SUSS BULL 46(1)

APRIL — JUNE 2006





Bulletin of the Sydney University Speleological Society



SUSS Bull 46(1)

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Cover Photo: Keir Vaughan-Taylor in Koonalda Cave, Nullarbor. Photo Kevin Moore



NEWS AND GOSSIP

New Committee

At the Annual General Meeting on the 1st of June, the following committee was elected.

President: Keir Vaughan-Taylor Michael Collins Vice President: Secretary: Kevin Moore Treasurer: **Brett Davis** Minutes Secretary: **Steve Contos** Max Midlen Equipment Officer: Librarian: **Matt Fischer** Editor: Phil Maynard Safety Officer: Mark Lowson **ASF** Councillor: Vacant

General Committee: Andrew Herries

Debbie Johnson Richard Pfeil

Breakthrough in Barralong

The last time Barralong was visited by SUSS was November 2003, when lots of discoveries were made (See SUSS Bull 43(3)). The divers got back into the stream on the June long weekend, with a dive upstream on the saturday and downstream on the sunday. Upstream, there was a bit of progress made in digging through sand in the sump. Downstream, there was a major breakthrough made from the sump which stopped progress last time. The sump turned out to be very short, with walking passage heading north to a rockpile. There are going leads from the rockpile, so more trips are planned to this area. This breakthrough got media attention; particularly from the Sun Herald (25th June) and ABC radio. See the article in this issue for more details.

More Progress in Rho Hole

The April trip to Jenolan saw more progress in the streamway at the bottom of Rho Hole, heading towards Far Country in the show caves system. Apart from getting the stream surveyed, the June trip saw a major breakthrough. Of the three climbing leads shown in the map, two died and one led to a series of upper level chambers. It's detrog territory, and needs survey and exploration. More details to come.

Alan Pryke

Presidents Report for 2005/6

As always it has been a busy year for SUSS, with many projects and discoveries, in addition to the trips more focused purely on recreation. SUSS continues to try to introduce new members to caving, we ran several training days to help new members to pick up the skills to feel comfortable on some of the harder trips we run. With so many people in the club active in the speleo community, Im sure I will have missed events out in the report, but a summary of some of our project work and expeditions from 2005/6 follows.

Jenolan

Barralong still holds the attention of the cave divers in the club and each trip in seems to result in new finds. The most recent set of finds include a new river passage heading towards the Bluetongue Pitch area of Barralong. These discoveries continue to catch the attention of the media with coverage in the Herald and the Daily Telegraph as well as an interview with the new SUSS vice president Michael Collins on ABC 702.

Rho Hole was the focus of much attention from SUSS in the past year, beginning with some survey work which ended up yeilding several interesting leads. The first major discovery was a dry streamway (Rhoboat Streamway) heading towards Far Country in the tourist caves system, which holds the promise of connecting Rho Hole into the main Jenolan system and providing a way for non-divers to reach Far Country. Additionally a set of well decorated passages (Rhoman Ruins) were found at a higher level. These leads are still being eagerly pushed and will hopefully give rise to many more bad puns as we find more new sections of Rho Hole.

Mammoth continues to be resurveyed although being such a large project there is still much work to be done. Much of the work is now being focused on the central and northern sections of the cave.

Wiburds continues to threaten to have a completed survey but then reveals a little bit more of itself whenever Coops visits.

Wellington

Keir Vaughan-Taylor continues to drive the restoration of Anticline cave with much help from the speleo community at large and also the people of Wellington. Over the course of the last 2 years the cave has been re-excavated and the doline stabilised with gabions hand-filled with rocks by volunteers. On recent trips up to Wellington discoveries were made underneath Catheral cave as well. With some funding becoming available, this project is sure to continue this coming year, with the focus on making the restored cave more accessible, particularly replacing the fence around the doline and providing stairs down into the doline.

The Nullabor

Koonalda – Several members of the club travelled out to the Nullabor to push the end of this significant cave. A challenging pitch was climbed over the course of several days, which unfortunately did not result in any significant new finds.

Overseas Expeditions

Waitomo/Puketiti – The club ran two trips to New zealand in the past year. The trip to Pukhetiti involved significant prospecting and exploration. There was no shortage of discoveries made and there is little doubt that Puketiti has more left to find. The Waitomo trip was focused more on recreation and members on the trip visited old favourutes such as Mangawhitkau, Fred and Waipuna. On both trips help was gratefully received from New Zealand speleo clubs.

Cambodia – While not a SUSS trip, SUSS managed to send one of its members, Dr Andy Herries, off to Cambodia to assist the Sydney University School of GeoSciences with an expedition they planned in the region of Ankor Wat. The aim of the caving side of the expedition was to sample speleotherms which could be used to infer changes in rainfall and temperature over time, to aid their investigations into the history and collapse of Angkor.

Mexico; Chevé System (Oaxaca, Mexico) – Again another expedition that involved a SUSS member, this was a major international expedition to push the limits of J2. Al Warild, a veteran of such trips attended and I'm sure most people in the club are eager to hear about it.

Mark Lowson

Constitutional Amendment

The following Special Resolution to amend the SUSS constitution is to be voted on at the August general meeting:

That Item 3 in the Preliminary section be changed from

"Society financial year" refers to the period from February 1 of each calendar year to January 31 of the following calendar year' to

"Society financial year" refers to the period from April 1 of each calendar year to March 31 of the following calendar year'

The purpose of this amendment is to align the membership year of SUSS with the membership year of the Australian Speleological Federation. This would simplify our finances, simplify the finances of the ASF and simplify the online membership databases of both organizations.



Sasa and Richard Kennedy in Rho Hole photo Alan Pryke

KOONALDA KAPERS

KOONALDA CAVE, NULLARBOR

23RD SEPTEMBER - 9TH OCTOBER 2005

BY KEVIN MOORE AND PHIL MAYNARD

Participants: Keir Vaughan-Taylor, Kevin Moore, Phil Maynard, Paul Hosie (WASG)



Koonalda doline photo Kevin Moore

Kevin: Having previously visited the area as part of the 'Escape the Hype' trip of 2000, Phil and Kevin were easily persuaded that another trip to Koonalda was a good idea. Previously strongly held convictions as to the sanity of cave divers were soon challenged, as Keir told Phil that he was being invited "to investigate a climbing lead for Paul and, oh yes, it's at the wrong side of a cave dive, and I've arranged for you to do a cave diving course with Merv...."

After a few months of having Merv jocularly removing his mask and closing his main tank valve while he negotiated ever more complex rats' nests of dive line in the dark, Phil was declared competent to cave dive, although it was suggested that he should be allowed only one fin, so that he would swim straight.

The morning of the first day, we collected at Keir's place and contemplated the pile of gear that needed to be taken, and the car and trailer in which we intended to take it. Alternatives were considered and rejected on the grounds that:

- 1. Taking Kevin's car as well would mean someone would be driving by themselves for a very long way.
- 2. Taking Keir's (admittedly larger) gas-powered ex-taxi Ford provided no great confidence in the prospect of actually arriving at Koonalda.

These alternatives being rejected, the gear was duly loaded into Phil's Forester, leaving it with a good half a centimetre of travel in the suspension. The trailer was also riding a little low and we looked askance at the state of the left hand tire. After lunch at Wellington Caves, and dinner at Cobar, we made it to Broken Hill five minutes before the backpackers was due to close. By the time we found it, it was ten minutes after the Backpackers was due to close, but Keir's negotiating skills and Phil's credit card obtained us a room for the night.

The second day dawned, and the dodgy tire seemed no worse for its adventures, so we continued on, lunching at Peterborough and stopping at a hotel in Wudina, a small town on the Eyre peninsula that consists of a wheat silo, agricultural equipment supplies and a pub. It's also the setting off point for the Gawler Ranges, and Phil expressed his enthusiasm for a side trip on the way back. The Wudina Hotel is a bit of a find; it's cheaper than the backpackers and it serves beer and enormous quantities of food.

