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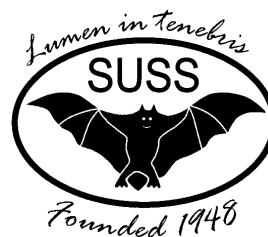
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Dan Noble, Patrick Larkin

Front Cover: Megan Pryke in Thampanna Cave,
Mundrabilla Station

Photo Alan Pryke

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2022 President's report

Lily Guo

It's been another year gone by and I've been very honoured to be president again. When I handed over the president to Katherine back in 2020, I definitely did not think I'd come back to this role, but somehow here we are.

This year marks my 6th year as part of the SUSS committee, and there's been some ups and downs during those periods, especially from 2019 onwards where we had bushfires, floods, and COVID19.

Comparatively I'd say this year wasn't our best year, but it showed some good signs of recovery. We've run more trips, some to areas that we haven't got to in a while; we're seeing some members who dropped out during COVID come back; and we're attracting some eager new people too, some that may become future trip leaders even. It's like a spring after a long winter.

But sometimes you win some and you lose some, and not all caving areas are quite the same as before. Jenolan as many of you may know currently has immense administrative and road controls in place, and coupled with a lack of convenient accommodation has been a bit of a struggle to run. Wombeyan has been out of action since end of last year, current news from David Smith suggests July 1st opening so we'll have our fingers crossed.

On a tangent from caving itself, a lot of USU related admin also changed this year, there's a few new systems and an new initiative called club communities which allows us to have monthly meetings with USU that has eased communication of certain issues, which shall hopefully make future club running easier.

Though we are not quite the same as our prime times, I feel confident to say that the club is heading in a genuinely good direction and I'd just like to end on a thank you note to all those that have supported us for another year.

To our members, each of your presence has been critical, as our head count is a significant factor to deciding if our club continues or not; to our trip leaders, we benefit so much from your experience and you are really the backbone of our caving events; and lastly to the committee that have supported me this year, we nearly couldn't fill all roles last AGM so thank you for taking one for the team.

2022-2023 has been a good run, and I wish all the best to the next committee too.

New Committee

At the SUSS AGM in May, the following people stepped up to help! Thanks to the new executive:

President Lara Munahe

Vice-President Vacant – casual vacancy to be filled

Treasurer Lily Guo

Secretary Rowena Larkins

Equipment Officer Phil Maynard

Minutes Secretary Karl Tam

And to the regular committee:

ASF Senior Councillor Emily Butcher

Safety Officer Gabe Naylor

Librarian Rod OBrien

Web Officer Rafid Morshedi

Bull Editor Phil Maynard

General officers Dan Noble, Patrick Larkin

Thylacoleo at Wellington

Palaeontologists digging in the main tourist cave at Wellington Caves have uncovered bones of adult and juvenile specimens of *Thylacoleo Carnifex* – the largest marsupial predator known in Australia.

“Weighing up to 164 kilograms, the marsupial lion was the largest mammal predator ever found in Australia and preyed on other megafauna such as the diprotodons between 2 million and 46,000 years ago.”

Thylacoleo was a chase-and-pull-down predator, able to outrun its prey and then use strength to haul it to the ground – even much larger prey such as the > 1 ton diprotodon. You really wouldn't want to meet one on the open plains. They were able to catch even the largest and fastest-hopping kangaroo species.

The current excavations are being run by Flinders University. They follow a rich history of megafauna discovery at Wellington Caves, since the mid-19th Century. The dig has been on-going for several years in the main chamber of Cathedral Cave, right next to the famous formation that is the centrepiece of the tour.

“Diana Fusco, a leader in Wellington Cave research, said while palaeontologists like herself had been excavating them for centuries, the caves still held many mysteries.”

“What we know is still just the tip of the iceberg; there’s so much more information we can extract from these caves.”

There have also been new discoveries of bones of *Megalania*, an enormous carnivorous lizard, which would also ruin your day if you crossed paths in the open.

Dr Fusco’s research suggests that the main driver of extinction for these megafauna species is climate change. Gradual extinctions are interspersed with mass-extinction events during times of environmental stress.

