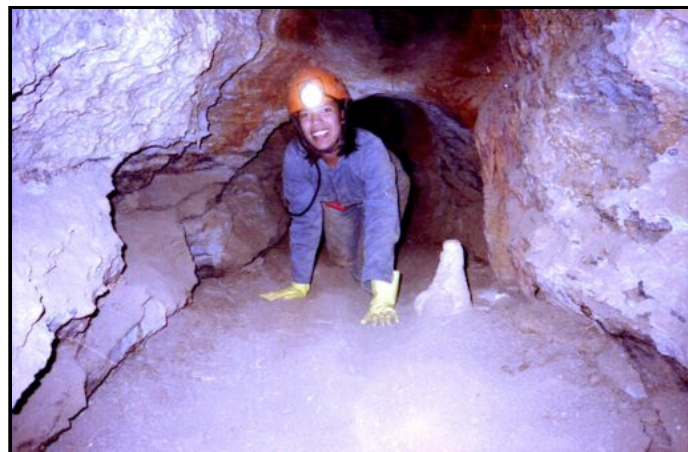
I don't quite know what it is that makes Cliefden less than appealing in the middle of winter. Maybe it's the long walks to the caves through freezing cold sleet... Maybe it's the discomfort of standing under a pathetically trickling shower-rose in a breezy tin shed, when it's sub-zero outside... Or maybe it's just the fact that neither Annalisa was available for this trip to cook up a delicious communal meal, nor was Simon available to perform his "oops-I-fell-out-of-the-top-bunk-again" trick on request. Whatever it was, there were not too many people keen to

come on this trip. And of the six we did have, only three of us were hanging around for Saturday night and Sunday...

Excuses all around it seemed. Most people had (or had managed to find...!) something better to do. Coops had to re-wire his car. Sushila was keen to get back to her cat. Still, never letting an imminent lack of people get in the way of good caving, we set off on Saturday for Murder Cave with all 6 people in tow. We entered the cave to a veritable symphony of "mooing" from across the river (*guess who said: "wow – cows in stereo!"*) – an entire herd of black cows watched us disappear into the hill. Murder Cave was pretty much business as usual – off to see the Blue Stal room (*accompanied by much "ooh-ing and ahh-ing..."*), around the helictite infested loop past the pineapple room (*more "ooh-ing and ahh-ing..."*), and back out.

After a pleasant lunch in the sun by the river (it was actually a lovely winter's day this trip – no sleet in sight...), we ducked into Transmission for a wander around. This is an entertaining little cave, with lots of climbing and crawling – definitely a touch sportier than I remembered. Chris found a neat little climby-squeezy-crawly loop-trip on the way out.

Back at the cars before sundown, Chris, Jenny and I returned to the hut, while everyone else made their excuses and left (without showers, too... euk...). Little did he know, but Chris had a very nasty surprise in store for his dinner that night... To his misfortune, when grabbing a plastic bag to pack his pasta in, he inadvertently picked up a bag containing someone's (presumably used) tissues. Somehow (and perhaps the prior consumption of a good portion of a six pack helped here...) he still failed to notice the additional contents of the bag when emptying it into his saucepan of boiling water... Shortly afterwards, a less than appetising lump of ex-tissue was finally extracted from the saucepan, accompanied by a most unimpressed cry of "*How on earth did that get there?!?!?*"



Sushila in a cave somewhere at Cliefden

Sunday saw the three of us head to Mollongulli for a bit of sporty caving. This cave is unusual, in that it is entirely formed in limestone that seems to be bedded at around a 50° angle... and so a good portion of the cave is spent climbing, chimneying and squeezing either up or down steep slopes. All in all, lots of fun... There are some nice pretties, too, in this cave – including some formations reminiscent of the famous 'Donkey's Tails' at Yarrangobilly.

---

## NEW DISCOVERY AT BUNGONIA!!

---

**BUNGONIA SRT TRAINING WEEKEND,  
21 – 22<sup>ND</sup> APRIL, 2001**

**BY LOUISE PARKER**

**Participants:** Phil Maynard, Greg Holmes, Annalisa & Steve Contos, David Connard, Jenny Mee, Lisa, Louise Parker

*What we set off on was a Bungonia SRT caving trip, what we got was a food and wine festival, a mild degree of alcohol poisoning and the greatest caving discovery know to man!<sup>1</sup>...*

After a short experiment on just how much gear one could fit in a Subaru Liberty, David, Jenny, Lisa and myself set off on our Bungonia adventure. The weather looked bleak and the sky above us began making an array of disapproving growling sounds. A sound I would come to learn, my stomach would make numerous times over the following 48 hours.

All hopes of the weather being only coastal showers slowly diminished as we drove inland. It was decidedly dark and moist by the time we arrived at Bungonia campground. Steve and Annalisa had arrived before us. We pitched our tents and took refuge under some tarpaulins and set the Food and Wine Festival in action with an assortment of delicacies including Steve and Annalisa's famous port.