The third day started, traveling through yet more wheat until we reached the last outpost of civilised petrol prices at Ceduna. We filled up on the principle that anything more than a top up at the Nullarbor Roadhouse was unnecessary extravagance. It was also the point at which we needed to stock up on food, which presented a problem: there was enough room in the car for the gear and the passengers, but not actually enough room for food as well. After toying with the idea of tying Keir to the roof racks, we attached a few of the boxes instead. With a couple of weeks' worth of food filling the interstices, we continued to the Nullarbor Roadhouse, where we were informed by a concerned driver that our trailer was bottoming out on the bumps. Keir airily informed him that we'd driven all the way from Sydney like that.



Koonalda station house photo Kevin Moore

Having stocked up on beer and topped up the tank, we drove the final hundred km to Koonalda Station. The station was built by the Gurney family out of scavenged sleepers and corrugated iron, and was a major stopping point on the old Eyre Highway, a fact evidenced by the collection of derelict vehicles that decorate the immediate area. The owners would promise to organise their vehicles, the insurance companies would say "like hell". This would be of little significance to us, if it weren't for two things:

1. the Gurneys went broke after the Eyre highway was moved, and the station house is now available for people to stay; and

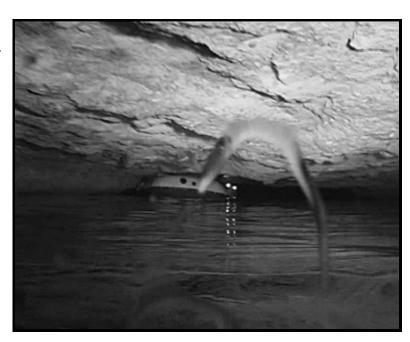
2. one of these cars was a Valiant.

We settled in and unpacked the gear and cleaned some of the accumulated dust out of the house. We noticed a few mouse holes in the kitchen, so we rigged up some rope to string up the food, and settled in to wait for Paul. Tiring of the wait, Keir said "Let's go out to the cave!" Phil and Kevin, having similarly short attention spans, readily agreed, so we got into Phil's car (now considerably taller) and drove off to the cave. It had rained recently, and there was standing water on the road, so Keir spent many happy minutes filming Phil splashing through mud.

Having reached the cave, there was little we could do without the key, so we said "Yes, that's the cave", and headed back to the station, where we were greeted by the Hosie-mobile and then by Paul himself. There being nothing much left of the day, we sat on the balcony with some cheese and beer, and made plans for the week's activities.

The plan was simple: A day or two to get the gear in, Phil climbs the lead, a day or two exploring the great unknown, a day or two to get the gear out, a day off in Eucla, and then off to see a few of the cool caves in WA that Paul wanted to show us. We'd organised some power tools for bolting the climb, and dry tubes to get all the gear through the sump, and, of course, rubber boats for navigating the delightful lakes, imaginatively named one, two and three. Since Kevin was going to be the one to have to organise a callout if we needed one, he was given Paul's CDMA phone, the number of the Eucla nurse, and, encouragingly, the information that he'd need to drive 90 km before he could expect any coverage......

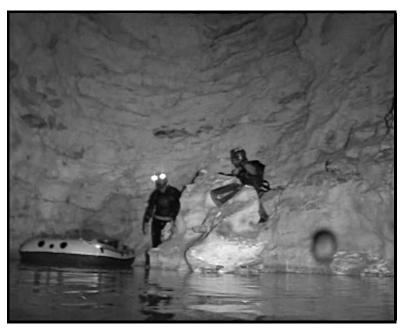
The build-up went as well as we could expect. On the first day, we got the gear into the cave as far as lake 2 and left, well satisfied with progress. Back at the station, Keir explored the wrecks, and returned with a glint in his eye and the information that he'd found the Valiant and it did indeed have booty! It was a model from the early 70s, which had left-hand threaded wheel nuts,



The CZ Vaughan-Taylor in the roof sniff video still Paul Hosie

and they would match the missing nuts on his trailer. Spanner in hand, he left to reclaim this precious loot.

On the second day, the gear had to be carried across the rockpile to lake 3, and this achieved, the divers would continue across the lake, through the sump, set up and start the climb. Meanwhile Kevin would return, and do



Keir and Phil at the landing, kitting up video still Paul Hosie

some photography in the rest of the cave. As the dive lights disappeared into the distance, loud banging and scraping sounds echoed around the chamber. The first difficulty had been encountered – getting the 'Caving Zeppelin Vaughan-Taylor', Keir's extremely buoyant rubber boat, through the roof sniff was proving to be less than practical.

Phil: May the Farce be with you: Keir and I were trying to haul a raft through the roof sniff while the raft just wanted to jam against the roof. The water's deep here and there's no ledges, so all we could do was swim, haul, curse, and try to sink the boat. It shouldn't have been that hard to get it to ride low; there were three complete sets of dive gear and a ton of climbing equipment on board. Just goes to show what forty dollars can get you at KMart. Paul could have helped us but he was having too much fun capturing all this on video, so the two of us had to persevere.

Beyond the roof sniff, there's one final stretch of lake in a huge dome chamber, then a tiny landing

next to the sump. We tied the boat up here and made it our dive platform for the rest of the trip. Kitting up, we finally got to have a look underwater. Below the waterline, the lake opens up underneath the west wall of the dome into a huge annex. This is very wide and drops steeply down to about 25 metres. At this point there's a short squeeze and then a steep ascent to the surface of the final lake, and the end of the known cave.



Phil gracefully dives through the squeeze video still Paul Hosie

OK, this was fine and easy for the other two – Keir and Paul are two of the more experienced cave divers in the country. But for me it was new, exciting and a little bit daunting. Of course, the others were carrying all the climbing gear through in neutrally-buoyant PVC pipes while I had almost no gear to carry, but I was still pretty clumsy. Paul made sure to capture my first trip through the squeeze on video, with me twisting around, knocking into things and generally making a fool of myself.

The final lake isn't particularly large, with virtually no shoreline and no way on at water level. The roof rises a very long way into a classic Nullarbor dome, disappearing out of sight over the top of a pitch opposite to the direction of the sump. The pitch was first attempted by Andrew Nelson, Paul H. and Paul Boler, back in January 2005. They managed to get to a ledge about 6 metres up, left a couple of bolts and carabiners in place and pulled their rope down after them. This time, Paul had bought a stack of aid gear, etriers and bolts and we were going to use siege tactics to climb the pitch double rope with slings and quick draws bolted to the wall.

I estimated the pitch to be about 30 metres, looking from the bottom. That shouldn't be such a huge undertaking, but in this cave there were a couple of things stacked against us. Firstly, the bedrock is very soft limestone, altered by salt water and other corrosive processes into, basically, wet chalk. It's impossible to get natural protection in this and ordinary 8mm bolt casings would be just as dangerous. Paul had brought massive ramset bolts and two powerful drills to produce anchor points which might stay put under the etriers and during abseiling. Secondly, where the pitch changed from vertical to a steep slope we could see many boulders the size of an overloaded Forester just waiting to roll down on us. Simply finding a route up to the top that avoided the boulders was a challenge.

After placing a couple of bolts for a belay I climbed up to the existing bolts and clipped in. From this point I was on belay, and the belayer (first up it was Keir, I believe) had to hang around for an age half in the water under a protective roof as the rocks came whistling down from above. Shuffling to the left along the ledge, I could see a sloping gulley route up to the right for twenty metres or so followed by a two metre overhang. All routes on either side led to the Boulders of Doom, but the thought of hanging from a roof made of wet chalk scared me badly.

Having seen enough for starters, I abseiled off new carabiners – the old carabiners were corroded shut after eight months in the cave. We left the climbing gear out of the water, although I doubted any alloy would survive long in the cave, and made our way back to the boat. Of course, we had to take our tanks out each night for refilling, but we could leave the other dive gear on the shore or in the boat.



Keir and Phil kitting up for the climb video still Paul Hosie

Kevin: Meanwhile, Kevin had returned over the rockpile to lake 2, boarded the CC Hosie, and holed it while attempting to land at the other side. This would mean portaging the CC Moore, rather than having a raft for each lake, and also meant that Kevin would have to wait for the others at lake 2, rather than heading to the surface. Still, there was time for photography before the others returned, and the crime confessed. Paul, it seems, is a very forgiving chap, and Kevin was not keel-hauled, or forced to wade across lake 1.

