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Articles, news and gossip to [Phil Maynard](#)

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SUSS Bulletin 57(1)



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Front Cover: Peripatus species (Peripatoides aurorbis), unnamed cave, Awakino River area New Zealand

Photo Megan Pryke

Australians of the Year

<https://www.australianoftheyear.org.au/2019-award-recipients/>

Dr Richard Harris OAM and Dr Craig Challen SC OAM

Dr Richard Harris OAM from South Australia and Dr Craig Challen SC OAM from Western Australia are the 2019 Australians of the Year for their heroic efforts as part of an international rescue mission to save 12 boys from flooded caves in Thailand.

In July 2018, anaesthetist Dr Richard Harris and retired vet Dr Craig Challen made worldwide headlines when they joined an international team to rescue a group of boys and their soccer coach from a flooded cave in Chiang Rai, Thailand.

Richard is a diver with 30 years' experience and a specialist in aeromedical retrieval. He has previously participated in complex diving recoveries, appeared in National Geographic documentaries and, in 2015, was recognised for his outstanding contribution to cave exploration. In 2017 he was awarded The Australasian Technical Diver of the Year.

Craig has dived some of Australia's deepest wrecks and has set depth records in diving, including diving to 194m in the Pearse Resurgence, New Zealand in 2011. He was awarded Technical Diver of the Year 2009 at the Australian technical diving conference Oztek.

Both Craig and Richard were awarded the Star of Courage for unwavering and selfless bravery following the successful rescue of the trapped soccer team.



Cave Dive find in Mt Gambier

<https://www.abc.net.au/news/2018-12-13/cavediver-finds-large-fauna-bones-south-australia/10599218>

Cave diver finds prehistoric bones in 'new room' of underwater cave network

A cave diver has uncovered a globally significant collection of ancient bones from Australia's prehistoric period in the dark depths of South Australia's underwater caves.

The jaw bones and teeth from extinct megafauna were in a chamber about 1 kilometre from the entrance to Tank Cave, located on private property.

Local cave diver Ryan Kaczowski said he was exploring the cave system when he found the "new room" containing the bones.

"It's a large collection of bones and they're strewn about the place, so I was able to document them and take photos and get some sizing," Mr Kaczowski said.

He sent the images and details to palaeontologists and was told the bones belonged to several extinct species, including the short-faced kangaroo and the marsupial lion.

One of the species identified among the fossils — the marsupial lion (*Thylacoleo carnifex*) — was the largest carnivorous Australian mammal in the Pleistocene epoch.

An ambush predator, the animal's enormous scissor-like teeth, used in conjunction with a large thumb claw, meant it would be able to dispatch much larger prey quite easily.

Jenolan in the sleet and colds

by Rafid Morshedi and Simon Murphy

07/07/2018 – 15/07/2018

Participants: Steve Kennedy, Rafid Morshedi, Simon Murphy, Stephanie Murphy, Miriam Noble, Deborah Johnston, Shaleen Patel, Paul Coulter, Em Butcher, Dave Apperley, Ken Anderson, Pete Baxter, Keir Vaughan-Taylor, Patrick Larkin

Mammoth squad

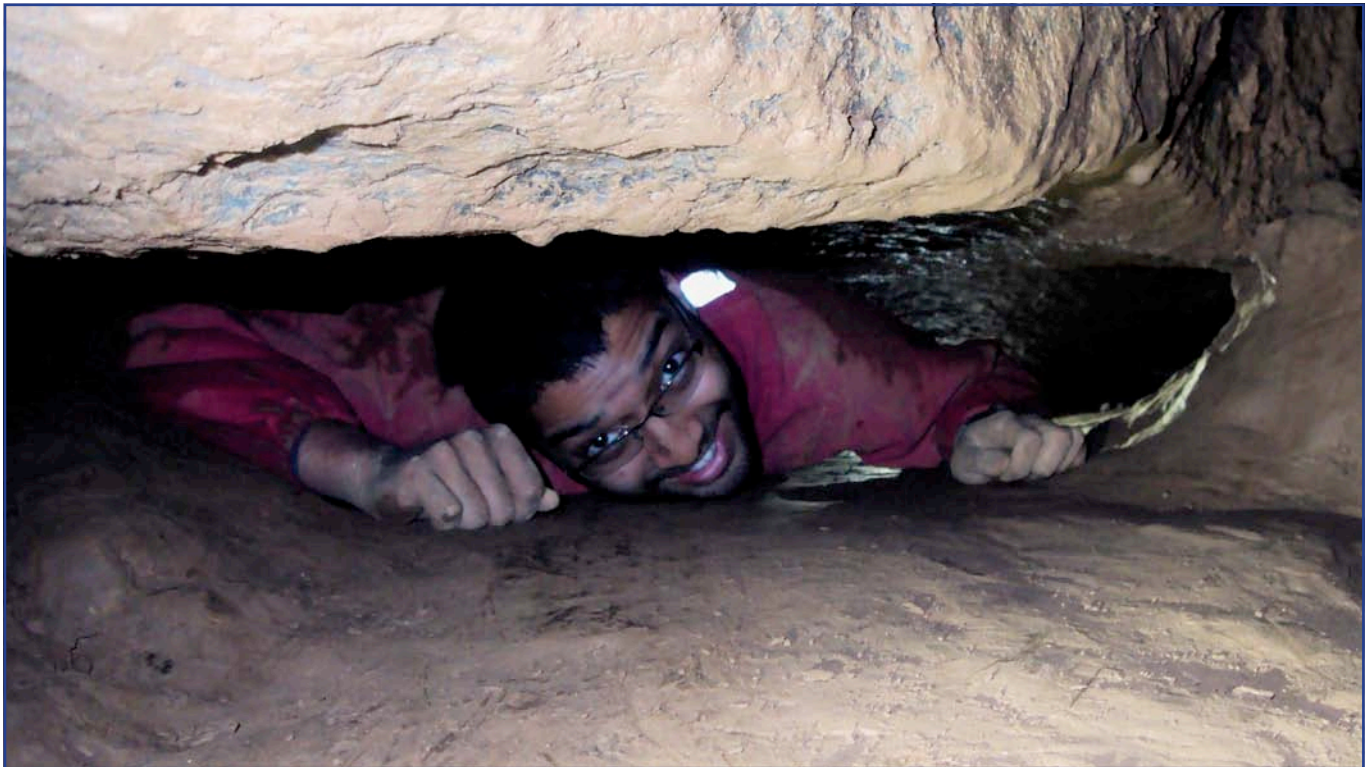
Saturday 07/07/2018

It was another start to a lovely Jenolan weeklong. Steph, Steve, Miriam, Ken and I (Rafid) headed to Nudist Colonies to survey the hard-to-access section of cave. We raced through to the northern parts of Mammoth, but suffered through the crawly sections. However, as Ken put it something strange happened along the way “we began to enjoy it”. Steve got through the entrance squeeze first and videoed the rest of us as we struggled through the chest-crushing flattener. With a 5 person survey team there were plenty of spare hands to push leads. Steve sketched whilst Steph and Miriam operated the Disto. Ken and I were nominated to push ahead and cross off leads.

I headed up a tight tube up and to the left of the entry passage. It seemed to go into a bigger room but was really tight and required a turning motion to get past the blades of rock sticking out from the wall. It was

particularly muddy and as the mud footholds disintegrated beneath me I asked for help in the form of head and shoulder shaped footholds. Stephen to his credit obliged. Despite our efforts we couldn't get through. Cave: 1, survey team: 0.

Completely covered in mud and thus unable to help in any kind of survey work, Ken and I continued to explore. We found a little rift that was quite tight and sharp and followed it. It got to a crack and on the other side we could see a massive room. We were really excited but thought it may be GNC. Either way it would be a good find. There were something like tool marks on the rock, but it might have been caused by water. We later went around to GNC and found the same tool marks and thus had connected Nudist colonies to GNC. We also found a big rift in Nudist Colonies heading north parallel to GNC and climbed it but there were lots of really big rocks up high so we came back down. [*The Nudist Colonies survey was completed in November by Stephanie,*



Rafid in the entrance to Nudist Colonies

Photo Miriam Noble

Miriam and Max Midlen – See the separate article in this edition of the Bull. ed]

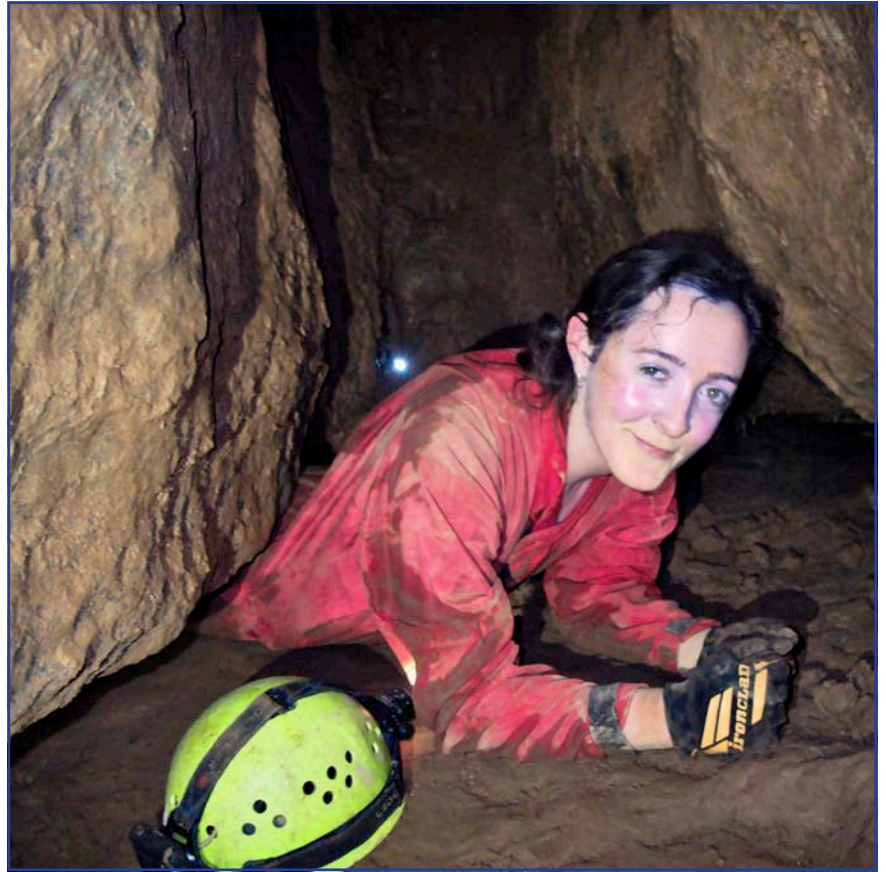
Steph and Miriam continued their survey and eventually came to some gravel in the floor. Ken and I headed back out to get a quick look at GNC before leaving and then met up back with the others at the Nudist Colonies squeeze and headed out of the cave. We were extremely muddy by the time we got back to the hut. Whilst Ken and I could get into Nudist Colonies with our overalls on, we couldn't get back out since the addition of mud made movement very difficult. The weather was fine outside and we had a pleasant walk back to the hut. We found out later that Simon, Rowena, Glen and Deb had spent the day in the southern limestone getting rained, hailed and snowed on. Lesson – it's nicer underground.

The Southern team

Simon, Rowena, Glen and Deb went to the Southern Limestone. The idea was to show Rafid the entrances to the various caves he wanted to see. Yes, you read that correctly. Rafid was actually underground several kilometres away. Due to various gear faffing, this party departed around noon in typical SUSS fashion. As the group drove to the top of the hill on the Oberon side sleet rained down upon them. Having parked up at the top of the Southern Limestone they wondered whether we really wanted to get out of the car. Simon confessed that, once again, he hadn't brought any thermals. They weren't expecting sleet and gusty winds.

Deb slipped when descending the hill and ripped her thermals. Luckily it wasn't a Ken-level rip but there is a new scar on her knee (for the chicks to dig). We located various caves for orientation, including Paradox, Staraj Springs, Enigma, Bloodsucker and a few more that the author has forgotten the names (and probably the locations) of. We also did a little exploration for new entrances, but the weather made it an unpleasant exercise and enthusiasm for that was very low.

Part of the earlier gear-faff delay was in preparation for a pinger-testing exercise. This was conducted in a flood-swallet cave somewhere north of Bloodsucker. Rowena was walking around the surface for some time trying to locate the pinger, not really sure what signal she was looking for. She identified various noise sources, includ-



Miriam emerges into Nudist Colonies

Photo Rafid Morshedi

ing her quartz watch. It turned out that Glen had placed the pinger upside down, so there had been no signal to detect. Rowena didn't look best-pleased.

At this point, Glen started taking off his clothes, much to the bafflement of Deb and Simon. The group was still standing in -1 °C sleet. From his bag, Glen pulled out an extra thermal layer he'd been carrying around all day. He put it on and continued as if nothing happened... Deb and Simon were exchanging WTF glances. We returned to the maintenance shed's carpark cold and wet, encountering a few wild pigs in the valley en-route. It's too early to say whether Deborah will ever be forgiven for advertising this trip as a "cruisy day in the sun".

Bottomless Pit and dive attempt 1

Sunday 08/07/2018

A standard trip to Bottomless Pit was in order, so the group slowly ambled to one of the best vertical caves in Jenolan. Steph rigged the pitch to get her vertical TS form signed off – she passed with flying colours. Bottomless is a very photogenic cave and we took a bunch of photos and had an all-round merry time. Pete takes awesome photos.

We took a different route back from the one taken the day before by Deb *et al.* Today the route was over the top of the hill rather than meandering in the valley. Stephen outpaced us all and “went exploring” on his way down.

