SUSS BULL 43(3)



OCTOBER — DECEMBER 2003



Bulletin of the Sydney University Speleological Society



SUSS Bull 43(3)

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PO Box 35 Holme Building, Sydney University 2006

Cover Photo: J23 Bottomless Pit, Jenolan Photo Francois de Felix

NEWS AND GOSSIP

Jenolan Trust RIP

During November/December, the NSW Premier's Department conducted a review of the Jenolan Caves Reserve Trust and its operations, with a view to determining the most appropriate management structure for the future management of the Jenolan, Wombeyan, Abercrombie and Borenore Karst Conservation Reserves. A number of interest groups were consulted during this review, including speleologists, who were represented by John Dunkley, Megan Pryke, Keir Vaughan-Taylor and Chris Norton.

The Minister for the Environment, Bob Debus, announced the results of the review in early December. Some key results are as follows:

- * The Minister will not appoint a new Trust Board when the current members' terms expire on 31 January 2004. Instead, he will appoint an Administrator, with a term to commence on 1 February 2004, estimated to last for about 2 years.
- * The Administrator will perform the functions of the Trust Board in this period and advise the Government, after consultation with stakeholders, on what administrative and legislative changes need to take place to effect a transfer of the Trust's operations into the Department of Environment & Conservation (DEC). This is the merged Department which includes the former National Parks & Wildlife Service, the EPA and some other, smaller agencies.
- * New Advisory and other bodies will be established to ensure that interested stakeholder groups will continue to be engaged at Jenolan.
- * The Government will consider establishing a new Karst Division of DEC, with status similar to a Region of National Parks. If established, this division may control all of the karst areas formerly controlled by the Trust and NPWS (eg Bungonia, Yarrangobilly, Tuglow, Colong etc.)
- * The Government is committing \$18.5 M over 3 years, commencing immediately, to upgrade the 5 Mile Hill Road.

The stated reason for the change is due to a number of recent problems that have been beyond the resources of the Trust Board to handle. This is presumed to be a reference to a number of increased expenses (including the recent discovery of significant problems with the 5 Mile Hill Road requiring urgent rebuilding) coupled with a fall in visitation and corresponding fall in revenue.

It is understood that Alan Griffin, Deputy Director-General, Office of Government Procurement, will be seconded to the position of Administrator of the Jenolan Caves Trusts for a period of 2-6 months.

Chris Norton

Cave Mania

The 25th Biennial Conference of the ASF Inc.

Place: Far South Wilderness Inc, Dover Tasmania

Date: 2nd to 9th January, 2005

The conference will include socialising, presentations on all things speleological, a slide/digital image competition, socialising, field trips to the caves near Dover, socialising, and post conference caving trips all over the state. SUSS already has quite a few takers for next January. Plan for your end of year trip now, and get in on the best caving Australia has to offer.

For more information, visit the conference website: http://www.tesa.com.au/stc/cavemania

Mammoth catches blue book; goes for gold

In the Blue Book (The Caves of Jenolan 2: The Northern Limestone), Mammoth Cave is listed as being $3510\,\mathrm{m}$ long. The current resurvey project has reached $3478\,\mathrm{m}$ – we've done less than a third of the cave. The latest areas to be surveyed are Ice Pick Lake, Snakes Gut and Helictite Hallway. With the discovery of large underwater passage in Ice Pick Lake (see article in this Bull), we've almost sorted the course of Central River from Twiddley-Om-Pom to Lower River.

MIDWINTER CAVING EXTRAVAGANZA

5TH - 13TH JULY, 2003

BY IAN COOPER AND PHIL MAYNARD

For two weekends and the intervening week, SUSS launched a frenzy of caving activity at Wombeyan, Jenolan and Tuglow.

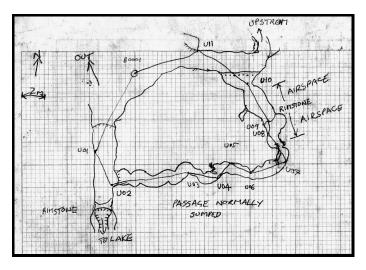
Wombeyan

Only one weekend remained to complete the Bullio project. We've surveyed W2/W65 Bullio cave and the associated efflux – W87 Mare's Forest Ck Cave. Taken together, the caves are a really good streamway, and Bullio is very well decorated.

Saturday 5th July 2003.

Simon, Geoff and Phil got going early in the sunshine, armed with a photocopy of the Bullio map draft. We went in through the higher (abseil) entrance of the cave and traversed the entire cave, looking for errors in the map. The cave was drier than 2002. We found the stream had disappeared completely from the downstream end of the cave. The 2m high rimstone dam downstream of the point where the track reaches the stream was a muddy trough, which opened up the passage upstream from this point. Normally, the stream enters the passage behind the rimstone from underwater. We were able to get into this rather tight passage and follow it all the way to where it reappears in dry passage upstream. We took the opportunity to survey the sump passage, and add that to the map.

Heading upstream, the cave was still completely dry. There is a section just upstream from the sump passage which is normally chest deep — and cold! — which was



Survey sketch of sump passage in Bullio

not even muddy. It was not until the gravel banks a hundred and fifty metres further upstream from here that we found water. The stream was dammed up behind the gravel, but not flowing. We swam and waded up to the upstream sump, but the water here was almost at its normal level and we couldn't get any further than the end of the survey.

Sunday 6th July 2003.

Another sunny day. We strolled over to the gorge and spent the day finishing off the survey of W87 Mare's Forest Ck Cave. The cave was still as dry as previous trips. All of the area that normally requires a swim was bare mud. The point where the stream enters the cave is normally underwater, but we were able to stick our heads down into the flattener just near the end of the cave and see the water below. We surveyed the side passage on the eastern side of the cave, which climbs steeply into a high, well-decorated fossil stream passage.

The survey was completed after a bit of poking around at the end of the passage by Simon. This passage has some potential in the ceiling, but it'll need scaling poles or bolts. With this passage done, the survey of Mares Forest Ck cave is finished – until the divers find a connection to Bullio.

Final Numbers for the Bullio system:

- W2/W65 Bullio is 963 m long.
- W2/W65 Bullio is 57 m deep.
- W87 Mares Forest Ck cave is 216 m long.

- The total length of streamway in the caves is TODO m, not including the passage found by the divers underneath the downstream end of Bullio.
- The gap between the upstream end of Bullio and the downstream end of Bouverie cave is about 150 m.

We should have the final draft of the map within the next couple of months. The main feature of the survey has been the discovery that the streamway actually runs well to the east of where it was previously thought to be, bringing the upstream end of Bullio a hundred metres closer to Bouverie than we'd realized. We also found a number of side passages to the streamway which were unknown to us before the survey.