Having made a small amount of progress on the climb, the lads were keen for the next day's activities. Kevin would help with the carry to lake 1, and continue photographing the cave, while the others went on and continued the climb.

There are a few things that had changed since our previous visits: one being that lake 1 is not as vile, or as deep, as it'd been on previous trips. So long as you are careful not to disturb the sediments, it can be negotiated in reasonable comfort, however its reduced depth makes it hard not to disturb the sediment. Another change in the cave is less pleasant to report. Despite extensive gating of the cave, there is graffiti in archaeologically significant parts of the cave that wasn't there in 2000. A section of the mesh near the entrance gate had been bent back, and rocks had been removed from the under the mesh nearby. We decided we'd do what we could to fix the gate before we left.

The lads on the climb were a little bit late this day, and the reason was apparent as soon as Phil removed his boot and poured out a mixture of water and blood: he had cut his foot inside the cave.



Keir on belay video still Paul Hosie

ter and blood: he had cut his foot inside the cave. Tomorrow was cancelled; we'd be visiting the Eucla nurse.

Phil: There's simply no way you can abseil or ascend on a single bolt in this rock. I knew that I'd have to leave enough time to put two bolts in wherever I decided to stop for the day. I started up, and found that the drilling was depressingly slow. The drill bit clogged in the chalk and the hole had to be cleared repeatedly. As soon as I started to place my first drill hole, I realized that it would take a significant amount of time to place any protection at all. The belayers got bored and scared at the same time as I seemed to make no progress for hours,



Rockfall onto the belay video still Paul Hosie

and knock down piles of rocks doing it. Several metres and several hours later, we'd all had enough. I'd reached the point where the slope eased off a bit and went up to the right under the overhang. It was better to abseil from where I was because the next bit would take me back over the top of the belayers.

Back at water level, I got out of my caving gear and was getting changed into the wetsuit. I was knee-deep in the water and bare-foot, walking across to where my booties were, when I felt my foot slam into a rock. The edge of this rock was so sharp that at first I didn't even feel the cut. Then a burst of red stained the water and I lifted my foot to find that the pad behind my big toe was sliced almost to the bone. Urk. I sat on the rock for a while trying to slow the blood with direct pressure, but it wasn't working, and Paul eventually got tired of me feeling sorry for myself. "Come on mate, we've got to go." And of course we did, since Keir was already gone through the sump before my accident and must be getting very worried by now. I put the wetsuit booties on and could immediately feel my

foot sloshing around inside, but there really wasn't anything we could do except dive back through and walk out of the cave.

Kevin: The Eucla nurse is a fine woman, with a practical outlook that is conspicuously lacking among insurance companies and litigation lawyers. She patched Phil up with Steri-strips and Duoderm, gave us some supplies to do it for ourselves, and told Phil to keep it dry for a week or so. On being informed that this probably wasn't how things were going to be, she gave Phil some rubber gloves to at least try to keep it dry and told him to have at least one day off.

Having come to town, we took advantage of the many facilities — a laundry, showers and a cafe selling a decent steak sandwich, souvenirs and beer. We went down to the old telegraph station before heading back to Koonalda. The next day, Keir and Paul would have to do the climb by themselves while Kevin and Phil spent the day exploring the rest of the cave.



Injured Phil photo Kevin Moore

The whole day was available for playing with the digital SLR. After taking about as many photographs as they could think of, Kevin and Phil decided to see what they could do about the gate, and set about finding the biggest gibbers they could to fill the gap that the illegal cavers had made. It appeared that the pirates had stopped when they encountered the dessicated carcass of a sheep, as that formed the base of the squeeze under the gate.

After the meagre progress of the day, Keir and Paul realized that Phil's leading hadn't been as slow as it seemed, and having reached an overhang, Phil's services would be required, injury or no. Kevin, on the other hand, was taking the day off, having run out of Kevin-accessible cave.

Phil: The idea of keeping my foot dry with a piece of latex glove just wasn't going to fly, so Keir sorted out a dressing to cover the toe and off we went. The belay underneath the overhang represented a sharp change in direction for the rope and there was already plenty of drag for both ropes, so I had to put a long sling on each bolt and then start reaching for the roof. The first two bolts were across to the left and close to the wall, but after that I had to place two bolts horizontally out under the roof. This was really really tiring, since I was hanging from a bolt by the short cowstail with my feet pushed out one way in the etriers while my arm was out over my head in the other direction holding the drill. The things we do....

The bolts at this point needed to hold, since any failure would probably make all the bolts on the roof fail and give me a four metre pendulum underneath the long slings into the wall. I was a happy climber when I got a bolt into the wall just above the overhang and finally got my legs upright. From here,

another four bolts placed me about two metres below a couple of big boulders which seemed to be the top of the climb! I tried to stand up in the etriers to see what I could see and realized that I no longer had the strength to do even that. Time to go, even though we were so close. Someone with more fitness than me would have finished the climb on this day. The rock here was so soft that my first attempt to place an abseil bolt failed completely, with the ramset just turning inside the hole when I tightened the nut. By the time I got a belay together I was exhausted, scared and wanting to get out.

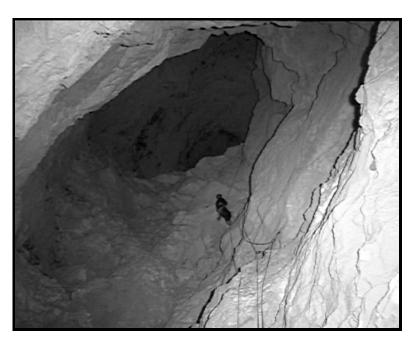
Kevin: Kevin spent the day on the surface, wandering around the area and paying a visit to Koonalda International airport, among other attractions. Koonalda International airport consists of a couple of rows of tires in a more or less flat area of scrub, riddled with rabbit warrens. He got a lift back to the station with a couple of locals. There were a couple of travelers who had also turned up, looking for somewhere to stay; the stockman's hut was free of

caving crap, so they took over that for the night and left us with some carrots and onions that would be contraband at the border crossing.

The next day was the scheduled day off in Eucla and, Phil being knackered from his exertions on the overhang, we took it. It was a chance to get clean, a chance to buy the Eucla Golf Club Tshirt, and Paul knows the proprietor at the Eucla cafe, which has a restaurant at night. Paul was also having issues with the video light, and had melted the insulation. The insulation problem was sorted with the aid of some grout, and we spent the afternoon playing on the sand dunes before returning for dinner at the restaurant.

Our energies restored, the final push was on for Phil and Paul. Keir was feeling guilty about the fact that Kevin hadn't been for a swim in the cave and offered to take him to the openwater-safe parts of the cave. This offer was gratefully accepted, and so Kevin was able to spend a happy hour diving around lake 3, looking at various bits of cave, while Keir floated above like a little angel [Little? ed.] albeit an angel that had forgotten his snorkel and had to lift his head from time to time to take a breath.

While Keir and Kevin were splashing about in lake 3, Phil and Paul were attending to more serious matters.



Abseiling below the overhang video still Paul Hosie

Phil: Ascending to the previous high point, I realized that the very soft rock continued all the way over the top. I decided to give up on placing bolts and free climb the last bit. Two metres above the dodgy double-bolt belay, I stuck my head up between two big boulders and looked at the top of the chamber. What I saw was a dome-shaped chamber 30 m across, with crumbling white walls, similar in form to the rest of the cave. The rocks I was balancing against – which were moving ever so slightly when I tried to climb over them – were at the bottom of a rockpile which rose steeply away to the back of the chamber. The roof came down and met the top of the boulder slope at the back wall. There was no air movement and no break in the slope or the walls to indicate a hole anywhere. Curses, foiled again!



Kevin waits on-shore for the divers video still Paul Hosie

I took a good look around the chamber but I couldn't climb the slope without getting off rope and the entire slope looked unstable. One more attempt to get onto the slope and I almost rolled off the edge, along with the big boulder that balanced there. That was enough for me – I had no confidence at all that the bolts below me would survive a fall from 2 m above. I called out the news to Paul and set about de-rigging the pitch.