The morning proved to be just as damp as the night before and the morning light encouraged us to hone our setting-up-camp-at-night-skills - as most of us had found perhaps the sloppiest ground Bungonia had to offer and spent the night like limpets continually crawling off the tent walls and back onto our sleeping mats. With the morning came the arrival of Phil and Greg. Despite the late hour there was a considerable lack of action in camp, after much puffing, consideration and reconsideration we managed to get going. Phil and Greg went to rig Argyle Cave for the following day whilst the rest of us had a mosey around Blow Fly cave. Steve went ahead to complete the rigging as part of his trip leader test. Being the last to enter the entrance pitch, I felt my stomach begin it's nervous little growling thing- it was finally time to see whether my SRT skills where going to get me through. Blow Fly proved to



<sup>1</sup> The above description is just a cheap attempt at encouraging you to read my article- if you have any reservations BACK NOW, if accuracy is of no concern to you - read on!

be a very enjoyable cave and my apprehension soon past. Lisa and I (the two newbies) made it though pretty well with a few minor hiccups on my part.

That night, with the weather looking a little clearer we collected enough firewood to make it though a Siberian winter and went back to camp. The remainder of the night was spent eating and drinking and drinking some more (note the emphasis on drinking). Many members of the group entertained themselves trying to scare the little SRT virgins (Lisa and myself) about Argyle squeeze. Although I suspected this was probably part of an unwritten SUSS initiation ceremony, stories of having to breathe out to continue along the squeeze more than met their mark on my fragile little mind. As the night progressed the greatest caving discovery known to man was revealed. Read on and you shall never see a battery pack in the same light again! As Greg competently demonstrated they have another, more useful application- it's ability to open 'flick-top' beers. How Greg managed to make this discovery remains unsolved but I am sure it will change the face of caving forever. Another little revelation of the night was a certain individuals plan to take over SUSS and convert it to a Wicken cult! Unfortunately (despite attempting to start this ceremony by running around the fire half clothed), very little support was given to the motion. The night ended with my stomach growling and vague nightmares of getting stuck in a squeeze with a witches hat on!

**Greg demonstrating his recent new discovery**



The morning saw many hurting souls and numerous claims by myself and others that we must have been run over by a pack of marauding harvesting tractors the previous night as we felt so poorly. I fell further into dismay when presenting myself to the toilet block I was confronted with a dozen young bible bashers. “*Jesus loves you*” and other popular bible songs echoed around me as I showered- not the best medicine for a hang over! But the show must go on and it did.



**Using an FX2 battery to open non-twist-top beers. Oddly enough, FX2's seem perfectly designed for this purpose. Coincidence? I don't think so...**

After some slightly more efficient ‘pffaffing’ we set off once more. Annalisa, Steve, Phil, Lisa and myself made our way to Argyle while David, Jenny and Greg went to try and NOT get lost in B4-5. With my hangover beginning to fade I felt ready for a challenge and Argyle was just that. It was an excellent cave, cool squeezes and nice little bridging climbs, really nice pitches and some tricky little SRT manoeuvres. The squeeze was interesting but as I discovered could be negotiated quite comfortably with the advice of a more experience member who knew the best part of a passage to squeeze through. We discovered that the carbon dioxide level had increased quite markedly in the last 12 hours. Having never been in a cave with foul-air before I began hassling an ever patient Phil to check carbon dioxide level every two steps on the way down. I found the feeling of continual breathlessness very strange but was always assured where everyone else was by the huffing and puffing coming up behind me. One the way up Lisa and I discovered that following Annalisa might be a good idea when we both successfully got lodged in a chimney much to the amusement of ourselves. After seven hours of caving madness we emerged unscathed and smiling back to the surface.

On returning to camp we discovered the remainder of the team had set out complete the food and wine Festival epic. In addition, Dave began demonstrating that numerous rope and safety skills could also be required in a humble game of Frisbee. An attempt to free a Frisbee held hostage way up a gum tree eventually succeeded by rigging a rope off one of it's large branches, tying a loop in it, and jumping around like crazy in order to dislodge it (and hopefully not the branch) - much to the amusement of the rest of the food-gobbling bunch.

So a great weekend was had by all. Food, wine, discovery and a little bit of caving to cap it all off. By the end I was very glad of Annalisa's training course- a cave is definitely not the right place to be learning SRT. Much thanks to everyone that lent a helping hand to training us newbies!



**After a hard day's caving, 3 cavers out of 4 choose FX2 battery packs to open their beers (while 1 caver out of 4 will give up and settle for a soft drink)**  
*(see those thermals? well, be thankful this picture is not in colour... ed)*

---

## CONVERTING YOUR PETZL ZOOM (OR OTHER TORCH) TO AN LED TORCH

---

BY MARTIN PFEIL

9<sup>TH</sup> MAY 2001

Sick of having your torch bulb blow at a really inconvenient time? Tired of the cost of constantly replacing batteries? Wanting a more “natural” light from your torch? Well, this may be the answer your looking for!!!

Firstly, you’ll need to get your hands on some of those new you beaut super bright white LEDs. These are available for about \$7.00 each from leading electronics retailers. The ones to ask for are the brightest you can get – currently about 6000mcd luminous intensity. These LEDs typically have a 3.6-4.0 volt forward voltage drop and 20-25mA maximum continuous operating current.

Assuming that you are using a Petzl Zoom type torch, you will need a resistor to drop the voltage and limit the current from the batteries. Using ohm’s law ( $R=V/I$ ) a quick calculation will tell us what value resistor is required.

$V_{bat} = 4.77\text{volt}$  (for 3 fresh AA alkaline batteries)

$V_{led} = 4.0\text{volt}$

$I_f = 20\text{mA}$

$V$  is the net desired voltage across the resistor =  $V_{bat} - V_{led}$

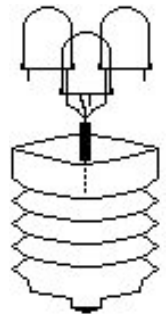
$I$  is the maximum forward current through the LED which, for 3 LEDs is  $I_f \times 3$

So  $R$  is calculated to be about 12.8 ohm. A 13 ohm  $\frac{1}{4}$  watt metal film resistor is the closest match.