The people who helped survey the caves were:

Phil Maynard, Megan Pryke, Alan Pryke, Jodie Rutledge, Kevin Moore, Rod O'Brien, Matt Fischer, Mark Staraj, Verity Morris, Richard Pfeil, Sean Hill, Geoff McDonnell, Simon Goddard, Martin Pfeil and Michael Fraser. Thank you one and all.

Jenolan

Saturday 5th July 2003.

The day was off to a slower than average start with the gear not arriving till midday. Ian, Keir, Greta, Min, Kylie, Brett and Shannon spent the afternoon looking around in Alladin and Rho Hole. The rockpile at the base of Rho Hole was drafting in and requires some systematic exploration. The draft may lead down to the Far Country stream passage that runs off from Imperial Streamway.

Sunday 6th July 2003.

Keir, Matt, Min and Brett visited Glass cave and looked around the base of the cave below the second pitch. Ian, Kylie, Mark, Kevin, Greta and Shannon visited Frenchmans, Bushrangers and the upper parts of Dwyers cave. The gradual return of rain has brought most of the drips back in Frenchmans with pools again present in the lower levels. Some little bent wing bats were seen in the lower level. I showed Bushrangers cave to the others for their information. Shannon and Mark poked around the small, dusty tubes at the back of the cave with little promise of more being found. There is some additional passage to what is shown in the Blue Book. The only relic left in this cave is a rusty billy in the entrance chamber.

Kevin went back to the hut while the remaining five went on to Dwyers cave, walking over the top of the bluff. We did a tourist trip around the upper levels. Shannon took Greta, Min and Kylie through the perculator to the top of Cloud pitch. The cave is still quite dry compared to normal.

Sunday afternoon saw Keir and Brett go back to Sydney, Phil and Simon arrive from Wombeyan and Cam, Al and Hanna arrive from Nowra.

Monday 7th July 2003.

This was supposed to be the day that the Wiburds survey was finished, but alas no. We all walked up to Wiburds Bluff, where we split into two groups. Shannon, Matt, Cam, Al, Hanna and Simon went to Wretched REF to complete the survey through the squeezes. Ian, Mark, Nin, Greta, Kylie and Phil went to the SSS Extension to push the streamway passage in both directions. We attempted a sound connection between Wretched and SSS Extension without success.

In SSS Extension, some progress was made in both directions in the gravel-floored, rockpile streamway. At both ends there is a draft heading downstream. Progress any further upstream is very unlikely but this area needs to be checked next time the stream is flowing to confirm the exact course of the stream.

In Wretched the survey through the squeezes was completed and leads examined. A rockpile lead upstream has progressed an extra 20 m and now requires survey. Both groups did tourist trips of the other main parts of the cave before walking down the valley. Drips have returned to the cave producing small pools. In particular the way to Henry's Dig is quite wet, yet the Perched Sump is still just a puddle.

Wiburds currently has a surveyed length of 4734 m and is 60 m deep. The highest point in the cave is the J243 entrance with lowest points being the end of Northwest Passage and Henry's Dig. There are twelve entrances (J58, J92, J101, J220, J221, J227, J230, J243, J319, J320, J324). The cave will probably not pass 5 km in length unless connections to nearby related caves (J231 doline, J234/J235/J237 Warbo cave, J240 Wards Mistake cave) can be made. In a cave of this size there are still places to look and some extensions will be found.

Ian, Mark, Phil, Greta, Min and Kylie did a brief tour of Hennings cave on the way back to the hut. Kevin left during the day and Kat arrived from Victoria.

Tuesday 8th July 2003.

Trips concentrated on Mammoth cave this day with three separate parties in the cave. Phil and Matt went to Ice Ages to start the survey and promptly found the clinometer unuseable. Back to the hut for a spare then back to Ice Ages to find that Primeval Fear had filled in, hence the rest of the day was spent cleaning out the squeeze.

Ian, Mark and Simon spent the day surveying between Hell Hole and Naked Lady Chamber. The first side passage to the east of Hell Hole leads to a drafting, clean washed rifty aven that requires a good climber and lead gear or scaling poles. The aven is about visibly about 20m high and continues out of sight. This aven is drafting quite strongly downwards, suggesting substantial cave above. [The climbing lead was pushed with scaling poles and killed on the December trip. Ed] Off this same passage is a rift that extends to the NNW but is only 20 cm wide. About 5 m onwards, the rift opens out with no floor or walls in sight!

Shannon, Cam, Kat, Al, Min, Greta and Kylie went on a trip to see the southern section lakes and Horseshoe Caven. Slug Lake, Lower River, Grinning Monster Lake and the unnamed lake below the southern rockpile are all well down on normal levels still, but formation drip pools have now refilled.

Wednesday 9th July 2003.

Another day in Mammoth, with three separate parties. Kylie, Min and Greta trekked back to Melbourne. Ian and Phil continued the survey between Hell Hole and Naked Lady Chamber. There are several avens and scaling pole leads to be pursued. The recent discovery of high levels in World of Mud indicates a high chance of upper level passage above Naked Lady Chamber.

The rest of the group went to Twiddly-Om-Pom to survey in two teams. Shannon, Matt, Hanna and Kat formed the advance guard to rig the pitch down from Great North Cavern. Half an hour behind them, Mrk, Cam, Al and Simon followed. The passage from Silly Buggers Sump back to the main chamber of Twiddly-Om-Pom was surveyed. All of the drought-only access areas have now been surveyed along the course of Central River south of Twiddly-Om-Pom.

Thursday 10th July 2003.

Phil, Simon and Mark returned home today. The rest of the group had a slow start. The afternoon was spent surface trogging the southern limestone. We located J23, J46, J48, J280, J285, J305. The stream emerging from Paradox cave was just a trickle and much lower than normal. This walk is much easier using a car shuffle, parking on the track along the ridge above Paradox cave and walking north.

Friday 11th July 2003.

Two short trips today to allow people to pack up and clean up. Ian, Al, Cam and Shannon located and surveyed most of Foz Hole J49. The cave was drafting in, as was an unentered lead on the opposite side of the 10 m pitch. To explore this lead climbing gear and a dynamic rope are required. No obvious leads exist in the rockpile base of the cave. [*The climbing lead was pushed and killed on the September trip. Ed*] Matt, Kat and Hanna went into Ooloop to derig the tape climb from the previous survey trip.

Shannon stayed on to hand over the hut to SSS and catch the bus the next day. Matt and Kat drove off to Katoomba (and Kat changed cars to join the Cocklebiddy dive trip). Ian, Cam, Hanna and Al moved on to Tuglow.

Tuglow

Saturday 12th July 2003.