Dave Apperley and Deborah carried gear to Slug Lake with ambitious diving plans. They arrived and began gearing up only to discover that one cylinder had drained completely empty. This cylinder was required for safety, so the diving plans were abandoned and it was removed to be serviced (new neck o-ring) and refilled.

Infinite extensions and dive attempt 2

Monday 09/07/2018

Steve, Simon and I headed to the very far reaches of Infinite Crawl in the hopes of finding the JUR. We got there pretty quickly, reaching Dry Syphon in 30 mins on the way. Our route included Hole in the Wall, Debouchement Detour, First Crossing, Middle Bit, North West Passage, Guzunder and then into Infinite Crawl exten-



Pete Baxter gearing up for Bottomless Pit

Photo Rafid Morshedi

sion. There were yellow-painted survey stations in the cave in this area, probably from a survey trip many, many years ago. We crawled through Ten Metre Tunnel and reached a small room with enough space to sit up in before the passage turned left (west) and headed down to another squeeze. We made a little progress in making that squeeze more accessible.

A documentary filmmaker attended to try caving but also get some footage of Jenolan and cave diving in general. He patiently used his talents to try and to get Deborah and Dave to look serious and not giggle. This took the entire day! Equipment was carried as far as Lower River where some diving shots were staged before exiting.

Droning on, and dive attempt 3

Wednesday 11/07/2018

Simon joined Kier V-T and Pat Larkin in some early tests of the capabilities of Pat's infrared drone on the northern limestone. See future SUSS Bulls for the details of this high-tech cave-finding technique.

Deborah and Dave spent another morning trying to look serious on camera, and failing, before returning to Slug Lake to complete the dives that had been rudely interrupted by an empty cylinder the trip before. While gearing up, Deborah discovered that the compressed air was triggering coughing fits (the beginning of a string of SUSSlings infected with the dreaded lurgy). The plan had required two divers, but this was no longer possible as Deborah reluctantly accepted she was going to have to sit this one out. The plan was reshuffled and Dave dived alone, aiming to reach approx. -55 m to continue some exploration. On the way he found that the passage was blocked at the squeeze at -30 m. It took a full 40 minutes to dig this out after which it was time to return.

Watersend, Spider, dive attempt 4

Thursday 12/07/2018

Simon, Pat and Kier went off with the drone again at 7am. Simon then went for a jog up the valley to see where the stream is sinking in the present drought. He made a gps trace of the creek bed all the way between Playing Fields and the stream sink north of Watersend Cave. The data are of mediocre quality as satellites came in and out of view from within the valley.



Typical passage cross-section in Infinite Crawl

Photo Rafid Morshedi

He is happy to make the data available upon request. Details about the stream sink are to be published in his drought article.

After the drone flying and the ~9 km round trip to the stream sink, Simon then joined Em, Glen, Pat and Pat's

children for a trip to Spider Cave. He wanted to see if there was any water in Pirates Delight, as last time he had been there (a year prior) it had been wet. Wet enough that he and Steph had removed their cotton overalls and gone through in their underwear. Weirdos. They confirmed that Pirates Delight is dry, as it was on the summer weeklong.

The squeezes proved too much for some, who turned around between Dingo Dig and Z-squeeze. The party then proceeded to Rho Hole, but there had been a problem with the padlock. Fortunately they also had the key to Aladdin, so they spent an hour in there.

Deborah and Dave returned to Slug Lake where it was Deborah's time to dive but she was once again unable to due being infected with a viral cough. Dave completed a short dive just to confirm that the restriction he'd cleared the day before was still free.

Bloodsucker

Friday 13/07/2018

Deb and Glen headed to Blood-sucker to check out the entrance for future trips, and had a peek around the southern limestone. Dave was starting to feel unwell so sorted out gear for the next diving trip.



Steve Kennedy in Infinite Crawl

Photo Rafid Morshedi

Infinite extensions and dive attempt 5

Saturday 14/07/2018

Simon, Steph and Rafid returned to Infinite Crawl to survey the extension. We surveyed from the junction at the end of Guzunder (with the other passage heading towards Sinkhole Cavern), through Infinite Crawl, heading north. We ran out of the old yellow-painted survey markers at number '40' which was painted in the roof of the small room reached on Monday. We spent quite some effort here and after a few hours we managed to get Rafid through the squeeze at the bottom.

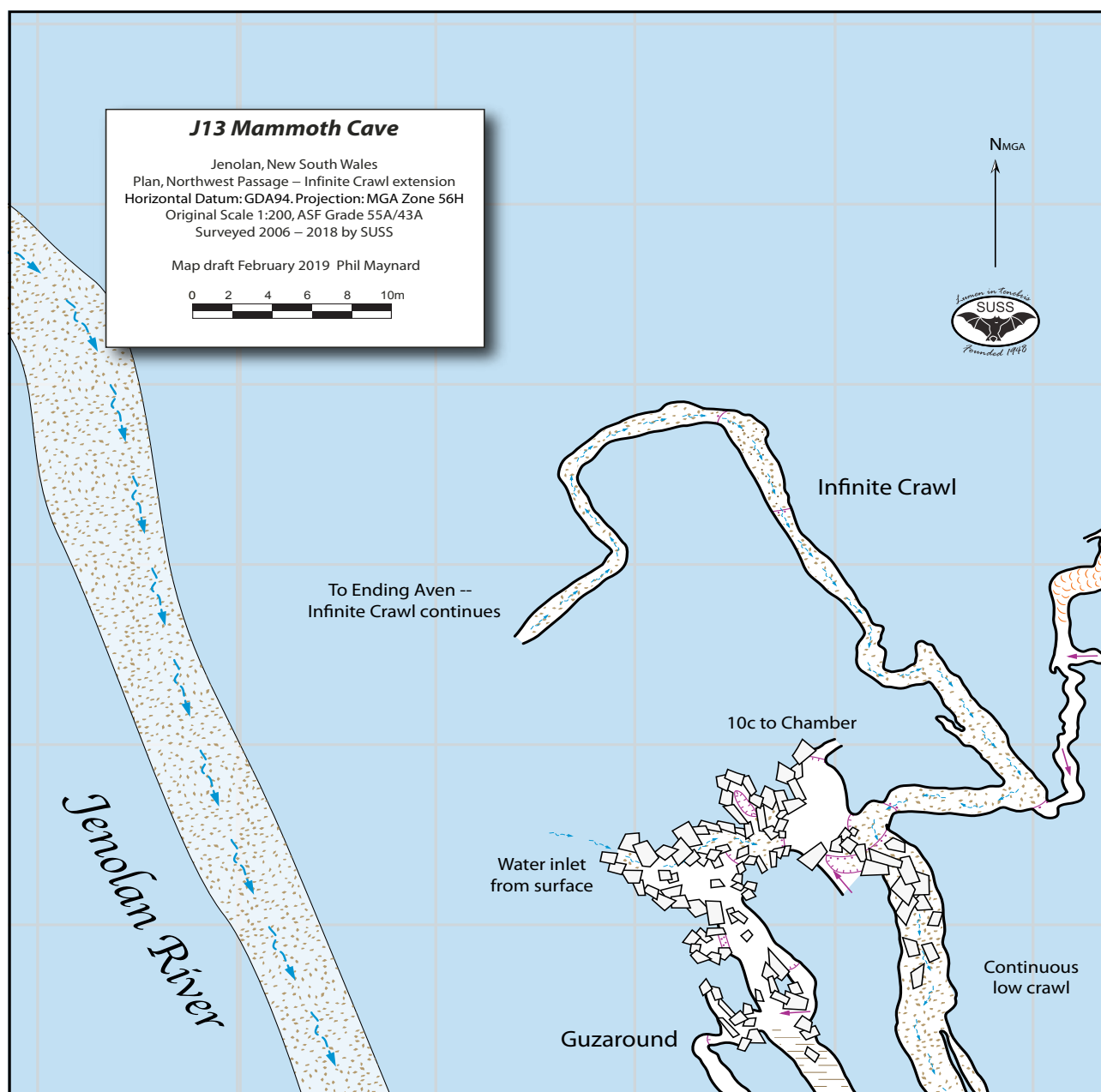
Because space was limited and we'd been there for a while, we breathed most of the good air. We took some rough Disto shots at this point, but had to turn around. This area will need resurveying, taking into account the progress through the squeeze. Rough shots imply Infinite Crawl extension heads WSW rather than NW, so

perhaps it doesn't connect with Diggins Diggins in Serpentine after all? *[It's a surprising direction which takes the extension out under the Jenolan River bed. It's another 60 m NW to the closest point in Serpentine. The next bit was surveyed in October – see the attached map. ed]*

Dave fixed some dive equipment before going home early feeling unwell. Deborah and Glen were also both feeling unwell so did a lazy trip through Dione Dell before going home early (where they spent weeks off work sick with the virus).

Sunday 15/07/2018

Everyone was pretty tired on Sunday, so there weren't any big trips happening. Rafid and Rowena went for a jaunt around the Southern Limestone, visiting entrances of Enigma, Photon, Crackpot, Bloodsucker, Goatshead and a number of other small caves in the area.



Sandwiches at Chillagoe

19th – 27th May 2018

by Simon Murphy

Trip participants: full-week; Simon Murphy, Alan Prkye, Christina Donovan-Oest, Mel Stammel

half-week; Stephanie Murphy, Jordan Fenech



Alan leads the way through the speargrass

Photo Jordan Fenech

Day 0 – 19th May

The journey to Chillagoe got off to a bad start when I received a text at 06:30 from TigerAir, announcing that the flight will be three hours late. Alan, who insisted on flying Virgin/Qantas, would be impatiently waiting in Queensland with an “I told you so”.

The second we set foot in the door at the CCC hut, Alan began with the jovial “I told you so”s. He was pleased to see us really, and we all sat around with a glass of wine, discussing the caves we might visit and our plans for the morning. Well, all of us except for Christina, who had set herself up with Netflix and earphones.

Throne Room and Spring Cave

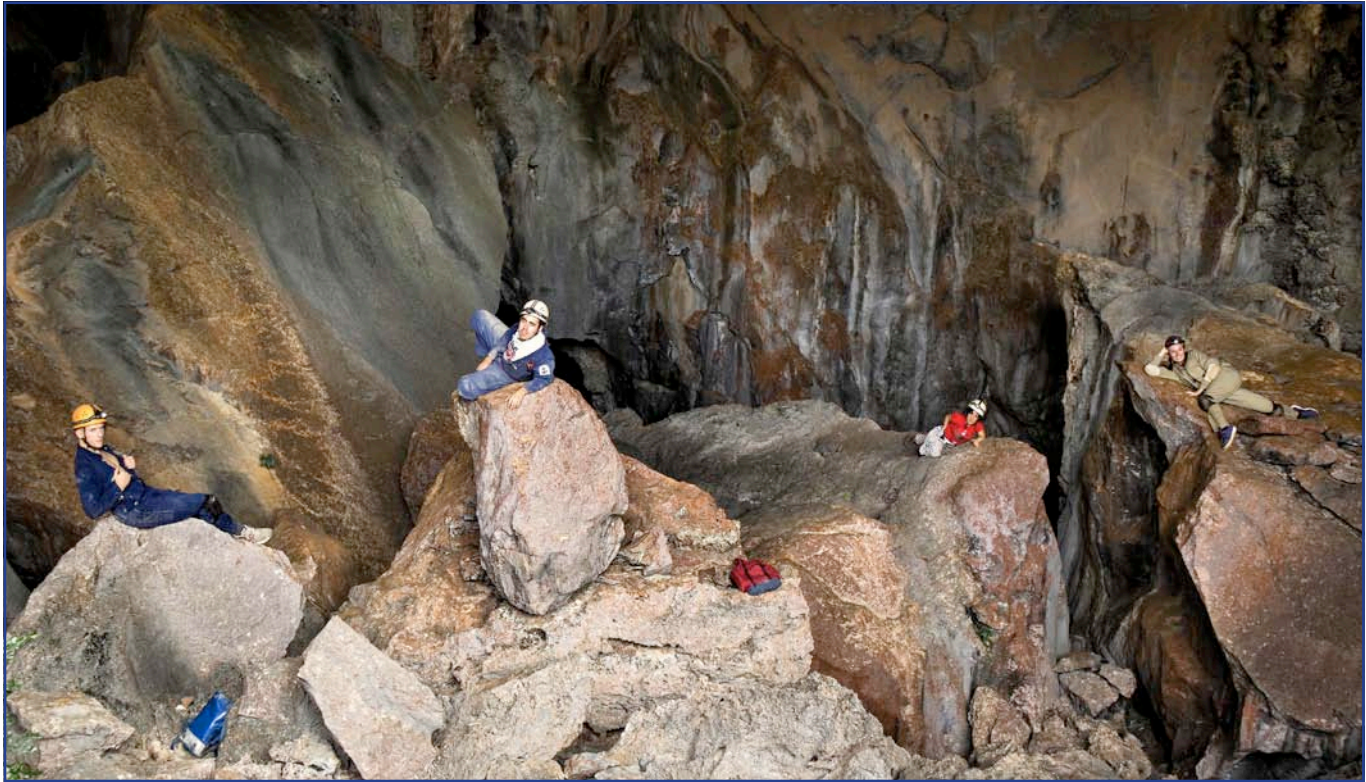
20th May – Day 1

We had originally planned to go to the Queenslander on Day 1, but Alan decided that we should all be well rested for that one. The rest of us looked around in confusion, but Spring Cave is good fun anyway so there

were no complaints about postponing Queenslander by a day. Especially not from Christina, who had missed the memo about our proposed 8 O’clock departure. She emerged at 08:15 to find us loading cave packs into the car. We were happy to wait for her to grab a quick breakfast but she wanted more time so she elected to stay in the hut and study.