Kevin: After the day's disappointments, enthusiasm for further caving was running low, as was time; we'd have at most a day for Paul's cool caves in WA, so we decided to give them a miss this time, and visit on another occasion. There was still the problem of getting all of the gear out of the cave.

Sigh

A day of getting the dive gear out of the cave. The joy was only increased by the land-lubber, who managed to sink another cave canoe, leaving only the CZ Vaughan-Taylor. Being made of sterner stuff, the CZ Vaughan-Taylor proved up

to the task of floating all of the gear across the lakes, so all was well. By early afternoon, all the gear was out of the cave, and the cleaning started. Much of the gear used for the climb turned out to have corroded and was useful only for pack-hauling. The demised canoes were given a suitable funeral, and we scraped together some sort of dinner from what the mice had left us. The mice, by now, had figured out how to tight-rope walk across our ropes and were providing us with serious competition.

It had been a great trip and it was over; Keir had started to worry about how many brownie points he was losing with Sue, but Phil was still keen to do the side trip to the Gawler Ranges. All in all, it had been a great two weeks. We may not have found boundless passage into the great unknown, but we had a hell of a good time trying. Many thanks to Paul Hosie for organising the permits and for his excellent company throughout the exploration.



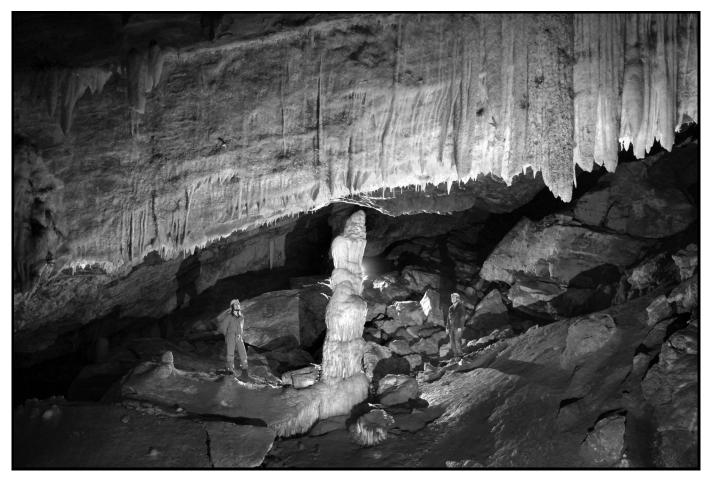
Keir and Paul at Koonalda station photo Kevin Moore

A WARM CAVE TO ESCAPE THE COLD FRONT

CLIEFDEN MAIN, JUNE 11, 2006

By MEGAN PRYKE

Participants: Chris Norton, Alan Pryke, Megan Pryke, Martin Pfeil, Mark Lowson, Steve Roy, Paul Lewis



Lot's Wife, Cliefden Main photo Alan Pryke

A large cold front arrived across all of NSW for the Queens Birthday long weekend. For many, it was the first rain in months, but for those wanting to get out out of town for the long weekend, the rain and cold was untimely. Caving was the outdoor activity of choice for this weekend.

Chris Norton was running the Cliefden trip. It was to be a two day trip being Sunday and Monday. However, as Alan had to work on Monday we made an alternative Saturday and Sunday trip. Saturday we went sight seeing through Orange, including a visit to SUSS caver Ian Cooper. We also had a look around the Borenore arch, for a mild caving experience, fortunately it was not raining.

We were first that evening to arrive that at the Cliefden Hut, establishing a good fire before the others arrived. About 11 pm, Chris arrived with Mark Lowson and Martin Pfeil. Steve Roy and Paul Lewis arrived in the morning. Alan had not been to Cliefden Main about 9 years so this was our point of call.

Cliefden Main was warm as usual. Mark Lowson decided to give caving a miss that day, I wonder if he realised that it was much warmer underground than sitting by the fire in the hut. Alan opened his camera case to let the camera acclimatise and then disappeared to explore a hole which went to a crystal pool. When he came back, the camera was noticeably wet. After some use the lens cleared. Chris positioned himself with a flash gun behind Lots Wife as Paul and Martin modelled. Steve Roy also took pictures using Alan's flash power and Alan, of course, took photos. The slave units were playing up, sometimes Chris's flash went without the foreground one and vice-versa, resulting in more time being used.

In the Laurel Room, more photography took place. I think that Paul and Steve had not been through such a well decorated undeveloped cave before [*Except for Barralong the day before*? ed]. Steve, since his Jenolan trip had purchased his own gear including dairy boots and created some SUSS bat stickers for his helmet. They were of course impressed by Cliefden and of course the famous helictite wall.

At the helictite wall, Chris quickly capitalised on a comfy spot, knowing that photography was inevitable. Alan decided to test Chris's proclaimed comfy spot by insisting that it was in just the right position he need to get a good picture angle, Chris was beguiled, moving aside.

We took off for home soon after exiting the cave, leaving the other three from Sydney to muse over the complaints about photography trips and scrape together dry firewood. Alan also mused that it would be nice to leave the camera behind on the next trip and just have a look.



Helictite Wall, Cliefden Main photo Alan Pryke

BREAKTHROUGH IN BARRALONG

JENOLAN CAVES, 10th - 12th June, 2006

BY PHIL MAYNARD

Participants: Keir Vaughan-Taylor, Michael Collins, Jason Cockayne, Paul Boler, Rod O'Brien, Jack O'Brien, Phil Maynard, Jenny Whitby, Gary Whitby, Darren Dowler, Caroline Dowler, Steve Roy, Paul Lewis



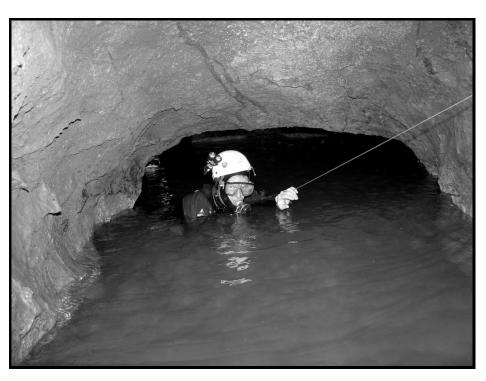
Jason exits the downstream Barralong dive photo Paul Boler

Saturday: This was the first diving trip to Jenolan in quite a long time, so a large group of divers and helpers turned up. Barralong was the main priority for the weekend, because of all the going underwater leads at Jenolan, it's got the potential for the biggest breakthroughs and has dry cave to keep the helpers happy. It was a cold, wet saturday and a good day to be underground, so we got going pretty early.

Barralong is a big extension of the southern show caves at Jenolan. It's a mix of phreatic tubes and collapse chambers, and the second half is famously decorated. The passage runs almost straight south from the show caves into the great unknown. Right at the end, the creek appears out of a lake and runs north past the main passage through some tight rifts into another sump. The upstream dive holds the promise of breaking into the entire southern catchment of Jenolan – at least 2 km of limestone with no stream cave known and no surface creek. Downstream, the course of the creek is unknown for about four hundred metres before it appears underneath the show caves. The creek flows right through the tourist sections of River and Pool of Cerberus before it appears on the surface as a spring beside Blue Lake.

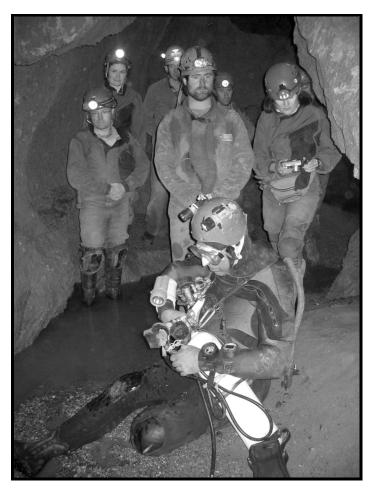
Carrying dive gear though Barralong is difficult. There's a tight section through some rockpile, followed by a short up pitch (we hauled the gear with a rope), followed by some extremely delicate decoration. Over the years, the divers have got better at doing the gear haul and avoiding damage to the caves, so we only took a couple of hours to put the divers at the end of the cave. Paul and Keir dived upstream from the lake, taking some sacks with them. The dive currently ends at a dig at the bottom of a slope. They were hoping to use the sacks to haul mud completely away from the dig so that it would not roll back down the slope.