Source: ABC Western Plains, 4th of May 2023

<https://www.abc.net.au/news/2023-05-04/palaeontologists-uncover-marsupial-lion-bones-wellington-caves/102291726>

Library News

Rod OBrien, SUSS Librarian

SUSS is the oldest continuously-running caving club in mainland Australia, formed in 1948, and as such, has amassed a comprehensive library covering not only Australia but caving records from around the world. As the SUSS Librarian and ASF Deputy Librarian I have prioritized the digitization of the SUSS library. This has been an ongoing project for me for many years.

In recent times the ASF Library has been undergoing a major reconstruction and SUSS has been a key part of the process, from moving the library out of Canberra, organising documents, to digitizing multimedia – there have been over 8000 slides already processed.

The ASF Library is now in a position as the national caving library to affiliate ASF club libraries as branch libraries. ASF Library is located at www.caves.org.au/administration/commissions/Library then click on the ASF Library website and catalogue link. Alternately, you



A healthy diprotodon specimen at Wellington Caves. Photo Greg Ryan.

can go directly there by typing asflib.net directly into your browser.

The branch library process begins by comparing the physical holdings of both libraries. The ASF Library needs to have an original paper copy of everything and then digitize it if it has not already been done. The data entry is into KOHA which is a Linux-based online library catalogue. Cathi Humphrey-Hood (ASF Librarian) has already set up SUSS as a branch library in the Koha program (Figure 1).

Note in Figure 1 that SUSS is now listed as a Holding Library for items that have been searched. Using the SUSS Journals as an example, when you do a search both the ASF Library and the SUSS Library are displayed as holding physical or digital copies. You can also search

just the SUSS Library holdings by selecting SUSS in the Refine Your Search box.

As I enter the data into Koha every item needs to be bar-coded and catalogued (Figure 2). Cathi has generated the barcodes using a numbering code for SUSS.

I have also been busy cataloguing the club journals held in the SUSS Library. The summarised cataloguing of each journal is listed under Public Notes. So far, I have listed nearly 700 club journals from the SUSS Library into Koha and the ASF Library.

It is possible that once the branch process is finished SUSS may not need its own digital library (except for its own publications) as it will all be incorporated into the ASF Library. However, that scenario is still several years away.