Alan bravely led the charge through the tall spiky grass to Throne Room – Mel’s helmet was just visible above the grass. We all bemoaned the speargrass and burrs and picked them out of our socks at the entrance. I had one in my toe, which I tried to pull out but only succeeded in snapping it in half.

Alan gave us a quick tour around this giant cave. We stopped occasionally for photos, including a Victoria’s Secret shot. Jordan very kindly offered us some snakes (of the confectionary kind), but his gesture of goodwill backfired. With Christina absent and Stephanie declining her snake, Jordan’s precisely calculated but heretofore unannounced snake allocation was now incorrect.



Victorias Secret shoot, Spring Cave

Photo Alan Pryke

He was visibly rattled. I quickly stepped in to scoff the leftover snakes before a full diplomatic incident arose.

After lunch, Steph and Mel were in exploration mode in Spring Cave whilst Jordan, Alan and I surveyed. We didn't finish the survey by late afternoon, so we earmarked that for another day. Walking back to the car, Alan convinced himself that the miners will have trashed it. We made several jokes about coming back to find it full of bullet holes as we walked along the dis-used railway track and pondered the scrap metal value of all the iron pegs lying around on the ground. A wild boar ran past. Jordan took out vengeance on "Australia's number one pest" – the termites, kicking over a mound or two. It was a lawless wilderness out there.

The car ended up being fine, of course, but as we were changing out of our overalls a road train pulled into the mining camp and we all got increasingly concerned about becoming parked in. Closer and closer the three-trailered vehicle approached. Jordan had been beating the dust out of his overalls by thrashing them against an old ore truck, regretting his show of aggression as the road train neared our location. We hurriedly mounted our trusty steed (the Mitsubishi Outlander) and escaped unscathed. Phew, that was close, we thought, as we passed the No Entry sign again on the way out.

Back at the hut, the defining moment of the trip arose. Kettle-gate. Jordan went to boil the kettle and found it to be almost empty. "Who left it empty?" he asked, branding us heathens. It seems that Jordan always fills the kettle to the max after using it. Stephanie, Christina and I could not fathom why the kettle could not be filled prior to using it, instead. After all, one can then fill it with only the amount of water needed, hence saving on boiling time and energy. But Jordan wasn't having any of it.

Queenslander (QB to Little Italy)

Day 2 – 21st May

Everyone was well prepared for an early (08:15) start. Upon arrival at the Queenslander tower, Steph, Jordan and Alan rigged the ladder at the Little Italy exit, then we all set off on the short walk to the QB ("Queens Bum") entrance. This entrance is a smooth tube about 1.5m above the ground that is quite tricky to get into, unassisted. Various methods include running at the hole and launching yourself in (beware faceplants!), and contortionist climbing.

We saw the various highlights of the Queenslander, including the Three Sisters, Ice Palace, The Cathedral and MOOON CRATOR! We had a little "fun" in Pages Pass, expending time and effort getting everyone over

the climb and down the other side by a counterweighted belay system, only to realise at the very end that an eyelet had been installed above it that we totally missed until the last man down (Jordan) spotted it. By this point, I had already sat for an uncomfortable amount of time on the narrow ridge at the top that is barely big enough for one bum cheek, part of which was also spent with Mel straddling my lap.

We had another photography session near Mooon Crator before posting ourselves through The Letterbox, viewing the Roman Arena and heading for the exit. The Little Italy exit is peculiarly difficult to find. The junction to it is located in an obscure location, behind rockpile in passage large enough that you'd never think to look at the rockpile. Alan was quite aware of this, presumably from having had trouble in the past, so we found it and headed out without difficulty. Until it came to de-rigging the ladder, that is. The bottom of the ladder had tangled itself among the cave coral in such a way as to be irretrievable from the top, so Jordan had to climb back down to free it, then back up again carrying the bottom of the ladder with him. It was a team effort, really. Updates on how the rest of the team helped will be provided when we can think some up.

Open Sesame & Assorted Shapes

Day 3 – 22nd May, (Spring Tower)

Our primary goal was to tie the existing survey in to the cave tags, which are high up and separated from the caves proper by spider webs and sharp limestone, as is typical for the region. After the Open Sesame tag was tied in, we explored remaining leads in that cave, which was mostly the small stuff that Alan and his previous accomplice ran out of time/enthusiasm for. They were small and abnormally dusty for Chillagoe. Mel had found something of interest and yelled at the top of her voice for some assistance. The thing is, she had forgotten Jordan's name and was calling for "Jared" in his place. So Jared and I went to look at what Mel and Stephanie had discovered. The gentlemen were working their way over when the ladies began raining large quantities of dust down on them. The dust rapidly filled the volume of air and the gents briskly evacuated the area. Jared bore the brunt of the dust cloud and was left coughing for some time.

Christina was our designated climber to explore a couple of leads that were a little higher up, and she completed the first with consummate ease, minus the unfortunate rip in the backside of her overalls that only grew with



Simon and Mel, Three Sisters Chamber, Queenslander

Photo Alan Pryke

time. She was, however, having some trouble with spiders. She had forbidden us from mentioning the word ‘spider’, so at this point we had resorted to replacing “spider” with “S-word”. We soon realized that this substitution would not work, on account of Christina being able to spell, so they were referred to as “sandwiches.”

After wrapping up the Open Sesame section, we proceeded to the connected cave, Assorted Shapes. Another cave tag needed tying in here, and Jared kindly volunteered himself for scrambling whilst I waited at the

bottom to assist with the disto-ing. We completed this part of the survey, regrouped, and Jared and I had lunch whilst Christina and Mel enjoyed a nice stretch out on the flat ground beneath blue sky. It was not until we were packing our lunch away that Christina realized this was a lunch break, so we then had a second, consecutive lunch break before heading into the “underground” sections of the cave. (The altitude of the cave is actually slightly above the altitude of the ground, but the limestone tower raises up above ground, so whether you’re really underground is debatable.)



Simon and Stephanie near MOOON CRATORR

Photo Alan Pryke

Assorted Shapes is an interesting cave, with a tough vertical squeeze to enter, and a neat Jaw-like entrance into an upper chamber that I named Smaug’s Jaw, even though I didn’t have naming rights.

After the “underground” caving, we did some surface exploration. In particular, we were looking for a large ladder pitch that Alan had previously identified from below, at the northern end of Spring. We found that quite quickly, and from there we all fanned out, looking for tagged (or untagged!) entrances that might lead to it. After around 30 minutes we stumbled across CH257 and CH286 and were quite pleased with ourselves, only

to realise afterwards that they were just 20 m away from Open Sesame (CH256) where we started. Stephanie and I independently found another untagged entrance on top of the tower, but there was a blind pitch that needed a tape to be inspected so it didn’t get pushed far. We suspect that’s why nobody has ever tagged it.

Late in the afternoon, the smell of smoke filled the air. We couldn’t find the source from the base of the limestone tower, with all the foliage around. We walked back to the car, which despite Alan’s concerns was neither on fire nor riddled with bullet holes. It wasn’t irrational of him. We’d had some difficulty finding somewhere to

park, and the place we found was far from ideal. After all, it takes a serious off-road vehicle (not a hire car!) to proceed far off the road. On the other hand, parking directly behind the “no unauthorised entry” sign might have been seen as provocative, particularly after Jared’s display of aggression the previous day.

On the drive back to the hut we discovered the source of the smoke. The 6 O’clock arsonist was wandering around, setting the grass alight. We would see his fires each evening for the rest of the trip.

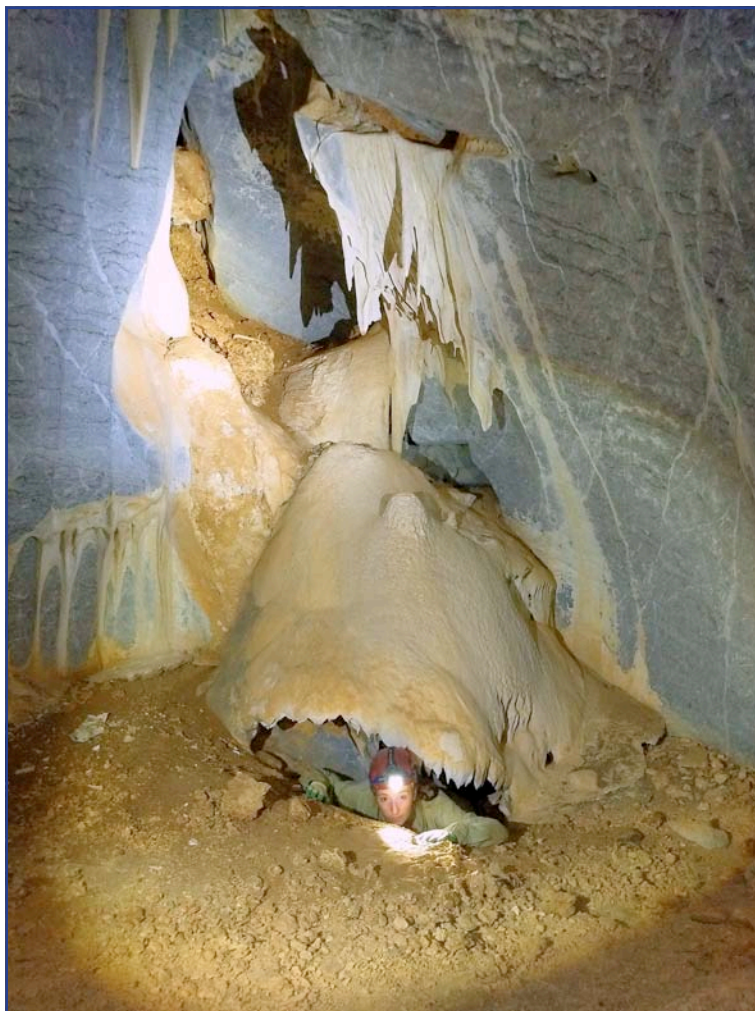
Castle Cave (Markham Tower)

Day 4 – 23rd May

Alan had surveyed some of Castle Cave before, with Phil Maynard and I helping on different trips in 2017, and Megan Pryke helping the year before. It’s a great cave and some survey leads remained to be investigated. One of these was down a ladder pitch of uncertain length. We took a 10 m ladder and a 20 m rope for belay. I volunteered to be the ladder guineapig and to see if this lead went anywhere interesting. It was a difficult descent with the ladder repeatedly catching on the cave coral and needing to be freed before downclimbing, but it was manageable with Steph on belay. Until the end of the ladder, that is. Then it had to be downclimbed without the ladder. The effort paid off – it went!

First there were a couple of 5 m rooms, then a much larger room at least 20 m across, with a daylight hole 20 m above and leads in various directions. I returned to the group, reported my findings and suggested a full day’s survey would be needed for this section. But it wasn’t to be. Steph and Jordan were due to return to Cairns for flights back to Sydney, and Christina and Mel had decided on a half-day, so the survey was postponed for a time when more than just two people (i.e. more than just Alan and I) were available.

In the afternoon, 4 people left for the hut and Alan and I tied off a few loose ends in the Castle Survey before beginning our search for the CH502 entrance to Centenary Cave – Silver Jubilee extension. The book (Chillagoe Karst) had a description of the location: “Entry is at the base of the bluff along the cliff line directly opposite Castle Cave CH206.” This description is a little ambiguous because “opposite Castle Cave” is not a clear description for the entrance! Alan and I searched the base of the bluff extensively. Too extensively, in fact. We set off in the afternoon Sun just after 1pm and ended up



Stephanie emerging through Smaugs Jaw

Photo Simon Murphy

spending 3 hours circumnavigating Markham Tower, while fending off green ants, grabby bushes and burrs. We found ourselves high up on spiky rocks, wondering how we’d get down. We were quite concerned about how we would get back to the car on the opposite side of the tower when we spotted the creationism camp. Hoorah! It was nearby and we could follow the road back to the car. CH502 would have to wait another day.

Castle Cave again!

Day 5 – 24th May

Our mission was to visit Castle Cave to survey the extension, and this time we took the 20 m ladder. All four of Alan, Christina, Mel and I went down the ladder pitch. Alan and I began to survey and Mel and Christina explored around. It was ~3pm when we finished surveying this area and found Mel and Christina giggling away in a corner of the cave. Seems like everyone had fun! Christina found and pocketed a cane toad, which later had a wee in her overalls before she released it. She didn’t seem to mind.



Alan sketching in Spring cave

Photo Stephanie Murphy

After surveying this lower area, one final lead remained – the Toilet Bowl from 2017. This also needed a long ladder, so although the day was getting on, it made sense to get it done. It was a free-hanging pitch with a couple of leads, each of which ultimately went nowhere. Also of interest here was an old cave pack! It was easy to see how a cave pack would fall down here and be very difficult to retrieve. It also stood out clearly, with its blue colour and white logo, contrasting against the mud floor. I attempted to pick it up, but failed. It was extremely heavy! And cold. And ... firm. "Oh, it's a rock," I exclaimed in confusion. A very backpack-shaped rock. Particularly blue limestone, with a couple of white patches that looked quite like a logo and text. How surreal!

At 4pm, Christina and Mel set off back to the car whilst Alan and I renewed our search for CH502. We found lots of rockpile collapse but nothing significant. Alan eventually battled through foliage, got attacked by green ants and found his way high up the tower. I didn't feel like getting thorns and ants embedded in me, so I waited below. Then Alan finally found CH502! It was large, like the QB entrance to Queenslander. Alas, we were out of time to explore. Alan, from the top of the limestone tower, found an easier way down to the iconic striated walls of Castle Cave. I, on the other hand, was struggling

to find a way back over the rock or through the dense foliage. We were 20 m apart, but it took 20 minutes for us to reach each other. In the very last of the daylight Alan and I negotiated the limestone with headlamps on and got to the car with almost no ambient light remaining. Stats for Castle Cave: length added 207 m, total length 995 m.