You will also need an old mes type light globe.

Now comes the tricky bit!!! Follow these steps carefully...

1. Carefully rip the guts out of your old globe & de-solder the base so that you can freely push a lead through this.
2. Clean the top outside rim of the globe as you will need to solder the LED terminals to this edge.
3. Trim the LED anode (+ve) leads down to 5mm and the cathode (-ve) leads down to 2mm.
4. Carefully bend the anodes over till they slightly protrude past the edge of the LED.
5. Trim one of the resistor leads down to about 4mm and bend in a small loop at right angles to the body.
6. Now position the LEDs upside down in a blob of Blu-Tak with the anodes touching and carefully solder the loop end of the resistor to these.
7. The next thing is to insert the completed package into the globe housing feeding the free resistor lead through the hole in the bottom of the housing – you will need to bend the housing a little to get the resistor leads to fit on the outside (they won’t fit inside!)
8. Finally solder the three cathodes to the globe housing, trim the resistor lead and solder this too. Now all you need to do is grind the LED flanges away from the outside edges. Test that your new “globe” will fit through the hole in the Petzl reflector.



Ready to give it a whirl...

All working??? Great, you now have a torch globe that never needs replacing, produces a brilliant white light and will run for about 35 hours with 3 alkaline AA batteries!!!

---

## CHAOTIC CAR CATASTROPHE AT COLONG

---

COLONG CAVE 28-29TH OCTOBER 2000

By MEGAN PRYKE

*(for those wondering, this was actually an UNSWSS trip...)*

**Participants:** Alan and Megan Pryke, Les Horvath, Yvoir Hingee



**The walk in – Picture by Yvoir Hingee**

For a destination that is less than 100 kms from Sydney's CBD you may wonder why it is often the journey that commonly features in many a Colong Cave trip report. The journey entails almost circumnavigating the Blue Mountains (well that may be a bit of an exaggeration), to an area of wilderness that is shielded from the Sydney masses by water catchment land. Much of the tail end of the trip is on winding gravel roads that are sometimes shrouded in cloud. The distance and technical difficulties posed make for a long drive. The odd wombat or roo can add to the stress. But, the journey on our trip was not a major contributor to a certain car catastrophe. In fact, we got away with things a bit easy. It was on Saturday morning, just before marching off on foot from Batsh Camp, when I discovered that the car battery had not survived the 15 minutes it had taken us to set up camp the night before. To make matters worse we had no jumper leads, not that this would have made any difference as our car was the only car, being a heavy automatic 4WD, the nearest town was 35 kms away, there was no mobile phone coverage and since we thought it pointless to bring maps for a 3.5km walk, we left them at home.

we headed off on foot, to the Oberon-Yerranderie stock route and then towards the Bindook property. We mused that it could have theoretically been Sunday afternoon, overstressing this point in order to alleviate the annoyance of being in a situation that was not dire enough to be beyond annoyance.

Well, luckily we were familiar enough with the area to know that the closest possible help was in the other direction from where we came. So

Les's CDMA phone showed hopeful signs of contact at the higher sections of road. Upon spying a sandstone-capped hill, Alan decided it would be a good idea to see if we could get reception on high. So off we rushed, to the cliff base to find it a dodgy climb to get on top of the sandstone crown. We walked around the base until we found a way to the top, discovering that we should have turned left at the base not right, which had lead us over three quarters on the way around. The magic 13 11 11 numbers was called, and thankfully we got through. Alan explained that we were in the middle of nowhere; the operator eventually and gladly transferred the call to the country division. "I don't know if you've heard of a place called Batsh camp, it's on the way to Yerranderie.." "Yes, I know it, I was there yesterday". Help was on the way! It was going to take a few hours so we admired the views that extended over the Bindook farm, which we had no longer had need to visit, before heading back to camp which was just over an hours walks back.

Finally our White Knight arrived. Wayne White in fact. We had decided not to take chances and asked for a brand new battery. It did not quite fit so Wayne had to work on some modifications to the clasp. Eventually it was time to test it out, we turned it over. There was no engine sound at all, oh no! Wayne quickly identified our battery terminals as being a bit worn and after some fiddling asked to test the beast again. This time it stirred to life. We bid Wayne farewell, pays to be nice to people who may have won a million dollars (Wayne did not believe this himself, which is just as well as he would not have come our rescue if he did. He had received a letter during the past week announcing that he, and only he, was the winner of a million bucks... If it's not true, at least Wayne's generosity will be at least immortalised in this article.) By noon we were on our way towards the cave!



**The handle of the Axe in the Axe Room Picture by Yvoir Hingee**



**Our White Knight to the rescue at Batsh camp Picture by Yvoir Hingee**

### ***In the Cave***

Well actually, sorry readers but I better mention something that was noted outside the cave first. The efflux was very, very low. The lowest I have seen it, only slight ripples could be seen and the pool near the efflux was so shallow I could only half fill water bottles from it.

Now in the cave: We headed for the Landslide area. We poked around two different side passages that none of us had been to before, Alan decided that only one would be worth surveying, the other worth sketching. Eventually we made our way to Pulsating River, which certainly was not pulsating. As we suspected, the route through to the Beach was not sumped, not even a puddle to tenuously crawl over! We took Les up to Woof's Cavern, which was very dry with only a trickle of water spilling over the gour pools.