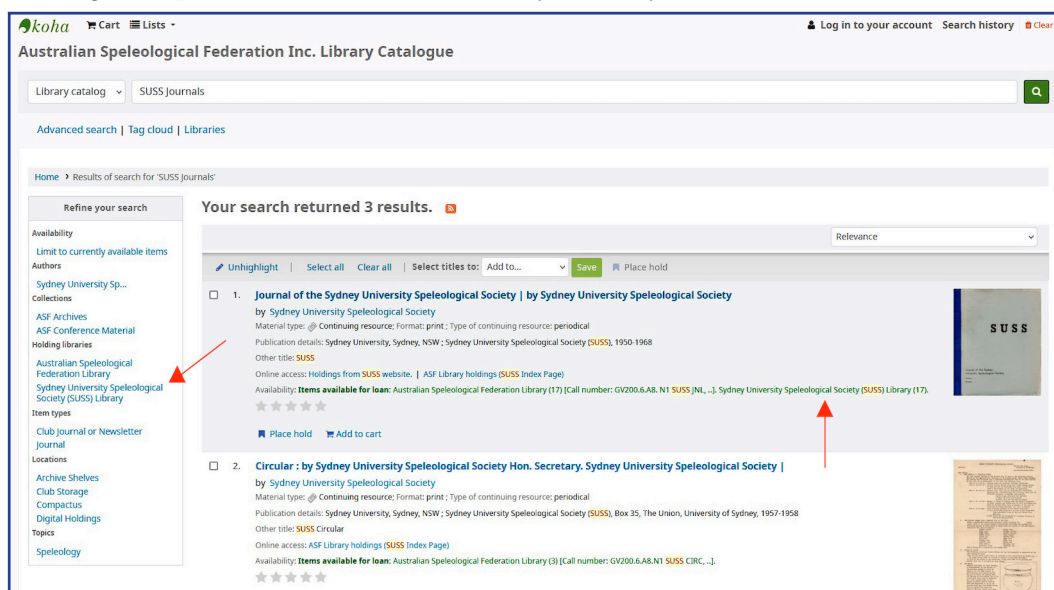


Figure 1: Koha listing for the SUSS Journal

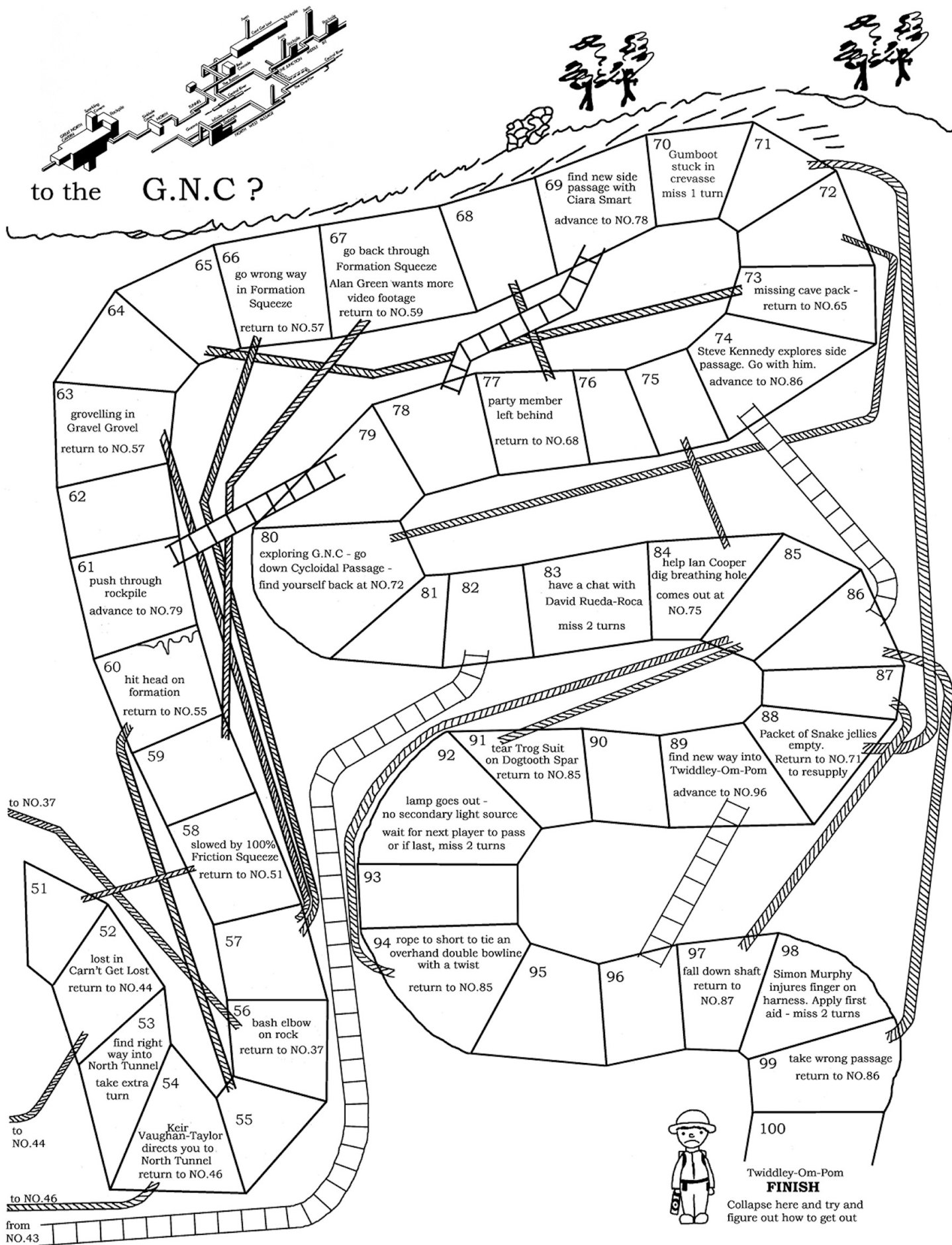
Item type	Current library	Home library	Call number	Serial enumeration / chronology	Status	Last seen	Date accessioned	Date last borrowed	Barcode	URL	Public notes	Non-public notes
Club Journal or Newsletter	Australian Speleological Federation Library	Australian Speleological Federation Library Archive Shelves	GV200.6.A8.N1 SUSS JNL	Vol.02 No.01 Jan 1955	Available	11/01/2021	11/01/2021		ASF1000000783	Link to resource	Hastings. Reprinted Feb 1960. Contents: Notices; B.J. O'Brien-The Narrangobilly Incident; J. Bowcock-Discovery of a new Cave at Jenolan Trip Reports: Cave Diving, Bungonia, Wombeyan, Comboyne, Narrangobilly, Narrangobilly, Cave Rescue, Jenolan, Clifden, Wellington Maps: J-17, Y-2E, CL-1	digitised, but of historical value
Club Journal or Newsletter	Australian Speleological Federation Library	Australian Speleological Federation Library Archive Shelves	GV200.6.A8.N1 SUSS JNL	Vol.02 No.02 May 1955	Available	11/01/2021	11/01/2021		ASF1000000784	Link to resource	Contents: Notices; Membership, D.T. Burke-Bungonia Foul Air; E.A. Faunce-The Physiological Effects of Foul Air; B. Mason-Fluorescam and Water Tracing Trip Reports: Abercrombie, Wellington, Burran Burran, Finch's, Camooweal, Buchan, Bendethera, Narrangobilly, Etrema Gorge, Jones Creek, Colong Maps: Y-1.	digitised, but of historical value