Spring Cave Survey

Day 6 – 25th May

Christina and Mel decided to have a day off from caving, so Alan and I took the opportunity to put in a full day's survey. There were visions of large chambers and a timely wrap-up, but as the day went on, so did Spring Cave, and it became apparent by lunch that the survey would not reach completion this year.

CH502 Centenary (Silver Jubilee extension)

Day 7 – 26th May

Having finally found this cave at considerable expense (there wasn't much left of Alan's overalls, and green-ant attacks are quite a price to pay), Alan insisted on visiting it, with no complaints from the rest of us who were looking forward to a sporty final day. We had an old map (it cannot reliably be called a survey, but more on that later) and that map indicated that a 10 m ladder would be required.

We sussed the route to the cave. It is NOT at the base of the bluff. Reach the towering striated walls of Castle Cave, then observe the rock pylon opposite. The goal is to ascend behind the pylon via its eastern flank – keeping the pylon on your right. Go past one deep hole (untagged entrance?) and the CH502 entrance is in a large collapse. It is a simple downclimb over rockpile all the way to mud floor level. The area near this entrance is unremarkable. To continue, climb up a steep dirt slope then over rock to a sharp left turn. A short, exposed climb follows, then a step across to three adjacent bolts. We rigged our ladder here with a rope belay, though the climb (3c?) is not too hard and could probably be negotiated without the ladder, especially if one were to rig a tape. Here, the cave opens up to vast chamber, some 40 m across. There are daylight holes starting at 20 m above, and the top of the tower can be seen a further 20 m beyond. The daylights can actually be used to abseil into this cave, but be sure to bring a 50 m rope and some rope protectors!

There is plenty to explore, and explore we did. The old map suggested that one can exit by CH200 from here, so we left that part for last and left our ladder rigged since

we wanted to be back at CH502 for easy access to the car. The daylight provided great natural light for photos and Alan had his flash guns, too.

After exploring most other leads, we pressed on in the direction of CH200. But where was it?! Down the 18p? That wasn't even on the map! Oh dear... maybe up to the obvious entrance? But that wasn't on the map either. How about under the rockpile? No, that didn't go either.

Alan eventually found the way, up to the apparent entrance, across a central collapse, over to the top of a large pitch on the other side. Oh! That's what we needed the 10 m ladder for. Well that'll be another trip for another day, then. We decided we should fix the survey by starting one of our own. We began in the vast chamber, in the direction that we had explored most completely. Alan and I spent three to four hours surveying whilst Mel and Christina explored and slept in alternating levels of energy and enthusiasm. We mapped 260 m of cave, only to realise afterwards that we had surveyed the better section of the existing map. We noted a few extra passages and explored them thoroughly (compared to the old map) but the great improvement will be made in the next visit – soon we hope!

We left the way we came in, out of the collapse and down the flanks of the rocky pylon back to the Castle Cave tower. Everyone had had a close encounter with a nest of green ants by the end of the day, though not as spectacularly as Jordan had some days earlier when he had to remove his overalls entirely.

Back at the hut, Max from CCC arrived to accompany Mike Tarpeton, who was doing a swiftlet survey. Max

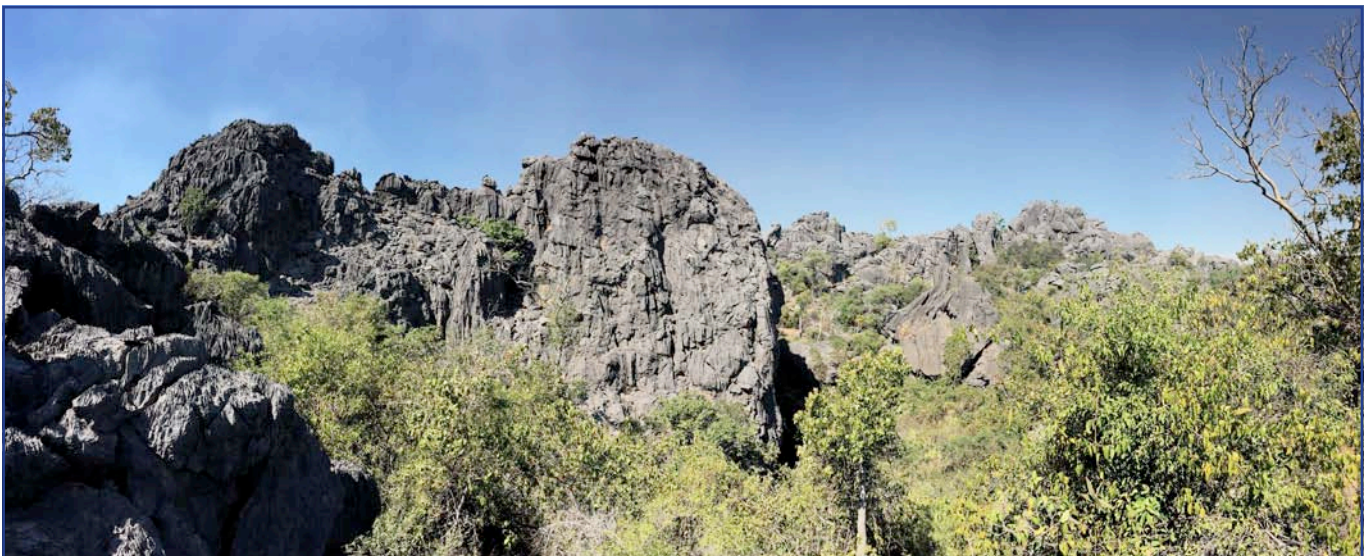
explained that the bolts for ladders in CH502 were recently installed for through trips for kids. Max doesn't bother with the ladders at all, apparently. We suspect he is well accustomed to the Chillagoe Karst and imagine he could nimbly traverse the rillenkarren by moonlight like a mountain goat of the Himalaya. It's probably harder to be a mountain goat when you're carrying a cave ladder in hand like us, but that's likely the way we shall be continuing.

Day 8 – 27th May – Home time

Cavers beware! It seems that Chillagoe Council have made the refuse tip a limited-hours enterprise. Sunday is not included in those hours. If leaving on Sunday, clean up as much as possible on Saturday morning.

Mel's flight was late afternoon so we set off between 9 and 10am in an effort to allow plenty of time for sightseeing at Barron Falls on the way back. Despite our predictions, Barron Falls were not more impressive in late May than early September. They are still well worth a visit, and the gorge looks beautiful. Alan then directed us on a driving tour of Kuranda. Christina got very excited at the thought of the Centre for Venomous Animals, until she realised they had no snakes and it was mostly spiders, sandwiches and jellyfish. Time was pressing anyway so we drove Mel to the airport.

And that's where the fun had to come to an end on another excellent Chillagoe trip. There will no doubt be another next year, so do keep your eyes peeled on the SUSS trip list for future tropical adventures.



Typical karst towers at Chillagoe

Photo Jordan Fenech

Small naturists required

Nudist Colonies, Mammoth Cave Jenolan

Stephanie Murphy

Stephanie Murphy (3 trips), Miriam Noble (2 trips), Steven Kennedy (2 trips), Phil Maynard (1 trip), Simon Murphy (1 trip), Rafid Morshedi (1 trip), Ken Anderson (1 trip), Max Midlen (1 trip), Dan Noble (1 trip), Dan Wood (1 trip).

In December 2014, Phil Maynard and David-Stephen Myles completed the survey of North Tunnel in Mammoth Cave from Half Moon passage to Great North Cavern. Their stats: 45 legs; 87 metres; 542 bruises. Phil noted in the Bull article (53-3) that Nudist Colonies would be surveyed when he could “find some small people”. In 2018, Phil told me about the survey and that they hadn’t been able to survey Nudist Colonies. He asked if I was interested in completing the survey of the area and that “it probably goes about 5 metres”. I agreed to coordinate a team of “small” people to survey Nudist Colonies. Our stats: 43 legs; 135 metres; 3 trips, 10 people; 1 survey course and 600 bruises (just on me alone).

Nudist Colonies is located in far north Mammoth cave and is a difficult trip that should not be underestimated. The entrance to Nudist Colonies is through a tight squeeze to the west of Formation Squeeze. This squeeze is around a body length with nothing to push or pull off, it consists of flat rock ceiling and floor so

getting through comes down to a combination of experience and chest size. Everyone needs to take off their helmet and most people will need to ditch overalls or maybe more, hence the name. If you can squeeze under the bench in the Cavers Cottage you will be fine. Once through the squeeze, you enter a main passage running north-west with a number of side passages. It appears to have once taken a steam with a number of sizable river rocks, however, the area is mostly choked with mud now. Passages lead off into steep climbs or descents. Two small fissures lead into GNC or North Tunnel but are too small for humans. There is a notable lead above the entrance squeeze to the south-west. This was explored by Rafid Morshedi who gave the muddy vertical squeeze a valiant attempt. Simon Murphy also tried, but gave up when his headlamp fell off. The passage does continue but a lack of foot holds, an abundance of mud, a vertical squeeze and lack of time meant this was not fully explored. It is not clear whether this lead holds much promise or reduces to a formation choke.



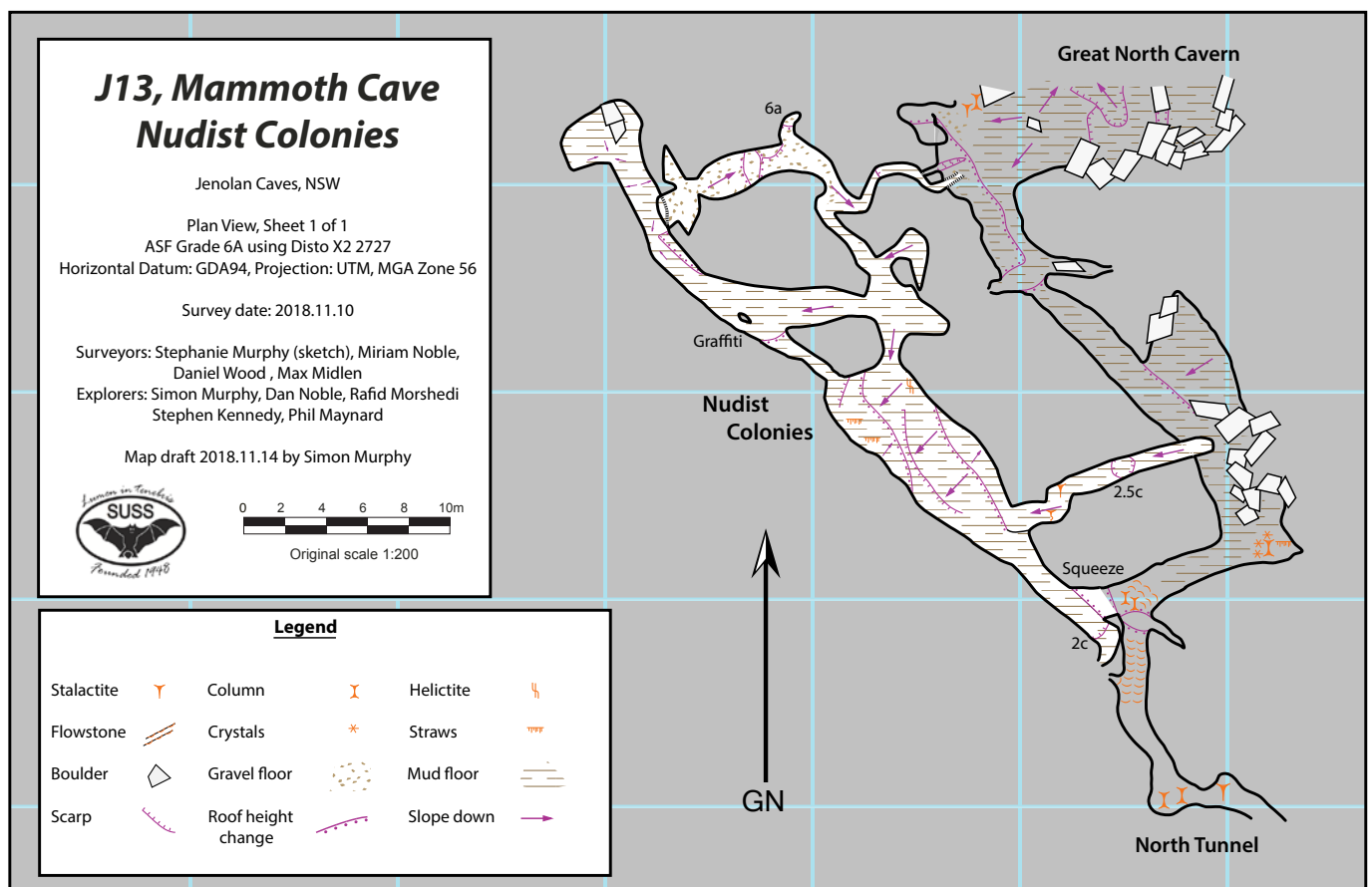
Stephanie in the squeeze at the entrance to Nudist Colonies

Photo Rafid Morshedi

It took 3 trips, each around 10-12 hours, to complete the survey. The distance from the entrance through the crawling cave passages to Nudist Colonies meant an early morning start was required each time and an acceptance that our team would be last back to the hut. We would also be significantly muddier, but we wore that mud like a badge of honour. The squeeze certainly provided entertainment each trip. We had one person trying to go through with a space blanket in his chest pocket, another saying “hang on a moment” and producing a large quantity of cereal bars and chocolates from his overalls. A third was reluctant to lose any of his many layers to get through the squeeze, but after sus-

tained encouragement and some peer pressure he did make it through in just his underwear. One individual made it through the squeeze fine on the way in but Nudist Colonies truly lived up to its name by claiming all of his clothing on the way out, much to the surprise of the person watching! [*What has been seen cannot be unseen. ed*]

The survey of Nudist Colonies is now complete and will contribute to completing the Mammoth survey project. It's possible that there is more to find at the northern end of Nudist Colonies, since the cave is developed along strike (North west – south east).