On Sunday we inspected possible leads off the Big Rock Room.<sup>1</sup> I

gave up on a too small for me lead. We also attempted to make a voice connection from a higher passage to a lower one, but no luck. Alan puzzled over the fact that the passages under investigation seemed to intertwine with an area closer to Pulsating River, which Alan calls the Leap of Faith area, yet we did not discover a connection. If such a connection exists there could be another way to the Beach from Pulsating River without such a long river gravel crawl, it could also potentially sump. But, there could also exist possible bypasses to the potentially very wet bits. It was out along the river 'grovel', elbow bruising, thank goodness for kneepads, crawly way out to Pulsating River for us.

While water levels were low, Alan decided to see whether he could continue down the river route near Piano Cave (for those that don't know Colong Cave, there are various caves within Colong, such as Lannigans Cave, Onslow Cave, Amber Cave, which are either passages or chambers within the Colong Cave system), getting very wet in the process. So once again, it was so long to Colong, leaving with a little more knowledge and more possibilities for further exploration.



**Megan and Alan in the Big Rock Room Picture by Yvoir Hingee**

<sup>1</sup> So called by Alan.



---

## CAVE RELATED ABSTRACTS

---

### SULFIDE-BEARING PALAEOKARST DEPOSITS AT LUNE RIVER QUARRY, IDA BAY, TASMANIA.

R.A.L. OSBORNE <sup>1</sup> AND I.B. COOPER <sup>2</sup>

<sup>1</sup> SCHOOL OF PROFESSIONAL STUDIES, FACULTY OF EDUCATION, A 35, UNIVERSITY OF SYDNEY, N.S.W. 2006, AUSTRALIA.

<sup>2</sup> DIVISION OF GEOLOGY AND GEOPHYSICS, SCHOOL OF GEOSCIENCES, F05, UNIVERSITY OF SYDNEY, N.S.W. 2006, AUSTRALIA.

The Lune River Quarry at Ida Bay, Tasmania exposes numerous palaeokarst features developed in the Ordovician Gordon Limestone. These palaeokarst features contain carbonate and siliciclastic deposits probably representing Late Devonian to early Late Carboniferous and Late Carboniferous karstification and sedimentation. Five facies of palaeokarst deposits are recognised, namely megabreccia, graded-bedded carbonate, laminated sandstone/siltstone, diamictite/quartz lithic sandstone and coarse crystalline calcite. Pyrite, dolomite and sphalerite were emplaced in the palaeokarst deposits after the Carboniferous. These deposits are probably associated with a phase of hydrothermal cave development in Exit Cave, which adjoins the quarry. Pyrite weathering accounts for the abundance of gypsum speleothems and cave breakdown in Exit Cave.

**Key words:** palaeokarst, sulfides, Ida Bay, Gordon Limestone, Exit Cave

*Also a brief summary of the conclusions:*

From the observations made in the quarry it is likely that the post-depositional history of the Gordon Limestone at Ida Bay has included: -

- i. a period of subaerial exposure during which significant karstification, forming caves, and narrow fissures occurred. Late Devonian to early Late Carboniferous
- ii. marine transgression resulting in the deposition of laminated carbonate facies in the karst cavities under phreatic conditions. Late Devonian to early Late Carboniferous
- iii. re-exposure, resulting in a second period of karstification during which the broad fissures formed. Late Carboniferous
- iv. marine transgression and burial resulting in deposition of quartz-lithic sandstone facies and siltstone / sandstone facies. Late Carboniferous
- v. hydrothermal cave development associated with emplacement of pyrite and dolomite, emplacement of the megabreccia matrix, formation of crystal-lined cavities and partial excavation of Exit Cave.
- vi. local faulting.
- vii. a present and continuing phase of meteoric karstification.

### PHYLOGENETIC STRUCTURE OF UNUSUAL AQUATIC MICROBIAL FORMATIONS IN NULLARBOR CAVES, AUSTRALIA.

(FROM *ENVIRONMENTAL MICROBIOLOGY* 2001 4(3) P 256-264)

ANDREW J. HOLMES<sup>1\*</sup>, NIINA A. TUJULA<sup>1</sup>, MARITA HOLLEY<sup>1</sup>, ANNALISA CONTOS<sup>2</sup>, JULIA M. JAMES<sup>2</sup>, PETER ROGERS<sup>3</sup>, AND MICHAEL R. GILLINGS<sup>1</sup>

<sup>1</sup>Commonwealth Key Centre for Biodiversity and Bioresources, Department of Biological Sciences, Macquarie University, NSW, 2109.

<sup>2</sup>School of Chemistry, The University of Sydney, NSW 2006, Australia.

<sup>3</sup>Department of Obstetrics and Gynaecology, Monash Medical Centre, Clayton, Victoria, 3168, Australia.