While they were gone, the rest of us did some more survey of the dry passages near the end of the cave. There's far more here than is shown on the original map, so we're slowly compiling data for a new map, to include all the side passages and the



Paul in upstream Barralong dive photo Rod O'Brien

dive. We connected up an unexpected loop and found more to survey on the next dive carry trip with idle carriers.



Keir kits up photo Gary Whitby

Keir and Paul returned with news that the dig looked a little more optimistic than before. They'd had to look at it without the sacks, though – the sacks hadn't made it through the first squeeze. Somewhere under the lake, there's some sacks waiting to be found again...... We left as much gear as we could for the next day and hauled the rest out, finding the weather truly cold wet and miserable on the surface when we emerged after dark.

Sunday: Rod went for a walk with Jack, and Steve and Paul went to Cliefden, so a slightly smaller group returned to Barralong. Jenny, Gary, Paul, Darren and Caroline concentrated on photography while the rest of us got Michael and Jason into the downstream end of the Barralong creek. The last time this was dived (See SUSS Bull 43(3)), there were three short sumps passed and then Keir spent his time digging out a fourth sump. He thought at the time that he'd cleared the sump out, mostly by removing big boulders, but the sump visibility was zero by then so he left it.

This time, Michael and Jason got through the sump with ease. It was short and shallow, and they found themselves in walk-through stream passage! The passage ran due north and the stream eventually disappeared under a rockpile. They climbed their way into the rockpile and found several climbing leads at the top, as well as a hole through which they could see the stream flowing about four metres below them. Without a tape or ladder, they weren't game to climb down to it, so next time there's a going lead at stream level as well as the possibility of climbing to higher level chambers.

Michael and Jason returned after two hours (only because that was the time limit we'd set; I think they'd like to have kept exploring) looking very pleased with themselves. We hauled the gear out into a clear and cold night and returned to the hut to celebrate.

Monday: Steve and Paul returned from Cliefden and helped us carry gear through to Twin Bridges in the show caves. The divers in the downstream end of Twin Bridges were Jason, Paul and me. About half way between Twin Bridges and Pool of Cerberus there's a side passage which is shown as a question mark on the 2003 map. Keir had been in there and surfaced in a chamber, as well as seeing some tight underwater passage that continued. This chamber is not shown on any map of Jenolan and we didn't know of any reports of a chamber in that part of the system. Jason and I were planning to get out of the water and climb around in the chamber to look for leads, while Paul was going to push the tight underwater passage beyond.

A fairly pleasant and open 10 minutes of diving saw us surface in the chamber. While Jason and I were splashing around trying to take off fins and other odds and ends, we suddenly heard a call! Michael had found us by the noise we were making. He stuck his head into a muddy tube off the Pool of Cerberus and found a way through to the chamber we'd surfaced in. There were plenty of footprints and kneeprints in the mud, so the chamber has been seen before, but not reported or mapped. That's surprising, because it's a pretty impressive chamber, rising 15 m out of the water with one wall entirely covered in flowstone.

Meanwhile Paul got through some desperately tight diving and got to the point where he could stick his hand, but not much else, out into air. He couldn't see what was going on, so was a little surprised when Keir shook his hand. He'd surfaced in the Pool of Cerberus chamber, in the little side creek that's shown on the map. Keir dug him out.

Jason and I got our gear back on and had a go at diving downstream to Pool of Cerberus through the squeeze in the main creek, but it's silted up since the survey and is impassable. We turned around and went back to Twin Bridges, surfacing in time to entertain a tour party.



Helictites in Barralong photo Gary Whitby

NINE DAYS IN THE SECRET DIARY OF A SURVEY KIT

JENOLAN CHRISTMAS 2004

AS TOLD TO MARK STARAJ

Editor's note: Some days after the Christmas trip had come to a finish I happened to be scrounging around in the Equipment Room when I stumbled on a collection of damp and muddied pieces of paper. Hallelujah! I thought. At last we've found those long lost Watergate survey notes that Keir had misplaced. He must have found them and snuck them back into the room out of shame.

After looking more carefully I was initially disappointed to realise these were just someone's rambling doodles. Out of curiosity I took them home and dried them out and what I found you would just never believe. It was a diary of the recent caving trip. But not just anyone's diary. The authors were none other than one of the survey kits! Incredible! Of course you may choose not to believe this but I did not have that luxury. There in front of my eyes was the amazing proof. I now present it to you, my disbelieving reader.

"Dear diary,

"This is Suuntos and I don't know what day it is as we are always kept in the dark. But it must be almost Christmas as Simon has just appeared and can you believe it? For all his scepticism and malignant charm he's actually hanging up Christmas decorations! And just now he's – I can't believe this! You have to see it! – hanging out an empty cave pack for Santa! Hah!

"We do not want to go on any weeklong trip. Too few come back. So Tapey and I are hiding in a corner behind the scaling poles. Book is lurking on the floor, trying hard to look like part of the mess.

"Clang! Clang! Clang!

"He's counting out the poles! Oh no! Tapey – quick pull your end in! It's too late....

They are coming."

Saturday 4th December – Instruments writing.

"Well here we are but Book escaped! She's upset and promised to tear down all the decorations so Santa won't come and instead fill Simon's pack with Bibles or the Manifesto of the Australian Labor Party. Good old Book!

"We had thought that without Book we might be safe but Annalisa had a bundle of A4 waterproof sheets and Staraj found an A4 3-ring binder in the garage. He's called Manual for the Care and Maintenance of Your Wood-Fired Heater. And he reckons he is going to take over from Booky! Where is the Union when you need it? He's too big anyway. He'll get trashed in an hour.

"Just as we hoped the cavers forgot all about us. One team went into Spider to go through the new connection at Last Resort and check out the new finds. Because Staraj turned up late there was no one in the group who knew what survey had to be done and so we were ignored! Staraj's absence again prevented us being hauled up to EndZone with one of the teams. We hate that trip! Its scary – I remember when a cold-rolled aluminium drink bottle came out looking like a SUSS car wreck (name your driver – uurgh, remember being covered in Herring Roll Mop?)

"More luck.... Phil went into Mammoth Cave without us! Just Gary and Jenny Whitby, and Guy McKanna. That was the good news. The bad news is that they found some cave. Sounds like some horrid squeezy rockpile. By the Cosmic Measure, I hope they don't drag us in there tomorrow! Rockpile squeezes are so hard on poor old Tapey. They shorten his lifespan! (Tape says – oh yeah so funny!).

"Anyway they had the BBQ and can you believe it! They ran out of gas half way through cooking the sausages! Judging by the look on some of the Guides' faces they could have finished the cooking by glaring at the food. While someone went to get more gas the others madly chased the flies to prevent them carrying the snags away! What a laugh that was!"

Editor's Note: In Spider Alan Pryke, Matthew Fisher and Shannon Crack got as far as the waterfall climb and Shannon found 4 m of dry streamway after squeezing into the rocks behind station WC11. No stream was seen flowing in Khan Passage. (This stream now has the name Fractal Flow). After hammering and digging, a squeeze was pushed by Gary at the end of the Railway Tunnel to reach a moderate-sized chamber. Use of scaling poles by ISS 3 weeks later did not find anything significant. The EndZone crew consisted of Carol Layton, Megan Pryke, Richard, Robert Howden.

Here is a report on the Railway Tunnel discovery and follow up drawn from comments by Jenny Whitby.

Phil Maynard, Jenny & Gary Whitby and Guy McKanna went to the end of the Railway Tunnel and looked at a small fist-sized hole sporting a breeze. They dug and hammered such that Gary was able to squeeze through to reach a moderate sized room – probably some part of the RT fragmented from the rest by a cave-in. Phil had some considerable trouble squeezing in.

Three weeks later the Whitbys returned on an ISS trip with Gerrard and scaling poles. After the first pitch they dragged up the scaling poles and set them up again. This led to a 45 degree solution tube that went up into the roof. A blade of rock in this area 3ft x 2ft & 6inches wide was removed for safety purposes, and also to enable continuation of the lead which went up further but then was too small to fit past. Beyond it then turned and joined a serpentinous passage. Jenny stayed at the bottom while Gary & Gerrard pushed onwards staying in voice contact. Since they had the scaling poles up the next level, if something happened, they needed someone to be able to get out so Jenny stayed below.