Club Journal or Newsletter	Sydney University Speleological Society (SUSS) Library	Sydney University Speleological Society (SUSS) Library Club Storage		Vol.02 No.02 May 1955	Available	06/05/2023	30/05/1955		SUSS1000000233	Link to resource	Contents: Notices; Membership, D.T. Burke-Bungonia Foul Air; E.A. Faunce-The Physiological Effects of Foul Air; B. Mason-Fluorescam and Water Tracing Trip Reports: Abercrombie, Wellington, Burran Burran, Finch's, Camooweal, Buchan, Bendethera, Narrangobilly, Etrema Gorge, Jones Creek, Colong Maps: Y-1.	digitised, but of historical value
Club Journal or Newsletter	Australian Speleological Federation Library	Australian Speleological Federation Library Archive Shelves	GV200.6.A8.N1 SUSS JNL	Vol.03 No.01 Feb 1956	Available	11/01/2021	11/01/2021		ASF1000000785	Link to resource	Contents: Notices; Membership, D.T. Burke-Bungonia Foul Air; E.A. Faunce-The Physiological Effects of Foul Air; B. Mason-Fluorescam and Water Tracing Trip Reports: Abercrombie, Wellington, Burran Burran, Finch's, Camooweal, Buchan, Bendethera, Narrangobilly, Etrema Gorge, Jones Creek, Colong Maps: Y-1.	digitised, but of historical value
Club Journal or Newsletter	Sydney University Speleological Society (SUSS) Library	Sydney University Speleological Society (SUSS) Library Club Storage		Vol.03 No.01 Feb 1956	Available	06/05/2023	27/02/1956		SUSS1000000234	Link to resource	Contents: Notices; Membership, D.T. Burke-Bungonia Foul Air; E.A. Faunce-The Physiological Effects of Foul Air; B. Mason-Fluorescam and Water Tracing Trip Reports: Abercrombie, Wellington, Burran Burran, Finch's, Camooweal, Buchan, Bendethera, Narrangobilly, Etrema Gorge, Jones Creek, Colong Maps: Y-1.	digitised, but of historical value