\*Corresponding author. Mailing address: Department of Biology, Macquarie University, Sydney, New South Wales 2109, Australia. Phone: 61 2 9850 6950. Fax 61 2 9850 9237. E-mail: [aholmes@rna.bio.mq.edu.au](mailto:aholmes@rna.bio.mq.edu.au)

The nature of unusual aquatic microbial formations in flooded passages of cave systems in the Nullarbor region of Australia was investigated using electron microscopy and DNA analysis. The caves are located in a semiarid region but intersect the watertable at depths of approximately 100 m below the surface. Throughout submerged portions of the caves divers have noted the presence of unusual microbial formations. These 'microbial mantles' comprise sheets or tongues of mucoid material in which small crystals are embedded. Examination of the biomass revealed it to be primarily composed of densely packed, unbranched filaments, together with spherical, rod and spiral shaped cells, and microcrystals of calcite in a mucoid matrix. Molecular phylogenetic analysis of the community structure revealed ~12% of clones showed high similarity to autotrophic nitrite-oxidising bacteria (*Nitrospira moscoviensis*). The remainder of the clones exhibited a high proportion of phylogenetically novel sequence types. Chemical analysis of water samples revealed high levels of sulfate and nitrate together with significant nitrite. The community structure, the presence of nitrite in the water, and the apparent absence of aquatic macrofauna, suggest these microbial structures may represent biochemically novel, chemoautotrophic communities dependent on nitrite oxidation.



---

## CAVE DIVING AT JENOLAN

---

1996-1998

*[Editors Note] These cave diving trip reports document the continued exploration of the river systems at Jenolan. They continue here from SUSS Bull 40(4).*

27/11/98

**Participants:** Alex, Ron Allum, Dave Apperley, Paul Boler, Fiona, Jarn Hodgson, J. J., Larissa, Rod O'Brien, Greg Ryan, Keir Vaughan-Taylor (trip leader), Al Warild

Not since the first dive trip in 1996 had 10 divers converged on Jenolan. The group divided up the dive sites in the Northern and Southern tourist caves and set to work.

### ***Imperial Resurgence, Blue Lake***

Exploration for the connection between the Imperial Streamway downstream from the tourist bridge to the Blue Lake had been ongoing over the last few years. Rod O'Brien had made substantial progress working downstream, and decided to begin his day by looking upstream from the resurgence in Blue Lake.

The restrictive nature of the resurgence requires a minimal diving setup, so Rod chose a no-mount system, abandoned his helmet and chose a small hand-held light. He tied off at the resurgence and made his way upstream, keeping to the left, and managed to navigate about 20m. The end of his line was weighted with a lead sinker and pushed ahead as far as he could get it, in the hope that it would be found on a downstream trip. Total dive time was just under 15 minutes.

He reported that the sump had changed since his last look upstream, with what appeared to be some collapses from the roof, requiring him to move some rocks to make progress.

### ***Downstream Imperial***

Rod then joined Paul and Jarn for a dive in the two downstream sumps of the Imperial Streamway. Paul took along his video camera, hoping to add to the footage of this section he had taken on his last visit.

They found the sumps to be very silty, with blooms of silt rising from the guideline each time they touched it. When they made it to the restriction at -12m in the rising part of the passage which marked the end of Ron Allum's original line, they found gravel had accumulated. The way on was impassable.

Their original dive plan had been to dive to the end of Dave Apperley's line, clearing the way on for a push to the resurgence, but they found that they had to spend their time clearing away this first restriction.

Paul said the siltiness stopped him getting the footage he desired.

### ***Upstream Imperial Streamway***

An hour after the downstream party entered the water, Dave Apperley led his group, consisting of Larissa, J. J. and Al, upstream through sump 1 of the Imperial Streamway.

Larissa and J. J. had recently qualified in their cave diving course, so this provided them with a good introduction to the diving at Jenolan. Al, who needed no introduction to Jenolan, used this opportunity to hone his sump skills in preparation for an upcoming caving expedition in New Zealand.

They ditched their gear after the first sump, and made their way upstream on a tour to sump 3 before their return.

### ***Pool of Cerberus***

Keir and Ron were to video a through trip from the Pool of Cerberus, via Cerberus Junction, upstream to River Lethe near the Mud Tunnels.

While they set their equipment up and got some above water footage, Greg took the opportunity to take a look downstream from the Pool of Cerberus.

Earlier dives by Keir, Rod and Ron had been pushing a restrictive lead which appeared to be the deepest section of a the phreatic passage at around -8m. Greg had accompanied Keir on one of these dives, and had sat behind in near zero visibility while Keir tried to clear a way on.

Greg expected to continue on in this vein, and had planned a 20 minute dive to work on the restriction. When he got to the room with the end of the line, he found the visibility was holding out very well. He tied off his reel and investigated the wall to the right of the tie-off. He could see the low sections reported by Keir and Rod, but decided to investigate the room some more before attempting the restriction. In the corner of the room he found a navigable bodylength slot, which opened into a larger room with an upward sloping gravel floor.

Following the slope up and around a corner, an easily navigable passage lay ahead. He followed up the slope to a slight narrowing in the passage, where a rock jutted across the way on. From this point he could see clearly ahead up a gravel slope to daylight filtering in from the end of the passage about 10 or 12m on.

The restriction he had reached appeared to be navigable with a bit of effort, with an option of trying to clear gravels to go under, or squeeze over the rock in the way. But as he was solo, and in new territory beyond where he said he would be, he opted to call the dive, tying off and leaving his reel in place.

The visibility on the return trip was fine, back to where he had initially tied off, where the conditions deteriorated to near zero from the mud floor sloping down into this section of the sump.

Urged on by the report of daylight, Keir decided to take a look at the lead. Unfortunately, the visibility had closed out on the rising part of the sump by this time, and he reached the end of Greg's line, with only the comforting glow of his own light apparent. Ron followed Keir into the start of the sump to get some video footage. He got some interesting cutaways of moving through silt, but had to report that the record button on his camera housing had come loose and was sitting somewhere in the mud in the sump.