Wishing Well, Spider cave photo Annalisa Contos

Sunday 5th December – Tape writes.

"Instruments has been whinging about a headache all of what was left of the evening. Staraj grabbed hold of us and hauled us to EndZone for some surveying. It was a hard day in the office and we did not get out until 7pm. But we're here. I waved my end at the other kit that limped out of Rho Hole and said 'Look, that could have been us!' but despite the whimpering of these filthy and abused components, Instruments is still complaining. For the Crying Out of Survey Readings, doesn't Instruments remember we must be careful? Remember the Compass That Was Cooked In the Oven by Ian Curse-his-name-forever Cooper? Lest we forget!

"Bet I know what's really been spinning his needle. He just spent all day listening to Woody the Wonder-Manual. He's big, he's blue and he's got three rings. Its so sickening it makes my end curl up. So what did Suuntos do? While Megan carried Suuntos over the top of Staraj Suuntos gave a big rock the shove. Of course Staraj chose

that moment to bend over his notes so instead of pulverising Woody into scrap it whalloped Staraj on the helmet. Luckily Staraj thought Megan did it!"

Editor's Note: Mark Staraj, Megan Pryke, Mark Lowson, Annalisa Contos and Steve Contos went to EndZone and put in 40 m of new survey. In particular an inlet from the north-west has been surveyed. This passage takes a notable breeze – from surface or more cave? It seems to blow out from the cave so an entrance is likely. Maps will make the possibilities here a lot clearer. Photos were taken by the Contos around EndZone and Wishing Well. Meantime Alan Pryke, Phil Maynard, Jenny & Gary Whitby, Matthew Fisher and Shannon Crack put in some more survey in the newly unfolding map of Rho Hole. They noticed that someone had tried to break in by stomping on the gate (since fixed) and that the newspaper secreted in the cave carries the inscription "E G 21/3/1956".

Monday 6th December – Instruments writes.

"Staraj was buggered and Shannon is the only other caver here. A rest day he declares. We will do something really easy today he says. We will go surveying he announces!! But not just any surveying – Upper Oolite! NINE hours later, yes count that. Nine! We finally get out.

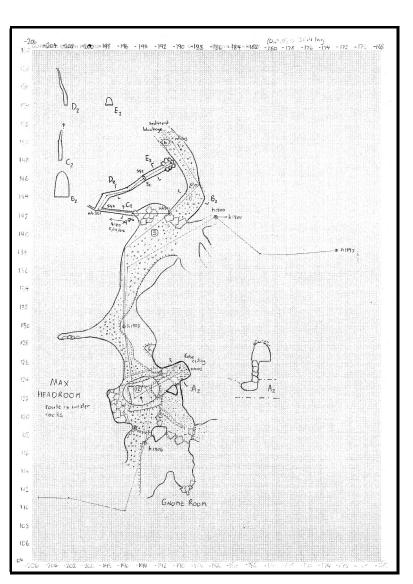
"The kit from Rho Hole lies there muddy and useless outside the hut. It looks like we will be doing ALL the surveying this week.

"Upper Oolite is scary the way they toss around the cave pack. Like guys! Its 20 metres down there to the floor! Take it easy! (and we all know how delicate Instruments are: ooh careful please, you've got me all upside down! - says Tape) Tape - get knotted!

"There was one really funny moment. Staraj and Shannon were surveying this tight passage and it got so small that Staraj couldn't open Woody to record the readings! We laughed ourselves silly and Woody had to shut up for a good hour after that!"

Editor's Note: Mark Staraj, Shannon Crack went to do an easy day's work tidying up loose ends in the mud tunnels at the start of Upper Oolite. Work was put into two passages to the west and north explored a few years earlier by Mark and there is also one to the south that had been pushed by Chris Norton.

They started with the western passage, marked out at its entrance by pieces of charcoal, where Staraj had been halted by a narrow 3m drop that can only be entered feet first and does not allow you to see where you are going. Shannon explored a tube dipping downwards to a squeeze



Mark Staraj draft of Endzone survey

which came up underneath this climb so he was able to spot Mark down it. The squeeze at the bottom had proved too tight for Mark but while there he explored a stream way branch to the south but did not force an awkward bend. Shannon later came back and passed the corner and a partially eroded sediment bank to find more passage ending at a diggable obstruction. The real find was made continuing to the west where an awkward upwards slope was attempted feet first but when that proved ridiculous Shannon managed to turn around and pass it to enter a roomy chamber. No leads immediately presented themselves but it appears inlets enter this room and sink at points in the floor. An estimated 30 m of new passages awaits a small-bodied team. Both leads warrant further pushing.

In the northern passage this was surveyed to a blade of rock that had prevented Staraj from passing a corner to explore 4 m of visible continuing passage. Shannon took to it with a hammer that had been brought for the purpose and managed to get through. Further along there may be a way onwards via a tight climb. Meantime Staraj went back to a side passage noted some 20 m earlier and found that it went on far enough to warrant surveying. It

turned a corner and became quite low but contrary to appearances it did not end after the visible 4 m but instead continued small but going. It was too much! 70 m of mostly challenging passage had been mapped with a further 30 m explored but still to be done. Both branches had been mapped to their original limits but both had split into two more going leads requiring survey and further pushing! After 9 hours of an 'easy' day we had had enough. Three leads to be surveyed had now become five for the next trip.

The area speaks to me of good potential despite its relatively small size and trickiness. Most passages show evidence of carrying streams and sport a breeze. The passages are heading out underneath the valley beneath McKeowns Creek and are 30 m below it. Water clearly still sinks in the creek bed above and once flowed eastwards along these passages but now disappears down new routes further to the west. Is the airflow from unknown entrances south of J13 or connected with undiscovered cave passages to the west and below? More work is clearly required.

Tuesday 7th December – Tape writes.

"Ok so this will be the easy day says Mark. More surveying but only two minutes into the cave in a large rockpile between the Jug Handle & Cold Hole. Can't be too bad.

"Just before they leave Keir and Simon turn up but neither are keen to do anything so Mark and Shannon head off by themselves.

"Easy day? Pull my other end! Seven hours later we crawl out! The rockpile was roomy enough but the edges were really sharp and was chopping up Mark's hands as he kept needing to remove his gloves for sketching. But that wasn't the worst of it. At the end, in some horrible little passage Shannon almost crushed us with an avalanche!"

Editor's note: how to make an easy day of it but still get something worthwhile done? Some years ago I explored a section under The Rockpile in the Entrance Chamber with Phil Maynard and found enough passage to warrant a survey. I wrote it up with a sketch map. I remembered it fairly well so it seemed a good opportunity to get some cleanup survey underway. Furthermore nearby was a squeeze I had pushed into a loose rockpile while following stream passage. Andrew Matthews poked at it on a later trip but only succeeded in bringing down a rock or two and beat a hasty retreat back through the 'Shredder' squeeze. He reported the lead did not go but I was not so sure he was paying enough attention to know. If we felt like some excitement it was just around the corner from where we were surveying.

Some hours later we completed our loop through this complex section. There remained only to tie it into the Entrance Cavern survey and complete a loop down to the Rockpile Route to Southern Section. And one other short side passage I had forgotten but was marked on my 1987 sketch map.

It had taken some time but we both felt pumped to check out my old lead. A streamway branch crawls off to the north from the route to Cold Hole. A stream runs out of here and down Forty Foot during floods. The main crawl north had been surveyed recently but not the short western branch from which the stream emerges. At its end lay the Shredder. After some cursory digging Shannon squeezed through. I tried a number of methods, more digging and finally some hammering and after breathing out I squeezed my chest through. Twenty years had not made me any thinner!

Shannon looked into a hole in the rocks at roof level. Andrew's poking had made it big enough to pass through but much loose rock surrounded it. Shannon gardened it and skilfully he and I opened up a hole going down the other side – through the gap a dark passage could be seen to lead off! The smaller Shannon scouted it out. Easing himself through the hole in a cascade of small stones and shingle he exclaimed in a mixture of surprise and dismay. I followed him down and soon saw why. The passage was walking height! But after just 4 m it ended abruptly with signs that water has been percolating down through the floor here for many years. No way on though.