With only a short drive from Jenolan to do, Ian, Al, Cam and Hanna were at the Gridiron Bends campsite by 7pm on friday night. Richard, Katie, Chris, Andrew and Mark arrived at camp at 1am. Saturday morning dawned grey and wet, which hurried us underground. We looked around the downstream sump area before going to Knights Knobbly Knob chamber, where some people continued up to the Overhead Loop while the rest of the group looked in the upper level downstream of KKK. We exited to a perfectly clear night and soon had a fire going.

Sunday 13th July 2003.

Cam, Al and Hanna left early for Melbourne. Ian, Richard, Katie, Andrew, Chris and Mark had a quick morning trip into Window cave before lunch by the Kowmung. The afternoon involved the walk out and a quick tourist walk around Jenolan on the way back to Sydney.

ADVENTURES WITH SUSS, TAKE TWO!

COLONG, 21st-22nd November, 2003

TEXT AND PHOTOS BY PAUL NELSON

Participants: Alan Pryke, Paul Nelson, Phil Maynard, Glenn Smith, Damian Grindley, Chris Norton, Trish Palmer, Tim Holden



Colong Arch

In January 2003, I met up with SUSS for a caving trip to Waitomo, New Zealand which was a lot of fun. Nine months later I am visiting Australia, and I am looking forward to another caving trip with SUSS. Luckily, Alan Pryke had a trip to Colong scheduled on November 21-22 that coincided with my travel plans. In 1999, I was invited on Colong trip but it conflicted with another trip, so was hoping to be able to see this cave someday. Four years later, I fulfilled that wish. In addition, the following week was a SUSS trip to Jenolan.

I had been caving for two weeks in Tasmania and the plan was to meet Phil Maynard in Sydney on the Friday morning. After dropping off unneeded stuff at Phil's place, we were going to meet one of my best mates Damian Grindley who had just returned to Australia with his family after living in California for five years. As always, the adventure was just about to begin before I expected it.

Friday morning and early afternoon's weather was very nice, however, by the time we arrived at Damian's place, it was raining very heavily! While waiting for the pizza to arrive, I checked the weather forecast. The forecast was for heavy rain through Sunday! Alan assured us the weather in Colong would be fine; even though the satellite photo showed a storm beginning in New Zealand and extending into the interior of Australia! I was beginning to question the merit of this trip as the alternative is watch the Aussies and Poms (English) in the Rugby World Cup.

We picked up Alan and Glenn in Glenbrook on the way to the Blue Mountains. The next challenge, besides the heavy rain, was not hitting the numerous kangaroos and wallabies along the way. I have never seen so many roos. Similar to deer in America, these beasts will suddenly jump in front of your vehicle. We had one close encounter but the car and wallaby survived. After hours of 'roo watch', we finally arrived at an old homestead farmer house – which is used as a public hut – around midnight.

The next morning, after breakfast, we met Chris Norton and his friends Trish Palmer and Tim Holden. After a group photo the group proceeded to hike to Colong and the infamous hill down to the cave in the pouring rain!

Colong was used to mine guano and for some reason the miners didn't care much about steepness as the trail goes almost straight down for about a quarter of a mile [*That's 350 m in civilised units. Ed*]. With the heavy rain the path was very slippery and my foot gave way and I went sliding about 15-20 feet, but not before twisting my knee! Eventually, I made it to the cave and under the shelter of the arch, a place to dry out!

After a quick lunch and some time for my knee to feel better, I joined the others for a trip into the cave. As there were several newcomers to the cave, Chris Norton led a 'tourist' trip through the cave for Damian, Trish, and Tim. Alan, Phil, and Glen went to survey leads off of the Landslide. The tourist trip went in via the upper entrance which had a lot of bat activity. We eventually reached Woof's cavern. While Tim and Trish rested, we did a loop exploring some of the pretty bits in the cave including some nice helictites. Chris and friends returned to Sydney as they planned only a day trip. The plan was for Damian and me to join Alan, Glenn, and Phil later for some survey.

Damian had a headache and I had a sore knee, so we both decided to admire the rain from the arch. Very unusual as generally we are always keen to find new cave! Since I was on the surface, I was then responsible for cooking our dinner of Thai red curry dish; which was excellent! We also hiked down a bottle of red wine to wash it down. Since Damian is a winemaker I was amazed that he didn't bring a bottle of something with him! We of course shared some with him.

After a night's sleep, Glenn and I set off to explore an area called Just Barely, while Damian, Alan, and Phil explored the maze underneath the Ghost Train area. It took a long time to get to the survey area and to find the tie-in point. After surveying about ten stations and with limited time, we set off to see if the small passage through break down would lead to any new discoveries. Just when we thought the tight passage become too tight, I noticed a small side passage and was able to remove some rock making it passable. This led to a larger room above with many going leads. However, we had to turn back to meet the others and hike up the hill. Fortunately the rain stopped before we had the strenuous hike up the hill.

Damian is from the UK, actually Wales, and was very curious if the English won the rugby match. Just as he turned the car on, the radio was replaying the results of Poms victory in the World Cup in Rugby. After negotiating the many roos on the road we made it to Hampton Pub for dinner and then to Sydney.

The following weekend, which was my last weekend in Australia, SUSS was having a week long trip to Jenolan. The divers were going to explore Barralong cave and needed help carrying gear. I called Damian and Jodie Rutledge from NHVSS and asked if they were interested in going, and fortunately they said yes. (I didn't tell them they would have to carry dive gear. Later, I did tell them about the price to enter the cave.) I was looking forward to the trip and spending time with my mates Phil, Damian, and Jodie before returning home.



Wet group

The plan was to go canyoning mid-week, but with the sore legs from Colong and stormy weather we canceled the trip. Instead, Phil, Megan Pryke and I went hiking to Mt. Solitary in the Blue Mountains. It rained, rained, and rained. I wish I had stayed in Tasmania were the weather was sunny and clear! On Thursday, I helped Damian move his stuff from Sydney to Mudgee. On Friday it was wine tasting!.......To be Continued

COME FOR THE CAVES. STAY FOR THE BBQ!!

JENOLAN CHRISTMAS TRIP 29THNOV — 7TH DEC 2003

BY SIMON GODDARD, PAUL NELSON AND PHIL MAYNARD

Participants: Ian Cooper, Jodie Rutledge, Rod Obrien, Phil Maynard, Glenn Smith, Keir Vaughan-Taylor, Mark Staraj, Simon Goddard, Damian Grindly, Paul Nelson, Michael Collins, Mike Lake, Jill Rowling, Chris Norton, Brett Davis, Don Mathews, Estelle Lifran and Francois & Caroline Cuffs. NUCC Sunday night thru Friday: Iain McCulloch, Andrew Wall, Stephen Peachy, Olaf Theden, Mel and Peta Stamell.