After Keir and Ron moved on to their video dive, Greg waited about an hour and a half, in the hope that conditions would clear. Little seemed to change, but he decided to take a look at this sump a second time, but found the visibility was well and truly zero by this time. There was no sign of the video button.

A final confirmation of reaching a resurgence from the Southern limestone would have to wait until next year.

### ***Pool of Cerberus to River Lethe***

Ron had brought a broadcast quality digital video camera and housing along on this trip. With the record button broken off the housing, he would have to start the camera and keep rolling. Equipping Keir with a 250 watt video light and battery housing, and taking a 100 watt light of his own, he entered the squeeze upstream from the Pool of Cerberus. Keir prepared to follow, having planned with Ron which sections they were to focus on.

Unfortunately, Keir found that with the large cylinders he had brought on this trip, and the light battery housing, he had great difficulty in negotiating the upstream squeeze. He backed out and reassessed his attack and finally got through, but by this stage with the camera rolling and the tape and battery running out, Ron had opted to continue on to get some footage of the upstream sump.

They met up again at the first of the twin bridges at Cerberus Junction and quickly changed camera batteries, before proceeding on towards River Lethe. The camera held out throughout the downward slope of the sump, but ran out before he could get footage of the more interesting rising passage on the Lethe side.

The missing housing button also controlled the camera's iris, which Ron then had to set on automatic. The end result was that there were sections where the camera hunted for autofocus where there were changes of light - something Ron normally controls manually.

Although he was not completely happy with the end result, he felt that there would be about 10 minutes of usable footage on the tape. This would provide a good basis on which to build comprehensive video footage of this river passage on later trips.

**11/12/98 - 13/12/98**

**Participants:** Ron Allum, Shannon Crack, Ian Cooper, Phil Maynard, Iain McCulloch, Rod O'Brien, Steve Reilly, Keir Vaughan-Taylor (trip leader) and others from SUSS

Away from the usual "last Friday of the month" routine, the diving group took advantage of a SUSS Jenolan permit, and the special permission of the Jenolan Trust and local Jenolan management to undertake a mixed gas dive in Slug Lake.

## **Setup**

On Friday 11th a small party entered Mammoth to rig the cave for the diving group which was to enter on Saturday. They rigged the pitch down the “Forty Footer” with a caving ladder and then proceeded to Lower River. There they rigged a flying fox across the river to the landing in the roof at the top of the climb into the roof on the other side of the river. This flying fox setup had been used with success on each of the group’s previous Mammoth diving trips. The time taken with the rope work made for easy and dry gear transportation over Lower River, and provided the best chance of keeping the river clear. Any sediment stirred up at here would be seen by the divers at Slug Lake.

A handy rock with a hole through it was located just outside the rockpile that provided a strong anchor point to tighten the load bearing rope. A second rope with a pulley tied half way along carried the gear from the other side of the river straight into the rock pile.

After rigging the ropes the group left the cave to go on another trip in the Southern Limestone.

## **Slug Lake Dive**

The next day the main party entered Mammoth about 10am and began the job of transporting gear to Slug Lake.

The group was split at the “Forty Footer”, with half proceeding through the rock pile while gear was lowered by pulley down the first pitch. There were twenty packs of gear to transport on this trip and the time taken in transportation was about double that of a normal air dive.

Ron Allum and Rod O’Brien were the nominated divers. Both divers had much the same gear configuration: seven cylinders each comprising

- 2 x 100ft<sup>3</sup> cylinders of heli-air (33% helium : 14.7% oxygen)
- 1 x 100ft<sup>3</sup> cylinder of air (travel gas used for the journey in shallower depths)
- 1 x 4 litre bottle of air at 200 bar for BC and drysuit inflation (helium has poor insulation qualities)
- 1 x 50ft<sup>3</sup> cylinder of nitrox (50:50 nitrogen/oxygen) for decompression
- 1 x 50ft<sup>3</sup> cylinder of nitrox (43:57 nitrogen/oxygen) for decompression
- 1 x 50ft<sup>3</sup> tank of oxygen for decompression

They reached Slug Lake at 2pm. It took Ron and Rod a further hour to prepare their gear and themselves for the dive. During this time Steve Reilly took some photographs before departing to fulfil his obligation to attend the Jenolan Carols by Candlelight.

Ron started the dive with Rod two minutes behind him. The squeeze at -30 meters had apparently silted up since the last dive. Ron, with the extra gear required on this dive, had difficulty negotiating the squeeze. Rod, similarly encumbered, found the squeeze even more difficult, since the visibility was worse for him, but nevertheless eventually got through.

Ron pushed on with the dive while Rod worked his way through the squeeze, and soon found himself at the end of the dive line that he had laid on a previous trip terminating at -75 meters. He connected on and continued down the passage to -92 metres.

The passage is in a 6m wide slot in the roof of a huge underground lake. The wall splays outwards from the slot descending at about 70 degrees on each side and despite Ron’s 100 watt light he could see no sign of the bottom. The roof slot continues steeply down but there was little point continuing and the clock was ticking on the runtime schedule they had planned for this dive.

Ron tied off and started the return journey where he met Rod, who then also turned round. Ron had spent 5 minutes at -92 meters and inherited 2.5 hours of decompression.

Both divers returned to the decompression point and began the long process of decompression.