Shannon was dispatched to get the survey kit and the new find was added on. As a sight was taken down through the loose floor hole part of the wall gave way and I fled downslope to watch as a large pile of rocks materialised beneath Shannon and close by to where I had stood – some of which rolled on down towards him. Escaping afterward it was considered a good day's work and we left with over 90 m of survey and another lead written off.

Wednesday 8th December - Instruments writes.

"Staraj had this plan to push the Jenolan System beyond 23 km. He figured there were some good pickings to be had in Barralong at the southern end of the tourist caves. Sounded like more hard work. Must have been too hard as we never came out of the cave pack!"

Editor's note: On an earlier trip in December 2003 it was realised that the second and upper route through to River Lethe in Barralong had not been included in the 1987 resurvey – in this instance, the Graeme Kates survey. Looked at least 100 m to add on here, maybe 200. Only one of those present had seen this upper route – me. The lower route had been the obvious choice for the diving parties. Time to go back and familiarise for a follow up trip.

The kit was taken in case enthusiasm could be found to begin the survey.

Firstly we paused at the base of the stairs in Temple of Baal. I had never been along the famous Baal Dig – scene of a SUSS breakthrough in 1998, and of countless hours of labour for many years before that since the early 20th century. The crawl alternates between low sections and short roomier sections where stacked rock walls hold back the spoil. On and on it goes. After something like 100 m the passage suddenly attains walking tunnel dimensions albeit briefly. It then narrows down to as it was and before the excitement of the 6 m stroll has time to cool it suddenly slopes sharply down to the left and plunges into a sump. No way through today. Maybe we will never get the 1998 discovery surveyed.

The others had been squeezing along another nearby dig known to Keir as the SUSS Dig. I think enthusiasm had given out before the digging had some 40 m further in.

Onwards we went down more stairs to reach the River Section and followed one of the offshoots up stairs to where the stal encrusted mouth of a passage led off the tourist path. A short way in a comfortable passage of mostly stooping height ends after a distance in a dig with a rockpile obstructed crawl nearby. Once through this we soon found two tubes on the right-hand side. One led up high into a roomy chamber. Three leads presented themselves – a shaft on the other side of a rockfall on the left wall proved later to connect with the other tunnel down below; a steep rising shaft on the opposite wall was slippery with mud and climbed quite high before dwindling into an awkward and disgustingly muddy continuation with little hope evident (but I did not go further to test this); and the last was a fractured, crumbling wall straight ahead which I climbed as far as seemed safe – possible ways on hidden in the shadows of boulders did not look fruitful nor worth the added risk.

Everywhere could be found the initials of Ron Newbould - a guide-explorer of this section back in 1964.

The other tunnel became a low flattener and was the route I remembered from years before. It led to a short but 6 – 8 m tall chamber. Shannon found a well-decorated passage (floor crystals) intersecting half way up but most likely first explored back in 1964. It led to a 4 m drop which he descended with a handline. At the bottom a tight squeeze brought him back to the base of the chamber. It was higher up where the real action was. A climb completed by Keir brought him to a sizable tunnel. In one direction it ends in rockpile and somewhere in here a crawl takes one into the top level in Barralong (which is how I had first visited Barralong). Keir did not find it but had a good look around and although the tunnel shrinks down to some tight passage Keir returned with great enthusiasm for what he had seen. He used a tape doubled over for a handline to come back down.

To complete our visit we ventured onwards along the divers' route to the Blue Tongue Sump and spent some time widening the channel to make the upstream route passable. It was a fun way to cool off but nothing interesting occurred.

That instead happened on the way out. We arrived at the Binoomea Cut entrance where we had come in but could not get the key to open the gate. Simon had been rather looking forward to getting out but now had to wait until we had reached the opposite end of the cave at Blue Lake. After a rather hasty tour of the show caves we finally got out.

Thursday 9th December - Suuntos writing.

"La-di-da-di-da! The easiest day by far!"

Editor's note: Last day for Keir so we went to an old favourite – Glass Cave. This cave was made famous by John Bonwick in 1953 where scaling poles were first put to the test in Australia. The resulting discovery still rates as one of the finest at Jenolan. We didn't bring the poles but a ladder instead in order to see the lower levels to check on another famous reference to Glass Cave. A letter received by SUSS describes the finding of a river in Glass sometime around the 1930s. Inspections of the cave largely dismissed the possibility. The 1980s finding of the Far Country streamway by cave divers within the Jenolan System led out towards Glass and renewed the interest.

Glass Cave is one of a handful of caves that is not large but rambling in a pokey sort of a way. Shadowy nooks, irregular walls and fallen rocks conceal odd and contorted continuations. You never quite feel like you have seen all of the cave.

On this occasion we used a ladder to reach the lowest level. A 5 m pitch descends through a squeeze to the floor of a tunnel. At one end an awkward floor hole gives onto a downclimb. In the floor of this pit another hole drops into another pit. This one is blind and seems to be the deepest point in the cave. A cursory pawing around in the bottom gave no hint of anything further to find.

We returned up the ladder to the chamber above. True to form for Glass, Shannon found a rift hidden behind a wall that led via a tight squeeze to an adjacent upper level some 4 m up. Keir had trouble with the squeeze so chose to freeclimb instead. Once up here Shannon investigated some more ways upward. He managed to squeeze up and avoid a more direct but exposed climb. And later, muttering curses, he allowed Simon to bully him into pushing some squeezes in the opposite direction. In all instances nothing further was found. We wrapped up yet another

absorbing but fruitless visit to Glass.

Friday 10th December – Tape recounts.

"We thought it was the worst of times but we had no idea. All we knew was that this time we were headed for the Watergate Sump area. Tales told by other survey kits tell of the horrendous water and mud. At least one set lost the plot and was reduced to gibberish readings, no one could make sense of them – we have heard they were retired and sent for 're-conditioning'.

"For a time we thought our luck was in. Staraj could not squeeze through from Last Resort and so no survey! But can you believe this? The others took us to a point within sight of the death sump and then DUMPED us! We spent the whole night shivering in the cold wind listening to the mad mutterings of that evil sump. It's such a terrible place we didn't really believe they would come back."

Editor's Note: Plan for today was to commence survey work in Kaos Korner. In order to preserve the survey gear and because a second visit was planned with the arrival of Max the next day I chose that we should reach Kaos Korner via Last Resort in Spider and avoid the horrendous mud of the Watergate Sump. I would also have an opportunity to test out my ability to get through the Suspended Animation squeeze in Last Resort. In case I could not return back up through it I would be bringing the Imperial Cave gate key with me for an exit via Watergate Sump. I gave Shannon instructions for how to find his way in to Water Cavern from the gate – in case that would be necessary, for instance to bring in our packs of change clothes.

Simon argued all along for a trip in via Jubilee. He is none too fussed about crossing the Terror Traverse – and fair enough too. Its no place for the faint of heart sitting as it is over 20 m above the river. However it was a completely uneventful trip and before very long I was looking through Suspended Animation to where Shannon waited for me. This squeeze marks the start of The Long Expected Party passage in Last Resort. I soon found out what I already knew – it's quite tight (the most common complaint of those trying to extricate themselves) and very committing. It slopes almost two metres through the tightest bit to where it leaves you dangling over a metre above the floor. I was soon very worried about shoving my bum through as my chest would be caught before my feet hit the ground. I managed to remove some large rocks at the entrance making access much easier but could make no positive impression on the squeeze itself. I decided today was not the day for it.

I encouraged Simon & Shannon to go ahead and begin the survey without me but neither was keen to nor knew the area of Kaos Korner that well. They took the survey kit and deposited it at the other end of The Long Expected Party. However Simon was not to return.

The opportunity beckoned for the first through trip from Spider to Jubilee and he could not resist. So Shannon and I left and picked up Simon's clothes to meet him on the other side in Jubilee. What would take him less than five minutes would be around an hour for us - especially as we had to change to enter the show cave section.