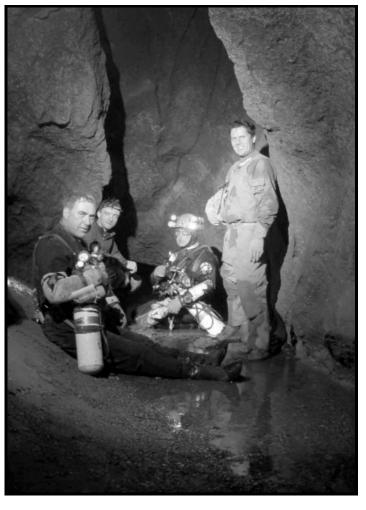
Overview BY SIMON

This was a highly successful trip with a great deal of work being done to achieve what is overall, a spectacular end to a great year of caving at Jenolan. We continued the Mammoth Survey and crossed off some leads. The SSS extension at the back of Wiburds still proved difficult; there was diving and surveying in Barralong and a highly promising push through Ice Pick Lake by Rod Obrien. I will not spend too much time on the details of the dive trips because I am sure Keir V-T is preparing his detailed after action report as I write this.

Those of you who know my writing style will no doubt be expecting me to live up to my reputation as a master of raconteur, a wizard of writing, a veritable king of the keyboard. You are going to be sorely disappointed for I have mellowed in my middle age? Instead I have attempted to present a serious piece of reporting that will perhaps one day be housed in the world's premier resource for valuable manuscripts – the back of Oatley Public Library, right next to the 'What Wildflower is That' collection donated by old Mrs Mousetrouser of No.92 Russell Street.

Saturday 29 November – Barralong Dive Trip & Survey BY PAUL

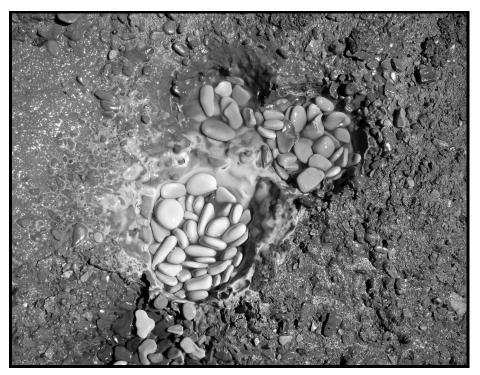
For some reason, everyone was driving up to Jenolan on Saturday morning. Damian and I were traveling from Mudgee. Fortunately, I was able to remember the way to the caver's cottage and we were the first to arrive. Keir Vaughan-Talyor, Rod O'Brien, and Ian Cooper arrived from Sydney and we helped unload the dive gear. While waiting for the others to arrive, Keir, Damian, and I went down to investigate the status of



Keir, Andrew, Rod and Mark in Barralong
Photo Olaf Theden

the Blue Lake, as it had been raining heavily the prior week and there was concern about the visibility of the water. The lake was blue and calm. When we returned Jodie, Phil, Glenn and Michael Collins had arrived, and we started packing up for Barralong.

Barralong cave is part of the Jenolan showcave system and is off the tourist trail below the Temple of Baal. We entered the cave around noon through the tunnel. The first challenge is hauling the gear up a small climb right off an old tourist track. With nine people, it was set up a haul chain to move the packs, then move forward and repeat which went quickly. The passage is relatively easy with few navigation problems until you reach the rock pile which is an area of breakdown. The plan was to pass the packs through a tight passage, to a group on the other side. This avoids having to haul gear up a climb and squeeze to get over the breakdown. At this point Damian and I were at the rear and followed the group over the breakdown to join the others and continue pack hauling.



Oolites in Barralong Streamway
Photo Paul Nelson

After the breakdown area you realize why Barralong is such an amazing cave. There are heaps of amazing helectites everywhere. A photographer like Alan Pryke could spend days in there, and I am sure he probably has. However the goal of the trip was to haul gear, so I kept myself under control. I only stopped a few times to document the pack hauling chain! The most interesting challenge is a flowstone slope that leads to a passage with a long soda straw about 4 feet away which Phil sought to protect by standing in front with his arms against the wall. I wish took a picture because he looked like he was going to be arrested and the police were going to check him for weapons.

After about two hours we finally reached the river and near the dive location. After a few minutes someone commented, "Where is Michael, has anyone seen him recently?" No one had seen him since

the rock pile. While were counting bags, no one counted people and everyone thought he was either in front or in back. Keir and Jodie went back to find Michael while the rest of the group ate lunch, looked for leads, and did some survey. A little over an hour later the search party returned with Michael. He had climbed up too high to get over the breakdown, but by the time he realized his error we had moved on. He then waited for the search party. Keir and Jodie found him sitting just below the climb and squeeze and told his rescuers, "It's about bloody time you came back for me!"

Michael and Rod did their dive going upstream. The others broke into two survey parties to survey the down stream portion of the stream. I was with the downstream group that had to deal with a low ceiling and survey station inches off the water to reach the sump. Yours truly was doing instruments. Why didn't I volunteer to

sketch? After finishing to the sump, we headed back upstream and surveyed until we reached the other party. We then found an upper level with some passage. Most of the leads eventually got too tight, even for skinny Glenn. This was partly surveyed, but needs more work.

The divers surveyed about 75 m underwater and finished in an air space heading south. There was more cave than they could survey in one day, so they were planning to dive all week on alternate days.

About the time we finished with the survey the divers returned and we packed up the empty cylinders and gear and headed out. The trip on the way out took less than two hours and we didn't lose Michael on the way out! We exited about 7:30 pm and spent about 7.5 hours in the cave.

After returning to the cavers cottage, other SUSS members had appeared,



Barralong dive group Photo Paul Nelson

including Simon who was still complaining about what a hell-hole Porterville (NSS convention site) was. (Just joking, but he did miss a great marble cave!) I cleaned up my gear in preparation to fly back home as I wanted everything dry. Then everyone proceeded to cook tea and drink wine. Phil started drafting the new survey.

On Sunday, the group was planning to go to mammoth cave for exploration. While very tempting, my gear was clean and dry, so I decided against it. Also Jodie had to return to Newcastle at a reasonable time and she was giving me a ride back to Sydney. I said goodbye to my mate Damian, which was hard because we have been pushing the exploration at Lilburn in California for five years and made some great discoveries.

Jodie and I went to see if we could join a tourist trip, but they were full. We then headed out and after a few stops to see a few sights in the Blue Mountain overlooks, we eventually made it to Sydney around 5 pm.

It was great caving with SUSS again, and I hope to join them on some future trip. Or maybe a group will visit the US now that the exchange rate is making it cheaper!