The Lost Cave in Kanangra Walls

Text & photos Keir Vaughan-Taylor



It was a dark and stormy night..... but here's a picture of Kanangra on a bright sunny day

Thirty years ago we had one of those SUSS epics. A river flowing over Kanangra's 200 meter vertical waterfall was more swollen than usual. It lumbered over a precipice next to where canyons begin their abseils. The water plunges temporarily free of *terra firma* but soon the full force of its free-fall turns into a frightening physical force struggling against the confines of a canyon battling with nature's fury.

Those of us on the lower pitches could feel the blast of water plunging out of the adjacent canyon along a narrow ledge where we dallied waiting for the tail members of our team. Roaring spray whipped across our bodies, carrying away heat and creating an imperative to spend as little time as possible on this folorn ledge waiting.

The upper rope couldn't be pulled down by our derigging group, working in a continual rain driven up into the sky rising out of the nearby cataract. Looking upwards I could see through the "rain" that their hauls on the rope were failing to coax it down. Above the water's roar I yelled to leave the rope.

After one last futile attempt, they tied my poor rope off to one side, as far way from the waterfall as possible, then leaving it behind descended the last section of the main face. Joining our group we all lowered ourselves down the last pitch of the wall into a swirling pool where we escaped to sanctuary on a lower rock platform. We were now missing one of our main ropes so we decided to bail on the Kanangra Main full trip and instead bush bash out of the the Kanangra Canyon and back to the

mountain plateau, our cars and ultimately a hamburger on the way home.

I wanted my rope back. Retriving my rope needed to happen the following weekend or someone else would find it and claim it as a charitable donation from the canyon. I needed a more experienced group to go with me on this trip. Most of the week it was raining so the water would be even higher on the next weekend. I managed to find some experienced SUSS canyons. Mike Lake didn't want to go but I nagged him and he relented. We had rope, we had ascenders, some climbing gear and a team of some of the best SUSS canyons in the business. What could possibly go wrong?

The next weekend was overcast. The rain had stopped but the river plunging over the edge at the top had become an awesome behemoth. Millions of tonnes of water rams out into space. Mostly quiet in its free fall, it drops into a canyon where its wrathful energy is released in a churning explosion as though recoiling from the wrathful vengence of some thunder god. Our meek human forms passed alongside that realm without being noticed by the angry god. Abseiling Kanangra main face went without problem. The rope was retrieved and at the bottom we looked back with awe upon the high cliffs with wild waters plummeting down ultimately making it into a lake across which we just had swum. At the start of the waterfall we could see another group just starting out. Not wanting to be held up by another team we started off to the next pitch and were to discover a change in the temperament of the canyon.

I had never noticed how close the walls of the canyon came further down. Usually a scramble across a set of cascades brings a canyoning team onto the first of many more abseils but now a pulsating monster was confined by two narrow vertical walls. Apparently there was no way forward and our last possible walking exit out of the canyon had been left several pitches ago.

There was one small ledge above the churn – maybe a handspan wide with sparse handholds in places along the traverse. I was a long time placing protection in cracks and joints, rigging the rope tight enough to prevent a fall. It's probably the only time I have ever used a piton. Pitons were derided round campfires as un-useful but without those wizz-bang climbing chocks on hand I am glad it was there on that trip. Mike belayed me, criticising my rigging as usual. On this occasion I listened to whatever I could hear above the roar not far below and acted on any helpful detail. Each member of our team made the traverse and Mike, the last to cross, removed the rigging as he made the crossing.

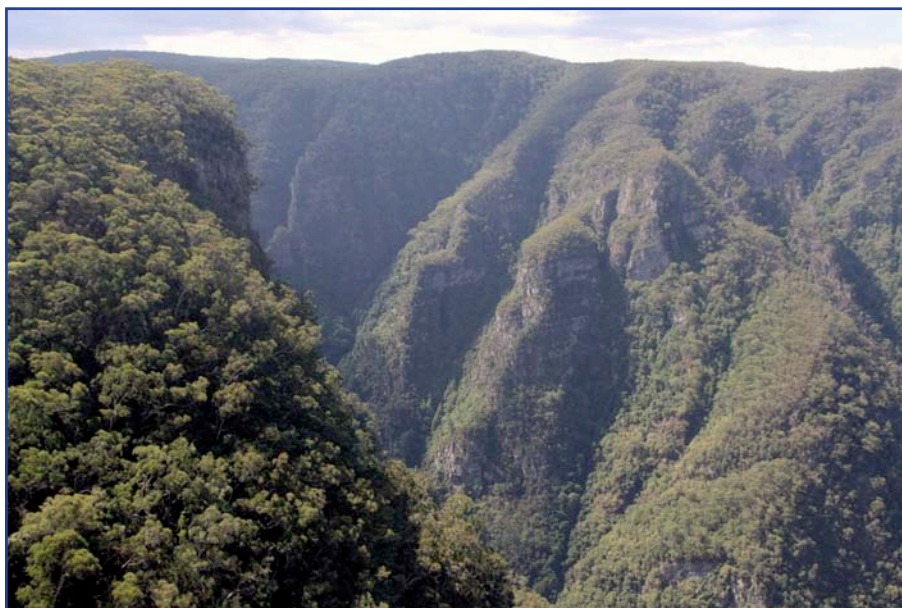
Rigging around the water on the next pitch, we were interrupted by a visitor. He was from the team we had seen coming down the main face. It was group of army friends that thought a little Kanangara Main trip was good way to spend a Sunday. Their rope had become stuck on one of the pitches. Confronted with the option of spending the night in the canyon, one of their number raced off after us wanting to join us because they no longer had a rope. The amazing thing was that he had made the traverse along the ledge without protection. He said that if our group had crossed the traverse then he could do it too. We smiled but no-one was going to do that again. To get the rest of their group safely to this

pitch needed re-rigging the traverse and this was all starting to take time.

Our trip was delayed and delayed, each pitch another series of problems entwining a route through and around pounding water. We arrived at the valley floor with the overcast day now overcast night. Darkness was complete with no moon and no starlight. We would have stayed in the canyon until dawn except our friends from the army needed to get back to barracks in time for reveille and Greg had a physics exam the next morning. Of course we had a light for such emergencies. Mine had been in my pack for such an eventuality for years. Sadly so had the batteries. Mike had a light and coupled with his poor night vision we started slowly up the first rock scramble passing the light backwards and forwards along our caterpillaring line of misadventurers.

The way back to the cars is a scramble up rock faces and thickets in a valley called Murdering Gulley. The average canyoner might take an hour to ascend the gulley. The gulley climb begins with rock scrambles but interchanging to thick undergrowth, strange trees and rocks, boulders and scree. Our progress was poor and hours passed, our army comrades rolling their eyes about what a bunch of nitwits we seemed to be. Nevertheless they remained silent in the face of their own screw-up.

Chosing to ascend straight up a scree slope would in daylight appear to be a bad choice. From the photo, routes to the walls are up tree-lines and the scree doesn't follow a horizional line along the walls. At the time it seemed right because we could make progress on the scree whereas the lower thicket in the dark with a small light was unimaginably difficult. I seriously hoped that



View from the top of Murdering gulley

once at the interface of the scree and the vertical facing walls of Kanagara we could follow that join line along until we reached the saddle of the mountain top and Murdering Guley. That was not to happen.

Instead of meeting that join line the ascent continued until we met the on-facing walls of Kanangra reaching vertically upwards from the darkness in which we stood into a wider darkness. In the side of the cliff penetrating straight into the walls was a sandstone cave. Was it sensible to explore a cave at this time of night? No of course not but we did. No-one argued. It was as though fatigue allowed me to make stupid descisions without opposition. Can you leave a cave unexplored in the middle of the night? Inside, the floor rose upwards. At first the cave was wide but as is the way with sandstone caves it soon narrowed.

Our way on was eventually blocked by the cave walls coming together but up in the roof a few meters, the passage was wider. We boosted a suitable volunteer who found a second higher level of our cave and we progressed further up even more passage where once again another similar end to the passage was once again surmounted with one person giving a lift up to another and the use of climbing tapes. This time the roof continued to a round hole in the sandstone. We climbed up into the hole then out into the outside world. We found ourselves on the flat plateau on the roof of Kanangra Walls,

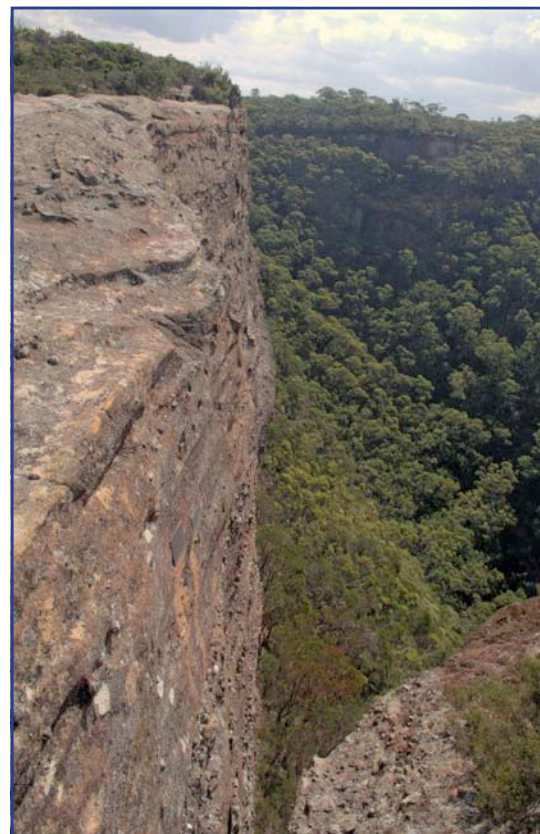
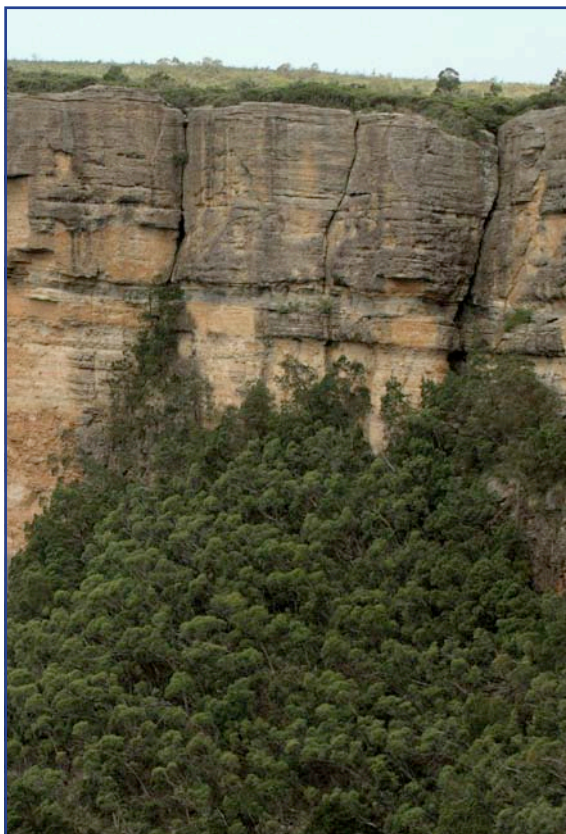
in the dead of night but situated near an easily-followed track back to our cars.

I remember sitting behind the steering wheel closing my eyes for a second. I must have fallen asleep because when I opened my eyes again the sun was up and Greg had an exam. We did get Greg back in time – well half an hour late but he passed the exam so we all lived happily ever after.

Postscript

The point of the story is that cave. Over the years I have walked across Kanangra many times and made a few desultory searches casually looking for our exit point made 30 years ago, but found nothing. This summer I made a more sustained search, exploring each of the major cracks and fissures obvious from the lookout on the other side of the valley. There are not many fissures and none seem to have a cave. In the photo, there are several major cracks that can be seen. I searched around the tops of each crack seeking the mystery hole to the bottom but there is nothing. There is no sign of a hole which might drop into a cave. Possibly the hole is further back along the top but there is thicket that makes searching difficult.

So what we need to do is go into Murdering Gulley, climb all the scree slopes and find the missing cave – and then what do we name it?