Shannon led the way – testing my instructions out. It went perfectly until he climbed the long stair into Jubilee. He looked for the centenary plaque marking its discovery back in 1893 – not there! Sure enough a patch of rock sporting empty bolt holes indicated where it once had been. Where has it gone and why?

Finally there was Simon. He had indeed made the first historic through trip to add to his first connection made in October. Those who know Simon would know how desperately keen he is to make his mark on the caving world. Well done, Simon! Those who know Simon very well may choose to recall his dislike of crossing Terror Traverse instead.

Saturday 11th December - Suuntos writes.

"Never, ever have I been so humiliated! All praise the Great Van Allen Belt that I am still here today! The survey was of course an unending torture. Before long we were smeared all over with mud. Max was taking the readings. Predictably my eyepiece became unsightable with mud. His solution? He licked me! May his loops never close! We curse him! [Tape here — okay, Suuntos really does have something to complain about but he should be infinitely glad that he does not resemble a lunch box! What became of Mark's lunch box? — well some things are best left in the dark...]"

Editor's note: Max Midlen arrived to go caving on Saturday and canyoning on Sunday. So with 4 cavers we had a team to take on Kaos Korner.

Max and Shannon entered via Spider and Simon and I rendezvoused with them at the start of The Long Expected Party where the survey kit had been cached. Onwards to Kaos Korner where a survey was commenced from WC110 and up the loose aven on the opposite side. The climb spiralled up some $6-8\,\mathrm{m}$ to where a short horizontal stretch overlay the WC110 station below.

Two ways on existed. The first up a vertical squeeze on our left led to the avens explored by Cooper and A. Matthews

in 1998 – this was the frontier. Ahead a tight muddy hole led on into rockpile and been cursorily explored once or twice before in 1994. With no role as yet Simon was thrown into the job of Chief Explorer and dispatched forthwith. With Max reading instruments and myself on book, Shannon leading with the tape followed Simon through the narrow hole. Excited voices! A pitch had been found!

Sure enough the room on the other side had a passage sloping down to a drop fringed by loose rocks - it looked around $5\,\mathrm{m}$ - and at the bottom a roomy and level passage disappeared out of view behind the rocks at the pitch head. All sorts of possibilities were discussed as Shannon found a devious route down. But it turned out to once again be Kaos Korner.

We turned our attention upwards again to where a climb led into a small room and further tortuous passage in rockpile that petered out. Shannon had an awkward retreat from one such. By the time we had squeezed back out we were all of us coated in wet mud. All the rocks are wet and a steady cold draft pours down from somewhere up on high.

We took the survey up through the vertical squeeze into the next cavern however I could not quite get up through. Still got far enough to see where the next climb awaits - some 4-5 m with some exposed bridging. This was conquered by Cooper & Matthews in 1998 but even Max was reluctant to assay it in his cold, damp and slippery state. It had been almost 6 hours so we left a tie-in station and headed out with the hard-won survey of an additional 40 m before hypothermia would begin to set in.

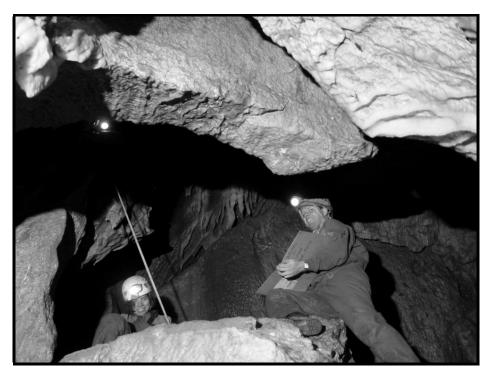
We retreated the way we came in. Two heavy packs of mud-laden gear and one barely recognisable cave pack accompanied Simon and I out of the cave.

There was a surprise waiting for us. The Jenolan Christmas Concert had begun! Our exit happened to be behind the stage and high up on the left. We had a clear view past the stage to where a few hundred people sat and were raptly watching the performers. As soon as we could we crept doubled over down the first flight of stairs so as to be closer to the back of the stage where a giant boulder provided a screen and made us less conspicuous. We waited for a suitable break to sneak down. Suddenly we were framed by spotlights as just behind us one of the singers appeared from behind a rock near the exit. We threw ourselves down to get our ghastly silhouettes off the wall and hared down the stairs and through the crowd. We paused for a while to listen to the rather excellent singing and then sweated on the laborious 200 m climb back up to the cottage where Shannon and Max were already showered and cooking dinner.

Sunday 12th December - Tape writes.

"Its over. Its over! At last we are clean, dry and packed. Let's go home!"

Editor's note: Late in the evening we were joined by Mark Lowson, Matthew Fisher and Phil Maynard amongst others. But only briefly as they grabbed beds prior to a predawn departure for one of the big canyons at Kanangra Walls. For the remaining 3 of us there was really only one option - cleaning. Every single piece of equipment had to be cleaned and dried and packed for return to Sydney and the cottage cleaned up. No small task either of them! It was mid-afternoon before we had it all under control and we waited and waited for the return of the others - they represented our lift home! Shannon left earlier on a coach to begin his long return to Melbourne. Around 6pm Max arrived - we loaded the packs in, dropped off the paperwork and keys to the guides and then took the long way to Hampton as after 4pm the Five Mile Road is shut to traffic.

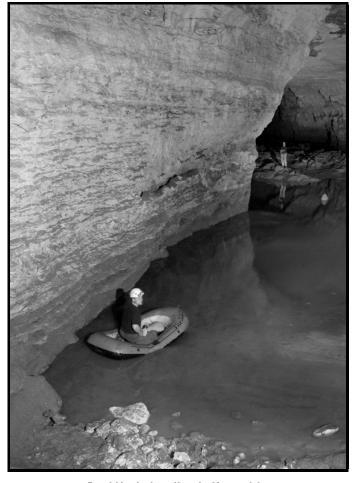


Mark, Megan and the survey kit in Spider photo Annalisa Contos

PHOTO GALLERY



Keir exits the squeeze, Koonalda Video still Paul Hosie



Paul Hosie boating in Koonalda
Photo Kevin Moore

PHOTO GALLERY



Entrance rockpile, Koonalda

Photo Kevin Moore

PHOTO GALLERY



Third lake, Koonalda Photo Kevin Moore

TRIP LIST: JULY 2006

SUSS General Meetings are held on the first Thursday of the month at 7:00pm (for a 7.30pm start) in the Reading 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 Reading 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.

July

- **8–16 Jenolan Mid Year Trip.** A whole week to explore all those leads you've been saving up at Jenolan. Or just come for a weekend. Contact Mark Lowson m.troglodyte@gmail.com or 0415 338 601.
- **22–23 Malaita Walls.** Abseiling trip down the sandstone of the Blue Mountains. Contact Michael Fraser 0419 236 576 michaelfraser172@hotmail.com
- **27 28 Wellington.** Another trip to help restore Anticline cave to its full potential and maybe even find some new cave. Contact Keir Vaughan-Taylor keirvt@optusnet.com.au

August

- **3 General Meeting.** Holme Building 7:30pm Probably, slides from the recent New Zealand trip.
- **5-6 Wee Jasper.** After finding that there were actually some nice caves down there if you knew where to dig, Mark vowed to return. Contact him: m.troglodyte@gmail.com or 0415 338 601.
- **12–13 Timor/Isis.** After a few false starts we have to get there soon.... Contact Mark Lowson m.troglodyte@gmail.com or 0415 338 601.
- **19–20 Jenolan.** Our regular haunt, nice and close to Sydney and with hot showers. Oh and the caving is good too. Contact Phil Maynard Philip.Maynard@uts.edu.au or (home) 9908 2272.
- 20 Mystery Canyon. Michael Fraser's mystery canyon: 0419236576.
- **26–27 Tugallella.** Beat Andrew Trafford's time down the bedding plane squeeze. Hard caving this one, with a great campsite on the river. Contact Andy: 99712693.

September

- 2-3 Cave Diving, Jenolan Caves. In the media, so it's Barralong. Michael Collins 0425 210 361.
- 7 General Meeting. Holme Building 7:30pm.
- 11-12 Jenolan. Extensive caves, luxurious accommodation, no mobile reception... what more could you want? Mark Lowson m.troglodyte@gmail.com or 0415 338 601.