Sunday 30 November-Scaling Pole Leads in Hell Hole, Mammoth BY SIMON

Mark arrived on Saturday night so I knew we would be getting some serious exploration done. On previous trips Mark, Ian, Phil and I had been working on the Hell Hole/Upper Naked Lady Chamber survey. The avens there looked tempting and certainly needed surveying so on this day we took the scaling poles into Mammoth to look at the avens between Hell Hole and Railway Tunnel. Phil and Rod climbed up 30 odd metres and pronounced them dead. On one occasion there was an almighty crash and a cry of "Below!!" from Phil. We all scattered like a troop of Prussian Guardsmen at Verdun and down came a big rock that Phil said just peeled off the wall. Ian later noticed that his water bottle was looking a bit worse (quite a bit actually) for wear than when it entered the cave. We all realised that it had born the brunt of the rock's assault.

There was another rift further in Hell Hole that Mark, Ian and I looked at on a previous trip. It needed scaling poles so we dropped them off nearby for another day.

Phil, Jodie and Michael Collins left Sunday evening.

Monday 1 December - Wiburds & Barralong

Trip one into Wiburds (Ian, Mel, Peta, Stephen, Glenn, Andrew) went to SSS Extension.

The Wiburds survey is almost finished, but there are still a few leads left to push. One of these is SSS Extension. The total surveyed length of the cave is 4745 m - just 255 m short of the big 5 km! The potential exists for more to be found in SSS, although it will be hard work. We were privileged to have the Sawnoff Shotgun with us -NUCC's secret weapon, so Ian just had to get them into the Extension to see what he could do with it. Also if it got broken, well it wasn't ours so who cares? Anyway Peta managed to squeeze her way into something that Ian had to chisel her out of. Ian pronounced the rockpile leads dead. However one month later after thinking about it he conceded that more work should still be done. It will never end, Ian. Pushing

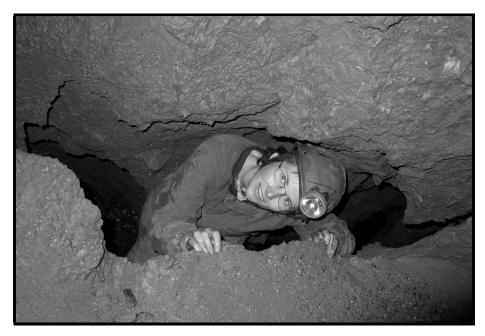


Rod kits up in Barralong Photo Paul Nelson

leads in SSS Extension is your doom!! You will never escape it. NEVER!!!

Trip two into Barralong

This was a pretty successful trip. While Keir and Rod finished the upstream survey mapping some 60 m of passage, Mark and Simon pushed the upper levels downstream, and the rockpile to the downstream sump. Iain and Olaf recorded some of the special formations in the cave.



Jodie in Barralong Photo Paul Nelson

The total dive time was 2 hours 50 minutes. All of the area upstream to end of the dive line has been surveyed. Rod found a 1970's style dive knife that must have been there since the first dives. It now resides in the Hut where it can be used for the ritual sacrifices. He later recounted that the knife was just lying there in its sheath and when he picked it up the sheath disintegrated in a cloud of dust.

Tuesday 2 December – Scaling Pole Leads in Hell Hole, Mammoth

We went back to scaling poles left at the entrance to the blowing rift near Hell Hole. The rift had a lot of potential, being washed rock with a strong draft. It went up about 11 m before becoming impassably small. Ian said that someone had been up there before. Perhaps one of the climbers that were pushing a lot of the climb-

ing leads in the '70s. The limestone is very close to the eastern edge of the contact. From the draft and water that washes down the hole it probably leads to the surface.

With nothing left to do in this area, we left the scaling poles near Hell Hole and did a recce to Ice Pick Lake. Rod had never been there before and when he saw it he was very impressed; "Wow this is a proper lake. I'm excited!" He decided to come back with small 7 litre tanks and do a recce dive later in the week.

After Ice Pick Lake we returned to Horseshoe Aven and had lunch. While there we noticed we were opposite the shaft leading to Helectite Hallway. We had scaling poles, the survey gear, the will, the opportunity and the bodies so we did it! There was a bit of trouble getting the poles right. We initially set up five and Mark and Rod were up it faster than a scalded cat. I followed next and when I got to the top, swinging wildly about at the top of the tube, I asked Mark how he got off the ladder. He said he didn't know and to just do it. After much thrashing about and swinging I successfully managed to push myself to the side of the tube 1 m directly opposite the sloping handhold free ledge I was supposed to climb on to. "I might be able to get over there Mark, but I am not sure how I am going to get back onto the ladder to get down." Mark responded that he had no idea how he would do that either and said he would worry about that when the time came. I said "Bugger this" and went back down to see about putting another pole on the end.

Ian and I attached another pole (you need to dig out the floor) and Ian went up to finish the survey. I was overcome with laziness so I went out into Horseshoe aven and had a bit of a lie down.

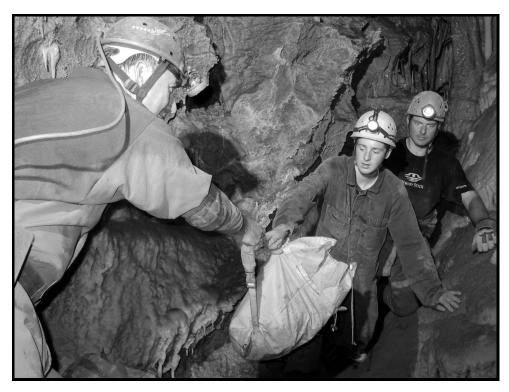
While we were in Mammoth, Keir patrolled the Southern Limestone to do GPS work and tie surface features in with the Barralong survey.

The NUCCers did nothing except go for a short stroll and sit and drink port!!

Wednesday 3 December - Diving in Barralong

More diving in Barralong. This time it was a push dive upstream. Rod explored a possible lead around the beginning of a restriction in the passage. Unfortunately it ended up looping around on itself so he spent the remaining time digging out the restriction.

The night before Mark and I had had a good look at the Graham Kates survey. We noticed quite a bit that we never knew existed. Most of it was right where we had been hanging around waiting for the divers! Where you drop down



Glenn and Keir haul gear in Barralong Photo Paul Nelson

into the stream is a passage over water washed flowstone and further along is a passage high up in the roof on the left hand side (heading east), shortly before the lake. These look like they are side streams running into the main stream. Mark and I pushed the passage heading west (on the right). We followed the earlier survey to a VERY tight restricting squeeze. Mark was unable to pass it but I managed on my third try. The whole area is full of clean sand, much like what you would find in a river on the surface. It definitely takes water in flood. There is sandstone in the Southern Limestone and this has to be coming in eroded rock from there. After the squeeze is a room that you can stand up in and on the opposite side from the squeeze is a slot which leads to a similar room. From here I went down a triangular hole, where I found

another chamber with an upstream sump – from the above mentioned side stream. The whole area is full of the sand. It requires surveying.