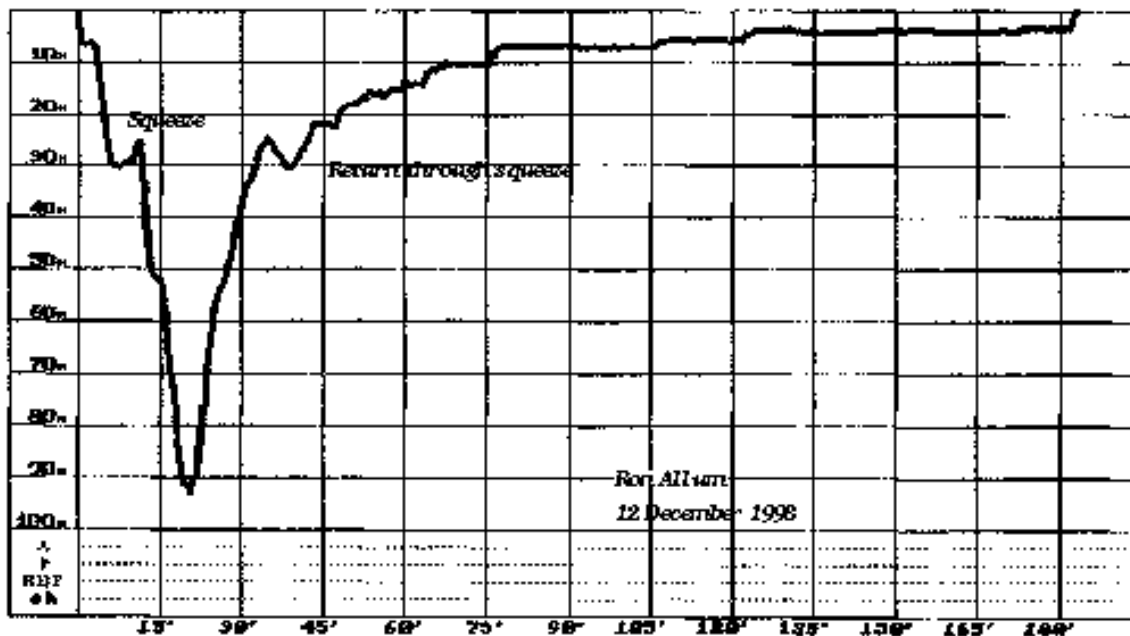
Following the dive the non-diving party members began the process of hauling the gear out. The gear was stacked at the bottom of the “Forty Footer” and the group exited Mammoth.

## Cleanup

A second team of cavers entered the cave on Sunday 13th and transported the remaining gear out of the cave.

## Site description and future prospects

Below is a profile of the dive, downloaded from Ron Allum's dive computer, showing depth versus time.



The graph shows the steep descent from Slug Lake to the squeeze. The rise beyond the squeeze represents travelling time across a large chamber with the guide line apparently rising to a tie off point on the other side. Most of the chamber beyond the squeeze is unexplored. The tie off point is on a wall opposing the squeeze and the line goes left and right. To the right the line rises to an air chamber called Gargle Chamber.

It resembles a throat, rising straight out of the water into some upper unknown region. It is smooth and only climbable with bolts or other such aids. The left line descends into the deep water with leads going north and to the south with the southern leads going deeper. The site logistics, group experience and technological limits make pursuit of these deeper leads extremely difficult, and impractical at this time.

The northern leads, heading towards the hallowed Woolly Rhinoceros, drop to -60m and will require the use of helium and tank staging.

There are normal air dive leads in the initial shaft of Slug Lake, including upstream Lower River which enters the sump at a depth of -6m. The upstream passage is a little tight but the floor is soft, clean sand and doesn't silt at all. Initial penetration shows a series of sand beds making upstream progress difficult.

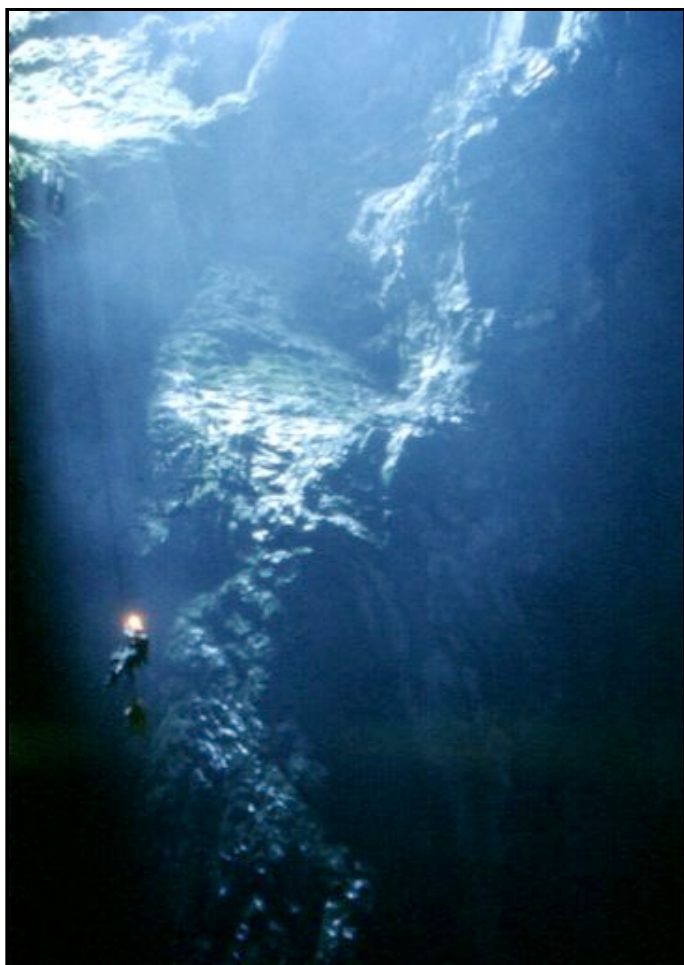
Gargle chamber's aven is about 10m across on the left is a smooth round passage rising at an angle of maybe 60 degrees with an erosion slot which slants down across the floor the floor near the bottom. Climbing out of the lake onto the ledges is a clumsy process. There is no floor to stand on in the water and tanks have to be removed and pushed onto a ledge before climbing out of the water. We need to fix tape to hang scuba gear just a little out of the water and well away from possible accidental rock falls while out and climbing. We can begin placing bolts to enable a safe climb up the tube to where there may be chambers and passages beyond. To the right of this throat is boulder collapse that can be climbed and explored but it is very muddy and would be tight. The rocks and mud are not kind to dry suits and this is probably not a viable exploration path.