Figure 2: Koha catalogue and barcoding



Can you make it





Coolleman Plain

Jan 2023

Rod O'Brien

The January long weekend is historically time for the SUSS weeklong extravaganza to the alpine region of Coolleman Plain in the Kosciusko National Park. This area is closed during the winter months due to snow fall. A hoard/riotous mob of cavers and cave divers from SUSS, NHVSS, MSS and CDAA were coming and going all week. This year we camped at Long Plain Hut Camp-ground due to Blue Waterhole roadwork and camp-ground works.

A day tour of Coolleman Plain was in order for the newly initiated. We dropped some diving gear off at River Cave and did a quick trip down to the underground river to assess conditions. The river level was up 150mm and flowing well. We then headed off on a tour across the plain.

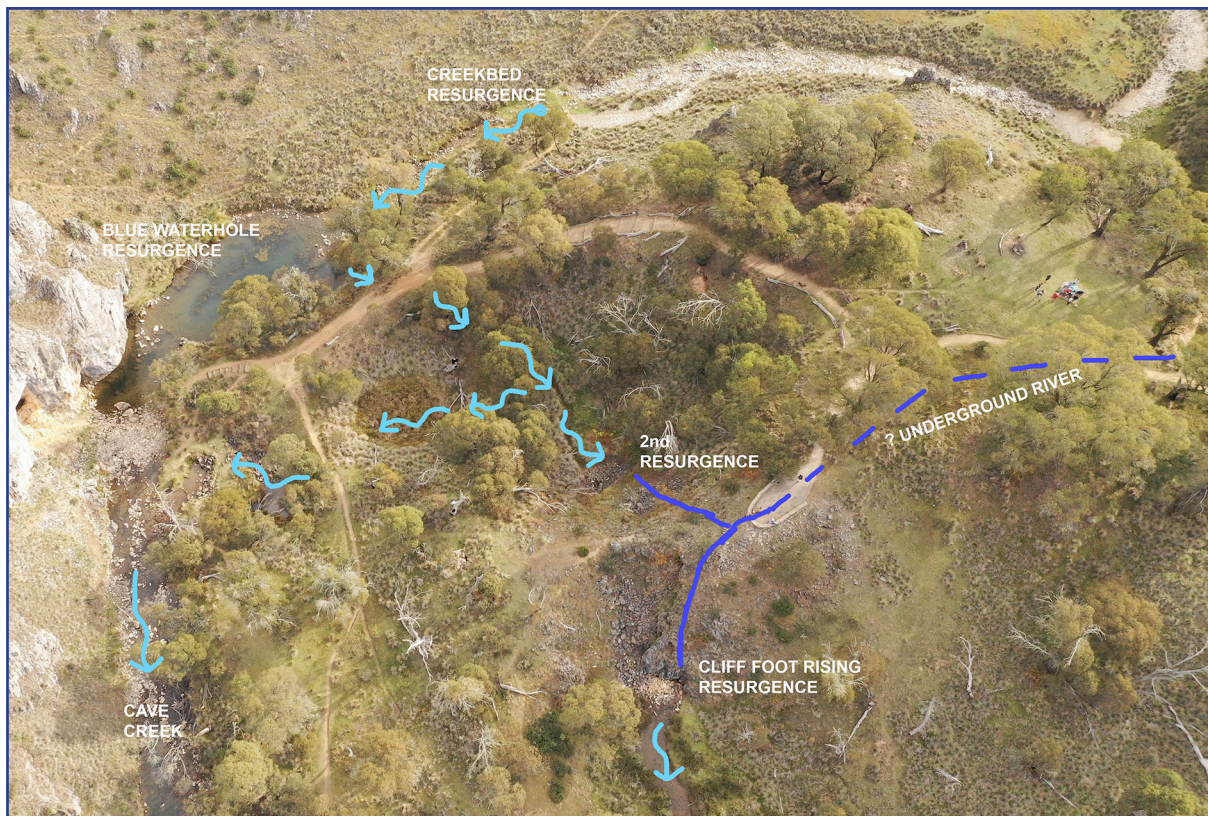
The South Branch was flowing well and disappearing at a rapid rate down the sink, but the surface creek was not quite high enough for it to flow into Ev's Cave. Several small herds of Brumbies were sighted scattered across the plain.