NUCC took more photos.

Dives in Barralong to date: So far the divers have laid 140 m of line, with 100 m of plan view and survey. Going downstream they have reached 40 m to the fourth sump and surveyed to it. The route downstream is still wide open with about 60 m left to go to Blue Tongue. From Blue Tongue next stop Lethe!! Progress upstream is impeded by a sand-choked restriction which needs digging. This looks like it could be a long and difficult task. Especially if it's anything like what I saw in 'my' upstream sump. If you look at the streamway passage that runs from the lake to downstream you will be hard pressed to find any large gravels or rocks. It is mainly sand and very small pebbles. This indicates that the constriction is extensive enough to prevent everything but very small objects.

On the way out we were stopped for a short time by a wedding in Temple of Baal. The bride had to hike up her dress so high to get down the stairs that we could see her stocking tops. She was wearing white suspenders. Mmmm. Being men of the world Rod and I assessed her 'experience'. We waited for the ceremony to end and were ushered out by a very thoughtful guide. The wedding photographer snapped some shots for the bride and groom to remember us by. How thoughtful.

Thursday 4 December - Far Country & Water Cavern

The rain of the previous day had disappeared so Keir cycled off to Katoomba. Mark, Rod, Ian and I went via Jubilee to Far Country. Mark said he was keen to get back into Far Country because the Water Cavern stream disappears into a gravel sump about 5 m below the path entering Water Cavern. When SUSS pumped the Water Cavern sump dry in 1993 the brown water which flowed for some hours was not detected at all by the divers even though they made frequent dives into the Imperial River that week. It was considered a possibility that it may actually flow into the Far Country stream which seems to be a parallel stream to the Jenolan Underground River. By visiting the area and perhaps having a cursory dig in the gravel sump we might be able to see if the passage can be followed further. At the same time a visit to the passages below the Drum would help determine if this stream goes to a new section of cave.

Mark and Ian Found new passage below tourist path in Water Cavern connecting down to Far Country. It's down a tight unattractive vertical rift where the stream mentioned above was thought to flow. The rift ends in a 1 m deep mud-filled rimstone dam that blocks the way down to the aven. It needs to be surveyed and a voice connection made to the aven in Far Country mid-levels. Rough height calculation based on body lengths indicated about 5 m distance between the top of the Far Country aven and the bottom of the rift.

The following text is taken from the trip the following month (10th - 11th Jan 2004). Chris Norton followed the stream to the rimstone dam and called out to Ian C who waited at the bottom of the aven. They were unable to make a voice connection. Mark pondered this and emailed me the following on the subject:

"About Water Cavern stream – I pulled out the maps we made of this area in '87/88 and saw that the detail was a bit inadequate for the area ('mid-level') where the aven is which is where the stream re-emerges from. It nonetheless it seems pretty clear that there is a passage heading off from the top of the aven for some 10-20 m. It's clearly drawn on the map but I'm certain it wasn't surveyed – I have a vague memory that one of the good climbers got in there.

"The reason it's not that clear on the map is that it was drawn to 1:500 instead of the 1:200 we use now. We should really resketch this area. The endpoint of the passage is drawn oddly but definitely shows an aven – perhaps it's the underside of that pit now filled with mud that you reach going down from Water Cavern? I think it's very likely." There definitely needs to be more work done in this area.

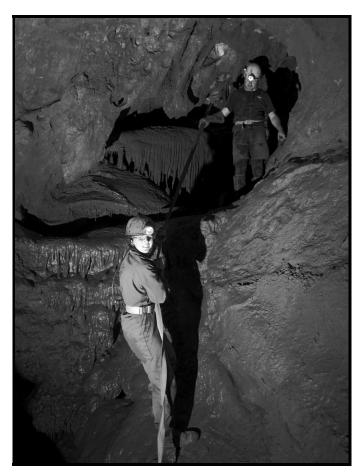
We entered Far Country and climbed down the 12 m pitch into the middle levels. Mark felt confident that he had found the aven the Water Cavern stream runs down. Nearby is a hole that dropped down a small climb into the old stream passage. After a short trip along a low passage we passed a dry sump, then continued on a short distance and climbed up a slot in the rock and then round a right hand bend to the Sump.

We then went back the way we came and shortly before the climb back up we turned left along a crawly passage, up over some rocks into a large room called the 'Knitting Room'. The sump into Imperial was on the opposite side and we climbed down into it and went through into a rift that leads to the river.

Sump 5 had an airspace in it (approx 5 cm). We found a hose so it looked like the guides had been draining it. Sump 6 was 2 m down from pre-drought conditions. The Watergate sump was 4 m down from lip.

Mark and I pushed the rockpile just below the drum. Most leads were discounted, however Mark was able to move some rocks and open an area large enough for a small person to get through. It may lead to some interesting passage. In the same email he discusses the potential of the area.

"I'm still intrigued by that rockpile we were pushing. My memory of Far Country maps was correct. It hits a flowing streamway out to the East. Presumably it once used Sump 6 to reach the JUR via Sump 5 but now this passage only gets water from Water Cavern and in flood (overflow). The rockpile is pushing out to the area that would be downstream of Far Country. The unpushed tube (blocked by a rock) also goes that way." Therefore there is potential for more large cave to be found beyond that rockpile.



Jodie and Damian in Barralong
Photo Paul Nelson

Water Cavern Extensions

While Water Cavern did not feature significantly in this trip, I feel it is worth recording some of Staraj's views on the area.

"The potential for large amounts (kilometres) of new cave is very good and there is potential to extend the system out towards Glass and Alladin Caves and Rho Hole. However the sump is rarely open (3 times in last 100 years) and readily fills up – we missed out on getting in by a day in December 2002 due to one day's rainfall. The section is not fully surveyed or explored. Each trip finds something new. The last trip – in 1998 – discovered a very high series of avens and massive rockpile – up to 40 m above the present floor level of Water Cavern. Every opportunity this sump is open needs to be taken advantage of to further document this intriguing new section of the system." Draining the sump again – just enough to make it passable – would guarantee opportunities for impressive new discoveries.

Friday 5 December - Diving Ice Pick Lake / Surveying in Naked Lady Chamber, Mammoth

The NUCCers left to continue their caverama in Kempsey. Staraj's leave pass had expired so he headed home to wife and children. Rod, Phil, Mike, Simon and Ian C took the dive tanks to Ice Pick Lake so Rod could finally dive a real underground lake. He went southwards (downstream) and laid all his line (about 75 m of it) in serpentinious passage. He said that the nature of the passage made it impossible to maintain a sense of direction, but it was beautiful passge to swim through. He could not find Keir and Pat's clothes, (or more importantly the jelly beans) lost many years ago in the incident that is now part of SUSS folklaw.