Cracks in the Walls, from opposite and from above

Cave Surveying Course at Wombeyan

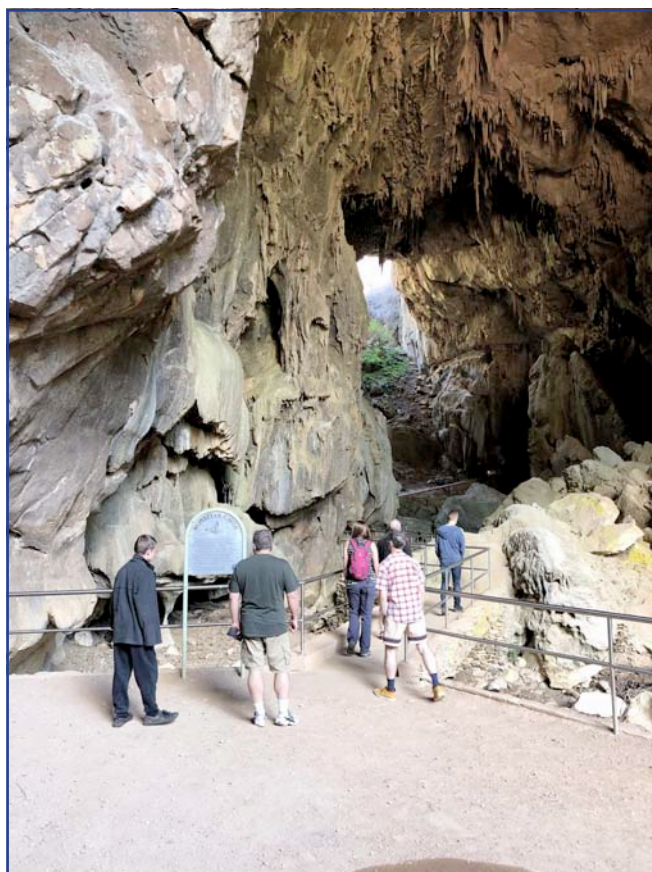
20/21 October 2018

Mike Lake and Jill Rowling

SUSS: Mike Lake, Philip Maynard, Jill Rowling, Kevin Moore, Simon Murphy & Stephanie Murphy and accompanied by: Daniel Burt, Melissa Hadley & Luke Buckingham (NHVSS), Phillip O'Connor & Adam O'Connor (CSS) & Chris Heath (Chillagoe Caving Club).

This latest course in cave surveying was run again at Wombeyan Caves on the weekend of 20/21 October 2018. It's been run previously by Mike Lake, Phil Maynard and Jill Rowling in 1997, 1998, 2013 and 2017. This year Kevin Moore assisted us as we had 8 participants from 4 clubs.

We don't have to stay in tents for this weekend, but in the quite nice "Post Office Cottage". Some people though preferred their tents. When you're reducing survey data and drawing maps into the night, you do need a nice place to stay with a couple of tables, electric light, kitchen, bedrooms, lounge room and shower! This is also just 5 minutes' walk away from the Fig Tree Cave where we do the actual cave surveying. The hire of the cottage and the supplied survey kit is provided at-cost.



The teams in Victoria Arch

Photo Daniel Burt

SUSS instructors supply all the survey equipment used on the weekend, and participants get to keep the printed course notes and a kit consisting of pencil, eraser, ruler, protractor, drawing pens, clip board, printed survey forms, graph paper, drawing film, and survey software. Plus we throw in some coffee, tea, biscuits, and cake for the weekend. Participants just bring their caving gear and food.

Friday 19th

Mike had taken the day off work so we could go to our farm near Rylstone Thursday night, check on our alpacas Friday morning and then leave in the afternoon for Wombeyan. We arrived just in time for dinner and to grab the double bedroom. Over the evening, participants trundled in.

Saturday 20th

Our course has a nice start at 9 am – not too early. Participants sit through a short briefing on the course and the weekend by Mike followed by the first "lecture" on surveying instruments by Phil Maynard. Then it's time for our first morning tea/coffee. After that we get into our caving stuff and stroll over to Victoria Arch, part of Fig Tree Cave. There is an introduction to various survey instruments, their advantages and disadvantages. As we had enough DistoX units for the whole group, the rest of the course used this instrument rather than compass and tape. We cover safety first off as the DistoX instruments are class 2 lasers – eye damage is always an option.

There is a short climb up into an extension on the western side of the arch. It's an excellent site for learning how to survey as it's not too complicated, has some roof and floor slope changes, speleothems, potential for doing survey loops and splay shots, and keeps our group not too far apart. Participants survey in teams of two, each with an instructor that guides them in the use of the DistoX, selecting survey stations and sketching. At 1 pm we head back to the cottage for lunch, then after an hour we head back to the site for the last bit of surveying for the weekend. During the afternoon, a noisy thunderstorm came over with occasional gusts into the Arch, but no real effect on our work other than it was

a bit darker in the Arch. At about 6 pm we finish and head back for dinner. Dinners are varied; Jill and I had Chinese takeaway to reheat, others have stuff that looks good, others have stuff I'd never eat :-)

After dinner, from 8:00 pm Phil gives the second lecture which covers the principles of processing survey data and then participants install Survox on their laptops, enter their survey data, and process the data. Loops are closed, errors found and fixed, and the skeleton of their survey is realised. Jill had brought her Fig Tree map project on Therion and gave a short talk-through of the Fig Tree Cave map. We finish at about 11 pm.

Sunday 21st

We start at 9.00 am with a talk by Phil on maps; map standards, naming and numbering, units, scales, survey record sheets, survey datums, symbols, survey and map detail grades and information required on maps. After that we all need some morning tea/coffee.

Then we distribute drafting film and with their drafting pens the participants have the opportunity to show off their artistic skills. Quite a bit of help is provided so the participants can start on the right place on the page. They start with printing out the adjusted Survox plots and with that sheet under the drawing film they trace over the legs onto the drawing film. Then after replacing the Survox printout with their in-cave sketch they trace out wall details, followed by features, a title block,

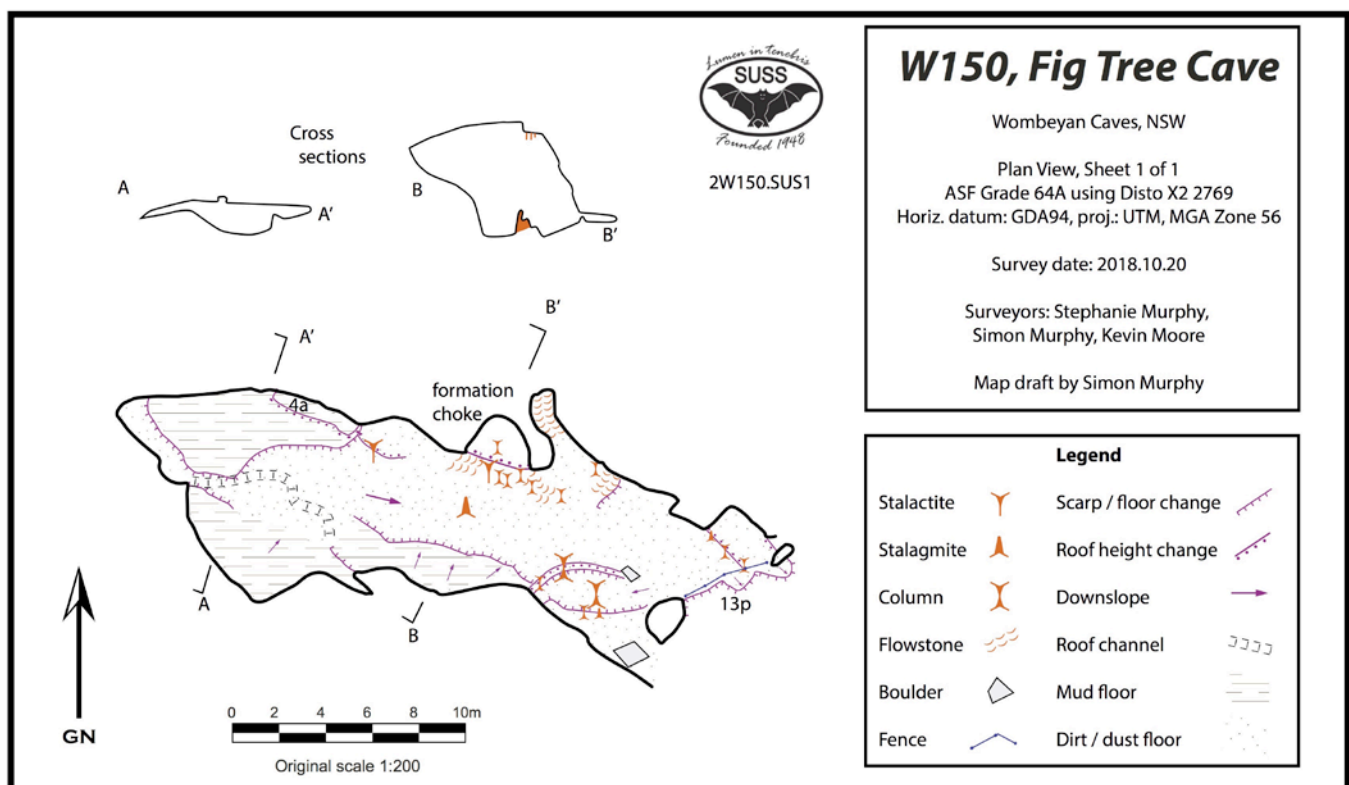
North arrows, and a scale bar. This takes two sessions separated by an hour lunch break in the sun. Yes, it is a lovely sunny weekend again. All the participants had finished their maps by about 3:30 pm. We finished the official part of the course by comparing the four maps produced – what's similar?, what's different?

As we had finished this year a bit earlier Mike arranged a trip into Fig Tree Cave for the group. None of the participants had been into this before and they certainly enjoyed the tour of this huge cave. We just followed the normal tourist route, Jill pointed out some geology and mineralogy features, and Mike pointed out some tricky surveying problems that we had encountered in the SUSS survey of this cave.

At about 5 pm the participants packed up with their new maps and headed home. Jill, Phil, Kev and myself also headed off to Goulburn, meeting at the Paragon Cafe for dinner. An excellent weekend.

Instructors: Mike Lake, Phil Maynard, Jill Rowling and Kevin Moore.

The instructors would like to thank the following individuals who provided assistance or gear: Marilyn Scott for organising the accommodation, the permit and a printer, Rowena Larkins for lending her Disto X and Wombeyan staff for the permit for the weekend and the use of the Post Office Cottage.



Map produced by Simon Murphy during the course

David Rueda-Roca

High water-level trip

30th June 2018

Party: Alan Jackson, Janine McKinnon, Stefan Eberhard, Fraser Johnston, David Rueda-Roca.

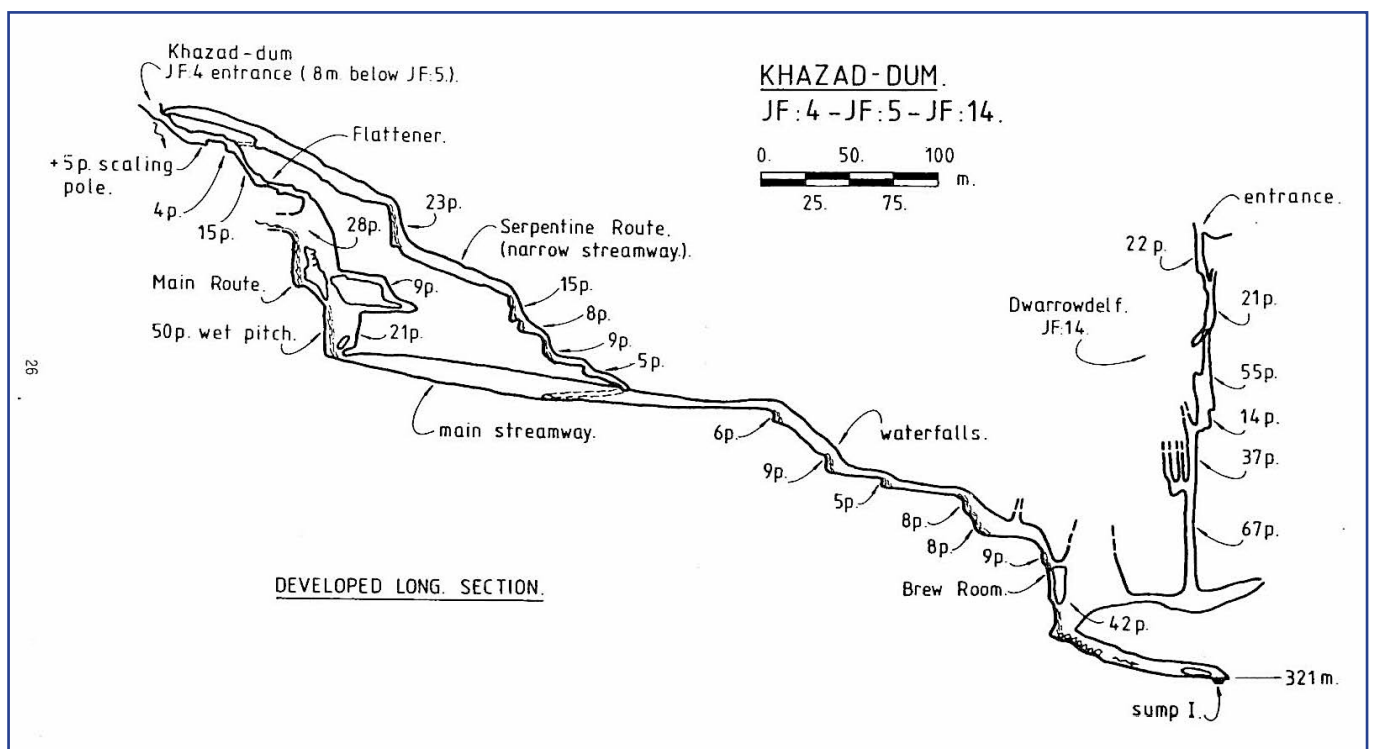
At the beginning of 2017, I asked about the possibility of joining to a STC trip to the cave JF-4/5 “Khazad Dûm”, in Junee Florentine in Tasmania. Sadly but understandable, the organisers were conservative, and as they did not know me very well, they recommended me to try to improve my vertical caving techniques in other areas before jumping to a trip like that one. Although I fully understood the good advices of my Tasmanian friends, KD was like a pending subject for me and I always wanted to visit it one day. It is a sportive cave with a lot of water that finishes in a gigantic chamber with a sump.