A shaft back up the passage from Slug Lake exposed in a recent drought appears to have a large lake beneath it, but this was not dived and can not be dived without low water levels, but the upstream Lower River may connect on here. This implies larger caverns to be found on the way to the Woolly Rhinoceros

---

## PHOTO GALLERY

---



**A caver dangles in space in the imposing 170m entrance pitch of Harwood Hole, NZ – David Connard**



**Alan and Megan Pryke scaling one of the climbs upstream in the awesome cave - Mangawhitakau, NZ – David Connard**



**A frog found somewhere in Walli Caves – Alan Pryke**



---

## TRIP LIST: AUGUST 2001

---

SUSS General Meetings are held on the first Thursday of the month at 7:00pm (for a 7:30pm start) in the Holme Building Common Room at the University of Sydney. The Holme Building is the building closest to the Parramatta Road footbridge on the northern side of campus. The Common room on the first floor (enter from Science Rd on campus).

For updates to this list, check out the SUSS website at: <http://ee.usyd.edu.au/suss>. Detailed information on each caving area (plus other useful information like what you will need to bring, etc.) can be found in the *Beginners Handbook* section of the SUSS website.

**PLEASE NOTE: it is YOUR responsibility to inform the trip supervisor of any relevant medical conditions which may in any way affect your fitness, such as diabetes, asthma and the like.**

### August

**4-5 Wombeyan.** Get involved with one of SUSS' projects and see the well guarded wild caves at Wombeyan. Contact Phil Maynard 9908 2272 (home).

**11-12 Jenolan.** Why go skiing this winter when you could go to Jenolan instead? Contact Ian Cooper 6366 5030 (home). Possibility of one-day of caving - ask the tripler.

**18-19 Wellington.** For those of you who would like to be warm, check out the dry caves at Wellington on a non-diving trip (for a change). Contact Ian Cooper (063) 6366 5030 (home) for details. Beginners welcome, as usual.

**18-19 Skiing!** For those you who like the cold, contact Kevin Moore and go skiing (not underground, fortunately?) 9878 0820 (home). Beginners welcome, as usual.

**25-26 Wee Jasper.** Just how cold will Wee Jasper be in August? Well, there's only one way to find out... Contact Steven Contos 9557 9475 (home) for details.

**1-2 Colong.** Become one of those who simply can't get enough of Colong caves - contact Megan Pryke 9524 0317 (home).

### September

**6 General Meeting:** Speaker to be announced – check the website for details

**8 Speleosports.** Simulated-caving obstacle-course. Be part of the SUSS 2001 winning team, or sympathetically support a team that tries to beat us! Contact Sushila Thomas 0414 915 681 or just arrive at Macquarie Uni and listen for the laughter.

**9 NSWSC Sydney.** Are you interested in what research, conservation, and exploration are going on in the caving world further afield than SUSS? Join Kevin Moore at the Speleo Council meeting, 9878 0820 (home).

**8-9 Jenolan.** Alternatively, go to Jenolan instead of speleosports and help out with some SUSS projects. Contact Greg Holmes 9908 2272 (home). Possibility of one-day of caving - ask the tripler.

**15-16 Wombeyan.** Get involved with one of SUSS' projects and see the well guarded wild caves at Wombeyan. Contact Phil Maynard 9908 2272 (home).

**22-23 Bungonia.** Practise (or learn!) your vertical caving skills, or go visit the horizontal caves. Contact Martin Pfeil 9713 9460 (home). Possibility of one-day of caving - ask the tripler

**29-1 Oct Tuglow.** Spend the long weekend at a sunny location with water views and marshmallow campfires, checking out the various caves at Tuglow. Contact Dave Connard 9437 6762 (home).

### October

**4 General Meeting:** Speaker to be announced – check the website for details

**6-7 Wyanbene.** What could be more fun than grovelling in a cold underground streamway out the back of Braidwood? According to Sushila – not much. Contact her on 0414 915 681 for details of this trip.

**13-14 Jenolan.** Caving in style and comfort... well, kind of, anyway. Contact Phil Maynard 9908 2272 (home).

**21 Watta Canyon.** or some other canyon – abseilly thing down in the Southern Highlands. Contact Greg Holmes 9908 2272 (home).

**27-28 Possible canyoning trip.** Check the website for details