After the dive Ian and Rod surveyed down to the lake's surface, but the section that had been dived remains to be done. Rod never expected get so far in one go. Very few people have dived Ice Pick Lake and it has great potential.

Mike and Phil surveyed Naked lady Chamber down to the lake and some side passages, while Ian and I surveyed around Ice Pick before you drop into the lake proper. We then went through a side passage which leads into the snakes gut area. It is full of phreatic tubes and a large rift. Rod, Ian and I surveyed through this and met up with Phil and Mike who had entered from the conventional Snakes gut entrance to Naked lady.

Saturday 6 December - XMAS BBQ

This year the weather threatened to rain on us so we had the BBQ in the fire shed. Brett organised the food and drink and did a masterful job at it. There was little else done this day, apart from walking on the surface. A lot of people had trouble starting on sunday.

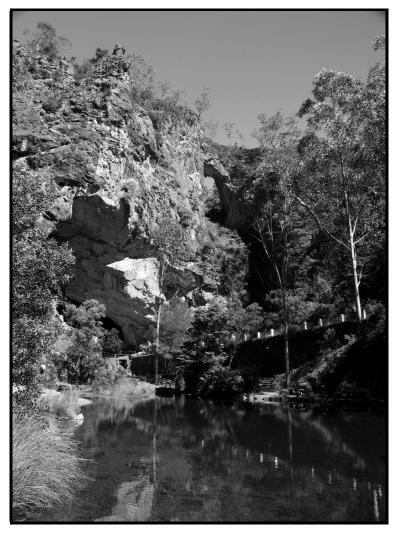
Sunday 7 December – Helictite Hallway, Mammoth BY PHIL

On sunday it was back to Helictite Hallway with the ladders and the bolting kit. The previous trip was stopped by a pitch with no rigging point at the top. We had Don, Estelle, Caroline, Francois, Ian, Phil, Brett, Steve and Annalisa to help with the scaling poles and surveying. Up at the top of the (precarious!) scaling pole pitch, there is a tight phreatic tube that goes up a slope and then drops into massive phreatic passage. There's good rock at the top of the drop, so I put in a bolt casing and rigged the ladder off that. The drop is about 7 m into horizontal passage that continues to the south.

Helictite Hallway is a fossil level of the main river heading south from Railway Tunnel. It's very well decorated – that's the problem really, the passage to the south is choked by flowstone all too soon. There's also some aragonite near the entrance. The passage points straight at a particular section of Pisa Chamber, which is nearly 100 metres to the south, suggesting that Pisa Chamber was once the main river passage as well.

We surveyed all of the accessible parts of Helictite Hallway (there's one scaling pole lead which was explored by the discoverers in the '70s, but it would be vandalistic to get back into it – it doesn't go anywhere). Annalisa tells me she's always managed to avoid survey trips before, so she was conscripted to tape duties. A couple of survey legs were on rope up a climb, but mostly it was big easy legs. The total length of our survey was just on 100 m, with no real prospect for more.

The trip wrapped up in glorious sunshine on sunday afternoon as we cleaned up. Another week when too much Jenolan was barely enough......



Blue Lake Photo Paul Nelson

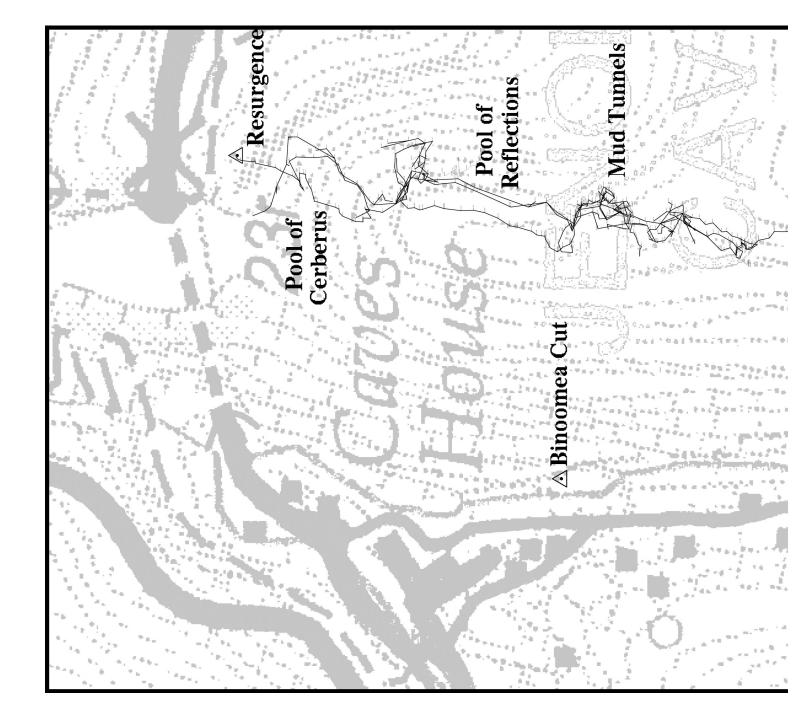
HOW FAR IS SOUTH?

BARRALONG AND THE SOUTHERN LIMESTONE

BY PHIL MAYNARD

The recent dive exploration trips in Barralong – in November and on the Christmas trip – have extended the known streamway by 200 m. This map shows how Barralong fits in with the rest of the southern showcaves and with the surface features of the valley.

Moving upstream from the resurgance at Blue Lake, the dry passages and the dive survey of Pool of Cerberus and River Cave are shown as a skeleton. Binoomea Cut is connected to River Cave through Temple of Baal (not shown) and the Mud Tunnels. River Lethe, which is the most upstream point for the divers in the tourist caves, is just south of due east from Binoomea Cut. Barralong diverges from the tourist track at the point where the River tour climbs the steep staicase to Mon's Meg. There is an old tourist track which meanders into an area which is no longer shown, and then a climb into the phreatic passage of Barralong.



The dry section of Barralong more than doubles the known extent of the southern showcaves to the south — it can be seen on the map as a single passage heading south away from the tourist caves. At the southern end of the cave, a short section of streamway was known, emerging from a lake and disappearing into another sump downstream. This stream has been extended in both directions by the new dive surveys. The new survey is shown on the map as a silhouette.

There is a sizeable passage running south in the upstream dive, which abruptly ends. The stream lies off to the east and heads deeper in small passage. The dive currently ends in tight restrictions in here with a debris choke. It can be seen from the map that the end of the survey is at the point where the surface valley cuts across the limestone above, and this is probably why the diving has become difficult – the same thing happens at the northern end of Spider cave. If the dive can be pushed across into the bluff on the opposite side of the valley, large passage beckons. It's another 2 km south to Paradox Cave at the southern end of the valley

There are no known caves in the southern limestone that connect to the underground stream. It can be seen from the map that Block cave and Hobbit Hole are almost above the river, but these are not prospective caves. If the river continues to head directly south up the valley, then it would pass almost underneath the bottom of Bottomless Pit, which is a deep cave and should be close to connecting. Wouldn't it be interesting to have an SRT pitch cave to carry dive tanks through?