The opportunity to go to KD came in a form of a glueing project for the anchor points of one of the ways through the cave. This project is run by STC and its goal is to make the less frequent access through the cave, called “Wet Way”, safer and more reliable. Moreover, Fraser Johnston and the “living legend” Stefan Eberhard would take advantage to film our progression through the “Wet Way” of the first part of the cave. Stefan is the younger brother of Roland Eberhard and they explored many

of the Tasmanian caves in the last 40 years. Stefan does not look so old as someone could think, considering his trip reports from the early 80s. Fraser, Stefan and “Barbarossa” Andrew Terhell are producing an awesome caving film called “Tartarus” in different caves in the Junee Florentine area.

As is usual in this kind of trips, I took the plane from Sydney to Hobart on Friday afternoon. I have recently discovered that the flying ticket that you can book with Jetstar is almost as expensive as one from Virgin, owing to the fact that you need to upgrade your luggage allowance from 20 kg. It is absolutely necessary to do so, especially when you come back to the mainland with your soaked clothes and a couple of kg of mud on your gear. Virgin is a good airline, however their checking system in Sydney airport is gruesome and appalling. So, there I was at the fancy Sydney domestic terminal, queueing for one and a half hours to check-in my luggage. I arrived in Hobart at 11:30pm. I took a taxi and finally knocked Alan’s place door at midnight.

Next day, I got up at the agreed time and Alan was already waiting for me. As soon as we went out of the house, we met Janine, Stefan and Fraser, who were waiting for us already. We went to Maydena in two cars, stopping in the usual bakery for an additional coffee. KD carpark is



Map of Khazad Dûm, from ‘Vertical Caves of Tasmania’ (1984), Bunton and Eberhard

approximately 900 m further from the JF-341 carpark. I was happy for being in a 4WD and being able to reach the last carpark of the road. We jumped out of the car and got changed quite quickly. It was funny to see how many layers of clothes Fraser wanted to put on. Alan lent me one of his bushwalking backpacks that helped me to carry my caving pack and other gear.

The main entrance of KD is a swallet. The creek goes into the cave entrance in a loud way and sinks to the right side of the entrance.

KD is one of the few deep caves in the area that were originally explored in the 1970's. The cave is basically divided in two parts, the upper sections and the streamway section to the bottom. There are four main routes from the entrance down to the start of the streamway section.

Entrance Series (some explanations taken from Roland Eberhard reports)

The area from the main swallet entrance (JF4) down to the start of the streamway is surprisingly complex. There are basically four main routes down to the streamway, though only two are regularly used. The neglected routes – JF5 entrance and the Wet Way – are more interesting propositions, if only because they are rarely utilised. The aim of the glueing project is to make the Wet Way route a common route to be followed.

- **Scaling Pole – Flatteners Route (Main Route):** The normal route involves leaving the water via the Scaling Pole Pitch (it can be by-passed) just inside the JF4 entrance. This route joins to the Wet Way at the base of a pitch called Dry Ninety.
- **Serpentine Route:** With its five pitches and winding sculpted canyons, the Serpentine Passage offers good sporty caving. This has been the typical route for mainland visitors so far, as it is much safer and easier to rig than the other ones.
- **Wet Way:** This is the route that we followed. It is the most direct route down KD. In the early 70's cavers didn't like the look of all that water, and the racy waterfalls of the Wet Way were neglected in favour of the Main Route.

For detailed revised rigging guide of the 'Wet Way', the reader should consult the *Speleo Spiel* 408: 5-6, written by Alan Jackson. This route is completely p-hanger-ed. So, from the JF-4 entrance we turned to the right, progressing downstream "following the water", and passed a 3 m climb down that led us to the top of the first pitch. Alan was first, checking the rigging, Stefan was second, I was third and Fraser and Janine were last.

This first pitch is around 5 m deep and when it is bottomed, a section of streamway below precedes the next shaft. Here the cave is very wet. Therefore, it is necessary to climb up to a small chamber on the left to start with the second pitch (31 m). It has been excellently rigged with six rebelay; 13 m, 9 m, 6.5 m, 7 m, 11 m, 9.5 m, 9 m respectively. This pitch is quite technical and very wet. High water levels make it even wetter (hence all the rebelay). An at least 66 m rope is more than recommended and allows using the rope around the initial large natural and completing the final approx. 3 m cascade on rope. Rebelay number 3, 4 and 5 have a permanently rigged traverse line for clipping into while abseiling (guided abseil). In some cases it was necessary to progress around tight corners to avoid the water of the waterfall in this pitch (especially the last rebelay). Stefan and Fraser were filming us in "action mode", passing the different series of rebelay.

Once we landed by a small pond that must be crossed by the right side avoiding getting wet feet, we continued with the next pitch (3rd pitch) that is 30 m deep and is called "Traverse pitch". At the top of this pitch, I passed Stefan and continued down, as Stefan wanted to take some "action" scenes of Andrew and Janine. This third pitch has only two rebelay. Both rebelay are well left (while abseiling) of previous hang to avoid water at high levels. Minor acrobatics are required. After abseiling this pitch we reached the same chamber as the lower level of the "Dry Ninety chamber".

Here, Stefan and Fraser were filming Janine abseiling down the shaft in a very elegant way. Alan and I looked behind a rock for protection of the waterfall splashing. Two passages lead off from the chamber. The dry one starts behind the rock where we were looking for protection and reaches a 29 m shaft down to the start of the streamway section. This pitch was descended in the early days of KD's exploration. A second passage that carries the stream from the base of the previous pitch also leads to a shaft. Before reaching the shaft it is necessary to abseil a short 5 m drop that is free-climbable at low water levels (spectacularly not so at elevated levels). Once this small drop was negotiated, we reached the top of a rather intimidating drop. This waterfall is the one cascading down from above at the start of the streamway. Its length is 22 m and is called "Animal Pitch". Here I passed Alan and continued downstream. Again, this pitch has two rebelay that keep you dry from the astonishing powerful waterfall.

Once I bottomed the pitch, I continued downstream, following the water, trying to get some protection from the powerful splashing. I stopped after a couple of curves of the downstream passage. Again, at the bottom of this

pitch, Stefan and Fraser continued filming Janine abseiling. She was abseiling pretty fast, probably for a supposed public on the other side of the lens of the camera. Here Stefan and Fraser decided to start coming back to the top of the cave, while Alan, Janine and I continued downstream through the lower section.

Streamway section

As soon as we started through the Streamway section, we crossed paths with the left-opening hole, where the Serpentine way joins to the main streamway. This lower section of the cave is very, very wet. Waterfalls are mainly unavoidable and it is impossible to avoid some of them, especially with high water levels and prusiking up.

The next pitch, first one of these series, was a 6 m pitch. It has an extra rope to make a safe approach to the pitch-head and it is rigged in such way that keeps you dry. Once this small pitch is bottomed, after walking downstream for a while, we reached a 9 m pitch. To reach the pitch-head is necessary to do an easy reach around the corner on the right. There are three rebelay in this pitch. Alan was drilling holes in some of the pitch-heads on our way down. He would start the glueing activity on the way up, letting the glue to dry out on its own.

The fourth pitch of the Streamway series was an 8 m pitch after traversing out on to a platform. If the water is up it is drier to traverse out further and rebelay from a natural up high on the left. Unfortunately, once down you then have to do a 1.5 m down-climb through the water curtain that cuts the passage. Alan showed me how to use the end of the rope in order to make this manoeuvre quicker and drier. It did not work with me so well.

We continued through the fifth pitch that is 8 m deep and it is rigged using naturals, reaching afterwards the sixth pitch that is 9 m deep and completely dry. At the bottom of this pitch, Alan told me to cross a hole on the floor carefully, where the water continued falling down through the cave. This crossing put me into a chamber called the Brew Room. The Brew Room is a dry and warm chamber protected from the water splashing and from the air currents. It's a recommended place to have lunch. Alan told Janine to come to the Brew room too. Sadly, Janine were not able to hear Alan at all and continued abseiling through the hole on the floor. From the Brew room, the "normal" way to the bottom of the cave continues through a 42 m deep pitch. However, "wet means wet" and this time the rigged way followed the water all the time. This wet way was the route initially followed during the original exploration of the cave.

We came back to the waterfall and abseiled a 10 m pitch by the waterfall to a small pond. Alan was first, trying to stop Janine in her way down to the cave. He found her negotiating the only rebelay of the next pitch. This was a 24 m pitch to a chamber, where we could progress alongside a ledge to a formation where a coiled rope was waiting for us. Janine was waiting there when I arrived. Alan suggested us to rig the next and last 10 m pitch and to bottom the cave, while he was going to start glueing the bottom anchor points of the cave.

I did not realise at that time, but I had left my "pantin" on the top of this final pitch. Once Janine and I bottomed the cave, Janine wanted to show me the landing spot of the vertical cave JF-14 Dwarrowdelf (6 pitches of 22, 21, 55, 14, 37, 67 m). After some navigational issues in this, so called, "Basal chamber" (we were going down to the sump instead of going uphill in the opposite direction to the bottom of JF-14), we finally reached the bottom of JF-14. To do that we had to climb a hill with loose rocks. At that moment, we could hear a very loud series of curses, profanities and blackguardism coming from a hanging light on the opposite wall of this enormous chamber. As foreigner, I have been always delighted with the wealthiness of the English language, but this unpayable class of English idioms enriched my language knowledge to levels that could be profitable for my soon official IELTS exam.

I looked at Janine's face and I could see some sort of worry in her expression. We came back downhill to the hanging rope of the last pitch and there we found a ballistic Alan at the top of the rope. It seems that his glue gun had lost a nut and therefore, regardless of Alan's efforts, it was impossible to get enough glue out of the can to proceed with the glueing of the anchor points. Moreover, he shouted that he found a "pantin". I asked him to send it down through the rope, as I realised that I did not have anyone on my foot. He shouted me a couple of times that he could not understand me. I asked Janine to pull down the rope to simulate my pantin (I am becoming old and lazy) and prussiked up. Once I reached the top of this pitch, I found my "pantin" and an excited Alan. Janine reached the top of the pitch shortly after me. Meanwhile, I was coiling the rope used for the last pitch and finally I put it on the ground. Alan thanked me for leaving it on the glue can and for getting it dirty with glue. He cleaned it and asked me to continue upstream. I am pretty sure that in other circumstances I would have been dead already...

After sumping it is possible that the KD water reappears in Cauldron Pot extension. Only a couple of hundred metres separate the two caves horizontally (Roland Eberhard). However, all cave diving projects have fin-

ished in blocked streamways, even for a young Janine McKinnon, who tried to go further where the bulky male alpha cave divers could not go.

I started the way up on my own, followed by Alan and Janine who were looking at me closely. I believe that I did not delay them very much. One trick that I always do in caves is to mentally divide the caves in sections. In this case, I divided the cave in two parts, the Streamway lower section and the Wet Way section. My progression through the Streamway section to the bottom of “Animal pitch” was very pleasant. They are small pitches and they are not technically difficult. Soon, I reached the water curtain before the bottom of the fourth pitch of the Streamway. I got soaked by the water curtain, however this did not stop me to continue progressing through the cave. Once at the bottom of “Animal pitch”, I did not almost stop and I continued prussiking up Animal Pitch. Alan and Janine were looking at me from the bottom of the pitch, commenting on my not-perfect technique. Actually, Alan helped me next day, indicating me to be more vertical through the prussiking to progress faster through the rope with less effort.

I continued prussiking up the next pitches with fun and closely followed by Alan and Janine till the top of the cave. We consolidated our packs, basically taking off our SRT gear and putting it into the bushwalking packs. We reached the cars in daylight!

Next day was a pleasant day with Alan. The weather was windy but sunny. We went bushwalking to the summit of Collins Bonnet in the Wellington Range and we came back home for having lunch at Salamanca Square. Tasmania was such a lovely and sunny place...

Very, very high water-level trip

18th August 2018

Party: Sandy Varin, David Bardi, David Rueda-Roca (“The three Musketeers”), cameo of Liz McCutcheon.

I woke up several times during Friday night, while I was listening how the rain drops hit the roof of the cottage in Maydena, thinking about how full and wild KD would be. Next morning, we had a slow start. With the heavy rain during the previous days, I thought that the hybrid (and usually useless) SUV would never make it to the top of the road. Liz almost drove it to the end and finally Sandy gave it a push, leaving the car at the carpark and saving us an unpleasant walk on the muddy road.

We got changed into Tasmanian wet bushwalking mode and started walking the KD track. One month ago, I found the track pretty easy and obvious. However, this

track has several deviations and all of them are also taped. We explored all the possible deviations. Finally, I could hear troubled water, louder and louder. After a few more metres, I found the swallet where the entrance of KD is. As Liz’ PVC suit was not the right one (the guys of Starless River sent her the wrong size), she decided to leave this opportunity for another time. David, who per accident had brought his short Wellies to Tasmania, said that as soon as he got wet feet, he would turn around.

The water was wild and turbulent. There are two ways to go into the cave. There is one way on the right side (looking downstream) that finishes in a window and a jump of two meters into the cave. There is another way through a small waterfall at the left side. I jumped the window, saw that David was following me, and turned around and told him to try the other way – Sandy might struggle in the jump. I turned ahead and I could see the reflective marks that show the first short abseil. I waited for Sandy and David at the bottom and as they were not coming, I decided to prussik up the 5 m pitch and see what was happening. Sandy and David were still thinking what to do with the entrance waterfall. Actually, David jumped the window behind me and could not climb back up, so he investigated the waterfall from behind. After a while I could see their head torches and then I abseiled the pitch again. The water was so loud that I communicated with Sandy and David with hand-signs.

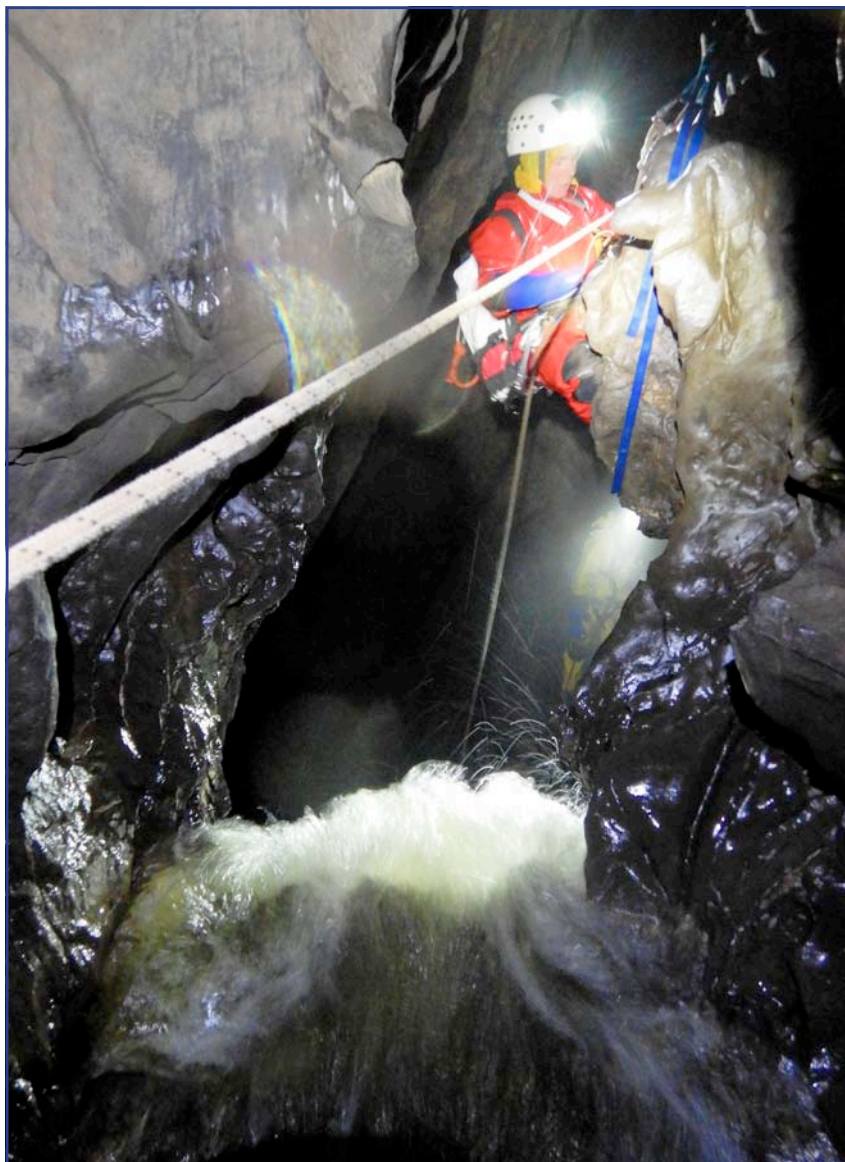
We continued progressing through the rebelay of the first big pitch, and when I landed at its bottom pond, I got wet feet (it was more a lake than a pond this time). David got wet feet in the entrance waterfall already, but he was joking when he said that he would turn around. The next great challenge that we found was the “Traverse pitch” with its 2 rebelay. At the last one, I had to uncoil the rope. When I bottomed this pitch, the power of the waterfall was such that I could hardly see much. I looked for protection behind the same rock as Alan and I waited for the others one month before. I called David to come with me behind the rock when he landed. My voice was absorbed by the noise of the waterfall.

There was water everywhere. The mist was violent. I tried to take a picture of Sandy abseiling the bottom of the pitch without much success. We reached the short and slippery 5 m pitch. Then I understood why the references say that it can be climbed down but not with high water levels. It was a wild and super-turbulent creek. I abseiled happily, because from my previous trip, I knew that there were rocks underneath the foam. As soon as I put my feet on the rocks, I could feel the water pushing me down. I had to correct my position several times. Then I de-attached myself from the rope and continued following the water. I was already soaked! After a little

bit of sneaky, wild streamway, we reached the top of “Animal Pitch”. I attached me to the ropes and followed the sideway that avoids the waterfall. Again, I found a coiled rope at the top of the last rebelay and after uncoiling it, I bottomed the pitch.

Here the power of the water was amazing. The continuation of the bottom of “Animal Pitch” to the lowest section of the cave is usually a small stream and you hardly get wet feet in this section. However the panorama was very different this time. I was forced to jump into the water to continue progressing through the cave. The first small pitch of the lower section is 6 m deep. We managed not to get wet in this pitch. However, after walking downstream with our feet under the water, we faced the next 9 m pitch. To reach the pitch-head it’s necessary to climb up to a balcony and there we used a deviation to abseil it. We found that the rope was slightly damaged and we made an isolation knot (actually, Sandy and David found it for me, when I was already down below). The bottom of this pitch is an unavoidable waterfall.

Finally, we found the fourth of the Streamway series. This pitch was my worry. It is an 8 m pitch after traversing out onto a platform. The amount of water in this pitch was incredible. I was told by Alan Jackson that when there is such high level of water in the cave, the jet-stream is so powerful that you do not get wet underneath the pitch. I started abseiling the pitch and, suddenly, I felt how the powerful water was pushing me down. I was with half of my body submerged into the stream. Soon, despite the PVC suit, I started feeling how the cold water was spreading through my whole body. I could not move up again and then I asked Sandy, who was just behind me, for help. She wanted to avoid that I pull her down with me, so she decided to be attached to the safety line before trying anything. I was a little bit concerned that perhaps the cold did not allow me to be strong enough to push me up against the powerful stream. Sandy offered me her foot (a white shiny Welly) without much success. I thought that if I pull it to go up, I would take it off from her foot. Then I saw a small stone at the right side of the pitch, where I could put my right foot. With that part of my body out of the water, the force of the water against my body decreased and then I could reach Sandy’s arm and



Sandy Varin negotiates crazy high water levels, Streamway section of KD

Photo David Rueda-Roca

push me up enough to liberate me from the streamway. I believe that I almost broke her back... Thanks Sandy! I must pay you a Thai massage...

It was four o'clock (we had a late start) when we were above the waterfall again. We decided that it was good enough for the day and stopped to have lunch. Once we finished, we came back to the surface as fast as we could. On our way upstream, we coiled the ropes again to protect them against the water.

To get out of the cave, we had to climb up the entrance waterfall. Once we reached the track and as my navigation skills are worse than Cristopher Columbus when he reached America thinking that he arrived in India, we followed Sandy, who performed a perfect demonstration of pink tape following. Great, great, great trip in one of the most iconic caves in Tasmania and also in Australia. Khazad Dûm is an excellent cave!

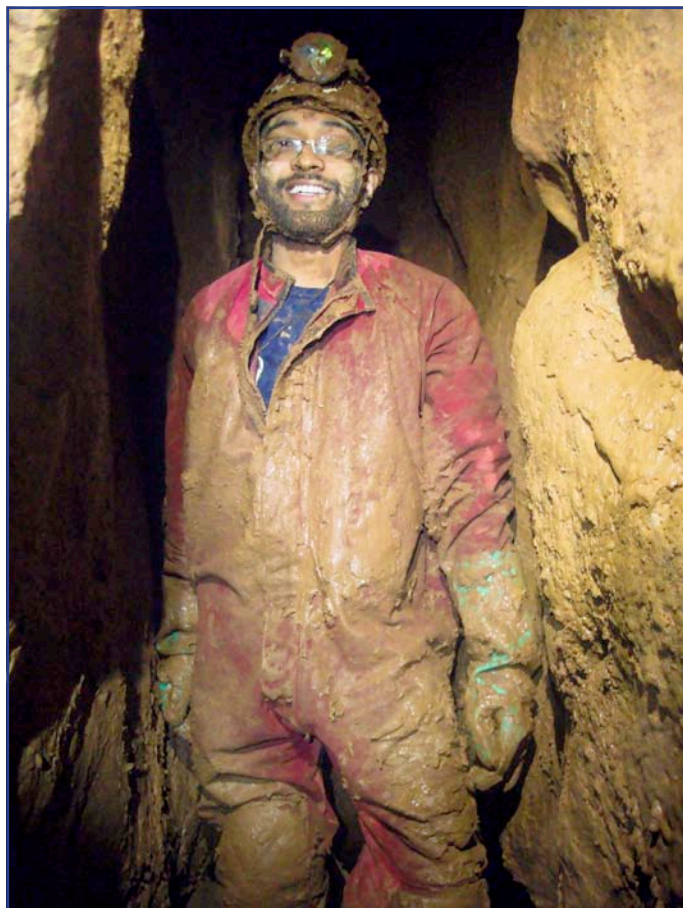
Photogallery



CH502 Centenary Cave, Chillagoe

Photo Alan Pryke

Photogallery



Rafid Morshedi in Nudist Colonies, Mammoth cave Jenolan

Photo Miriam Noble



Stephanie Murphy in Nudist Colonies, Mammoth Cave Jenolan

Photo Rafid Morshedi

Photogallery



CH502 Centenary Cave Chillagoe

Photo Alan Pryke

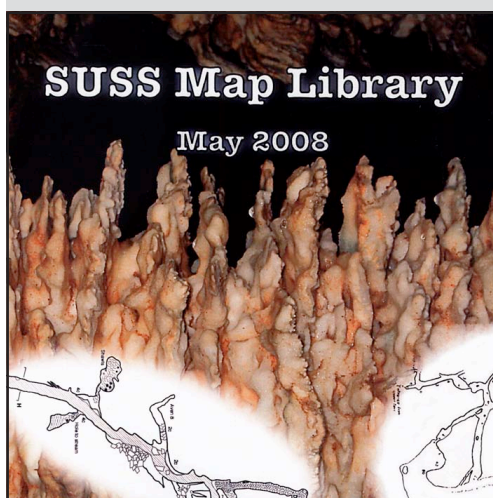


Alan Pryke in J41 Dwyers Cave Jenolan

Photo Michael Fraser

Things to buy

For postage and handling costs and the details of how to order go to <http://suss.caves.org.au/publications>. There you will also find a range of must-have maps and other publications.



Maps And Bulls On DVD

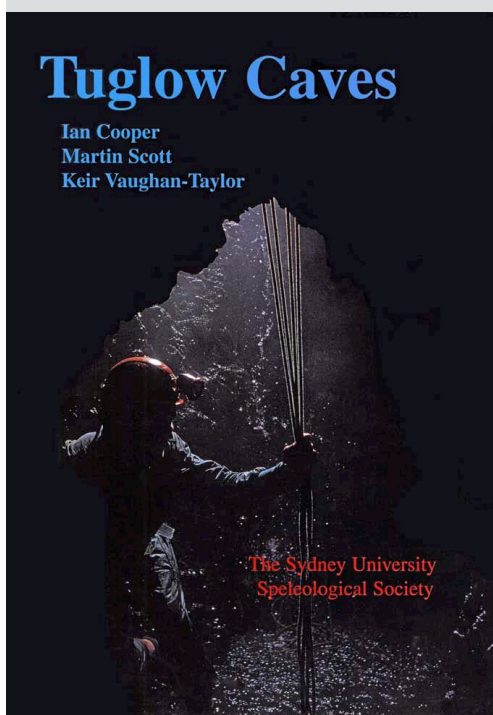
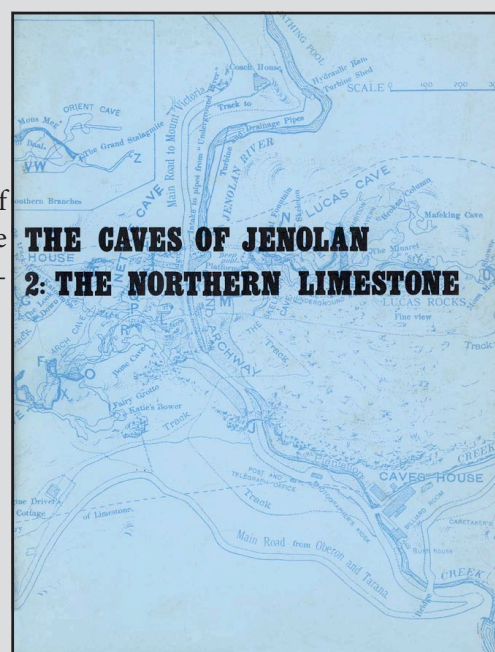
The entire SUSS cave map library of over 300 maps is on DVD and available for purchase. Our map library was scanned to provide wider access to the maps for SUSS and other ASF caving clubs. There are field sketches, ink maps produced on drafting film, ink maps produced on linen, as well as some of the latest digitally-produced cave projects. The DVD also contains all SUSS Bulls in HTML format from 35(1), July 1995 to 47(4), March 2008 and SUSS Bulls as PDF format from 42(1), April 2002 to 47(4).

Price is \$10.00 + PH.

The Caves Of Jenolan 2: The Northern Limestone

Edited by Bruce R. Welch. 1976, 140 pages. We still have some copies of these books left. Contains maps and descriptions of many caves in the Northern Limestone section of Jenolan plus notes on the history of Jenolan and its geology, geomorphology and hydrology.

Cost is \$8 for members and \$10 for non-members + PH.



Tuglow Caves

By Ian Cooper, Martin Scott and Keir Vaughan-Taylor. 1998, 70 pages. Examines caving procedures, site descriptions, history, biology, surveying and maps, geology and hydrology of Tuglow Cave and others.

Cost is \$13 for members and \$16 for non-members + PH.

Back Cover: Cave Hazard, Jenolan
Photo Rafid Morshedi



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