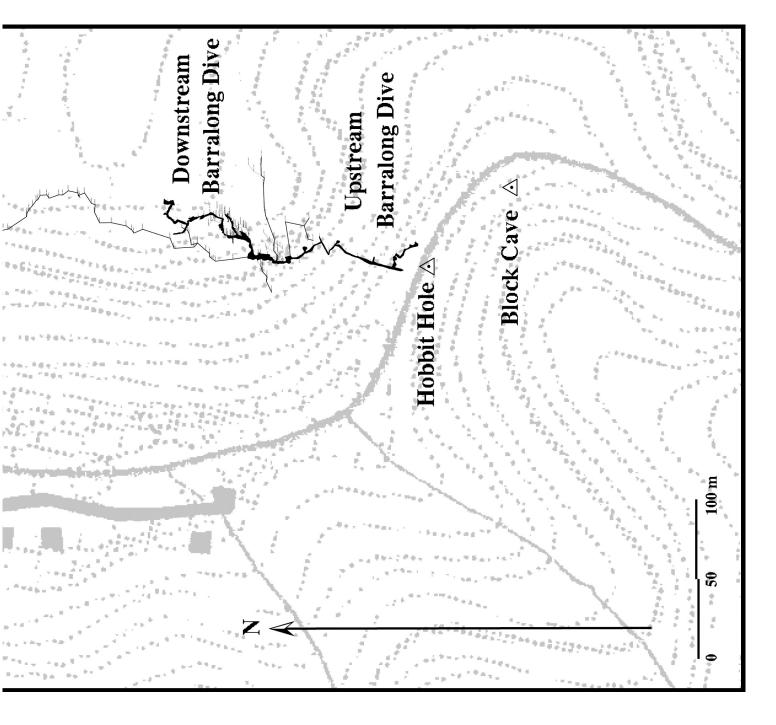


PHOTO GALLERY

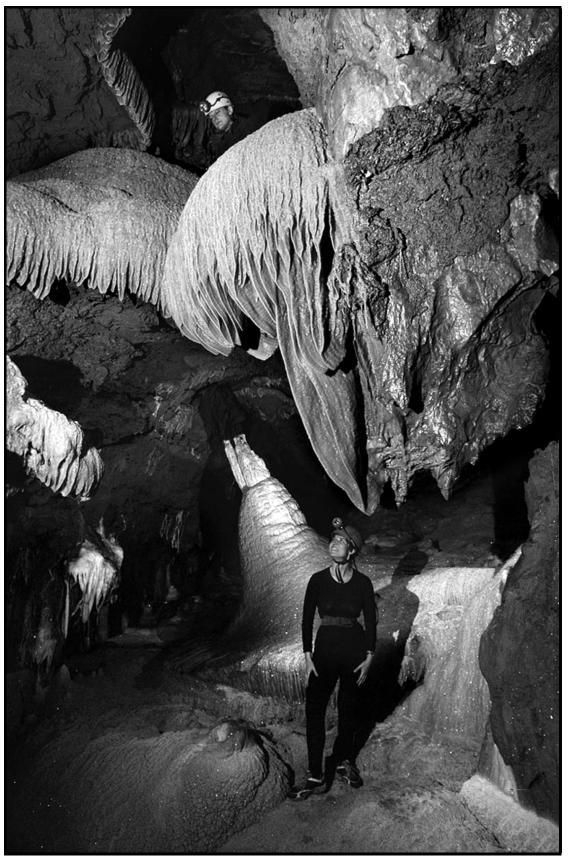


Camping Hazard, Mole Ck photo Paul Nelson



Kanangra photo Michael Fraser

PHOTO GALLERY



Steve & Annalisa Contos in Pisa Chamber, Mammoth Cave photo Alan Pryke

TRIP LIST: JANUARY 2004

SUSS General Meetings are held on the first Thursday of the month at 7:00pm (for a 7.30pm start) in the Common Room of the Holme Building at the University of Sydney. The Holme Building is close to the Parramatta Rd footbridge on the northern side of campus. The Common room is on the first floor (enter from Science Rd).

For updates to this list, check out the SUSS Website: http://ee.usyd.edu.au/suss. Detailed information on each caving area (plus other useful information such as what you will need to bring) can be found in the Beginner's Handbook section of the 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 asthma, diabetes and the like.

January

- **24–26 Yarrangobilly.** A great place for a long weekend of caving. Contact Brett Davis bdavis@ssc.nsw.gov.au 9747 4818 (home).
- **31 Hole in the Wall Canyon.** Hole in the wall canyon is in the Newnes Plateau area. Contact Richard Pfeil richard_pfeil@hotmail.com 9713 9460 (home)

February

- **5 General Meeting.** 7:00 pm Holme Reading room.
- **7–8 Jenolan.** Our regular trip to Jenolan is on again, accommodation at the Cavers cottage. Contact Simon Goddard Simon.Goddard@defence.gov.au 9359 3145 (work)
- **14–15 Colong.** A cave with a bushwalk! Colong Cave is a 3.5Km walk. Alan is co-ordinating surveying and exploration of this maze cave. Camping is close to the cave, you will need overnight camping gear to come along for both days. Contact Alan Pryke meganandalan@optusnet.com.au 9524 0317 (home).
- **28–29 Wee Jasper.** Celebrate the leap year at Wee Jasper. Contact Brett Davis bdavis@ssc.nsw.gov.au 9747 4818 (home).

March

- 4 General Meeting. 7:00 pm Holme Reading room.
- **6 Training Day.** Want to come on a caving trip and dont know what to expect? Come along to a training day to find out what its all about and learn the basic skills. Contact Steve Contos scontos@hotmail.com 9488 7742 (home).
- **7 Mt Wilson Canyoning.** Suitable for beginners. There are many beautiful canyons in the Mt Wilson area that are perfect for summer. Contact Richard Pfeil richard_pfeil@hotmail.com 9713 9460 (home).
- 13-14 Jenolan. Our regular trip to Jenolan is on again, accommodation at the Cavers cottage. Contact Matt Fischer—mfischer@mail.usyd.edu.au.
- **20–21 Colong.** A cave with a bushwalk! Colong Cave is a 3.5Km walk. Alan is co-ordinating surveying and exploration of this maze cave. Camping is close to the cave, you will need overnight camping gear to come along for both days. Contact Alan Pryke meganandalan@optusnet.com.au 9524 0317 (home).
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