North Branch was also flowing well and disappearing underground at the sink. Due to the unstable condition of the rock a large collapse has blocked direct entry into the sink. However, an entry hole has opened up approx. 2.5m above and to the left of the sink. This could have been entered but there was a scary looking chock stone in the roof holding up a lot of rock so entry was not attempted. *(It's all loose river sediments, so one of the best exploration leads in NSW remains unentered – it'd be suicidal. ed.)*

The North East Branch sink was also working well but still unenterable.

Towards the end of the day, we wandered down to the resurgence (Cliff Foot Rising) at the Blue Waterhole. There was a good flow of water pouring out.

An interesting hydro flow was taking place. I have read historic reports and personally noted that the water normally flows out of both Cliff Foot Rising and the 2nd Resurgence. On this occurrence the water was flowing into the 2nd Resurgence from the Blue Waterhole and



Blue Waterholes, showing the resurgences. Image and notes by Rod O'Brien.



Blue Waterhole. Photo Cathi Humphrey-Hood.

then out of Cliff Foot Rising. I have thought of two possible reasons for this;

If the water level in the doline outside was higher than the 2nd Resurgence, that could mean that the water pressure was higher in the doline outside of the 2nd Resurgence than the water pressure in the underground river. The water would then flow the other way.

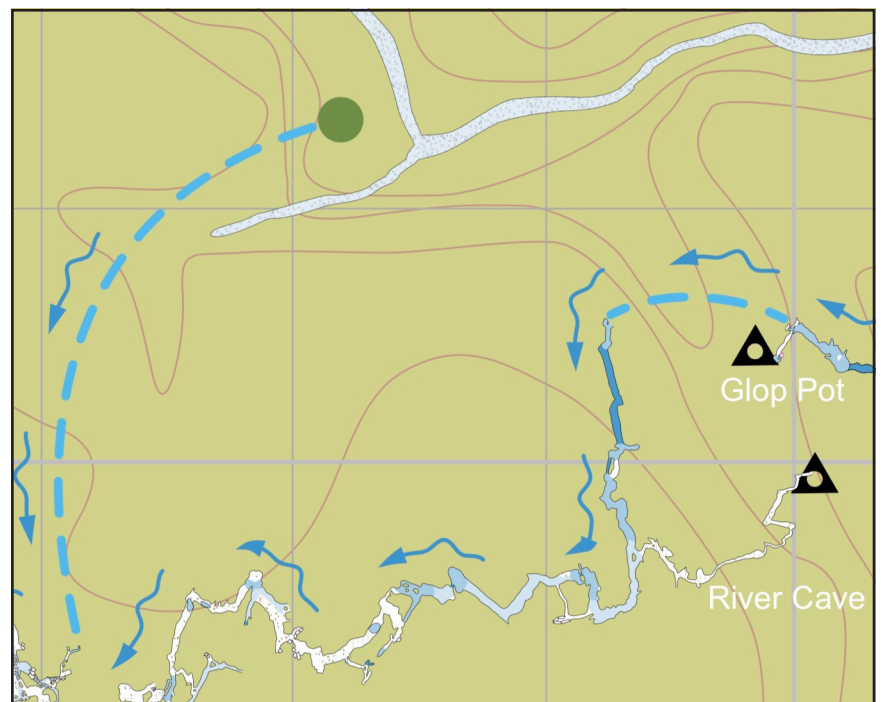
The flow coming out of Cliff Foot Rising was quite strong. Possibly, as this water flow passes the passage that exits to the 2nd resurgence it drags/ sucks the water out of the short 2nd Resurgence passage causing the water in the outside doline area to flow into the 2nd Resurgence. This is the same process used by the water powered underwater dredges that I operate at work.

Some diving was done in Murray Cave where the downstream sump was

assessed. This is the furthest downstream that the underground river is seen before it reappears 2.4 km away at its resurgence at Cliff Foot Rising. We are still looking at ways to access this area as no cave has yet been found that allows access to it. Also, there was water flowing out of CP-175, Murray Cave's second entrance. This created a small pool in the creek bed outside of Murray's which was occupied by two pan-sized trout.

The divers did some exploring in upstream River Cave and found some leads that may finally connect River Cave with Glop Pot (watch this space). Several trout were spotted in the second upstream sump. Finishing the upstream dives, they turned their attention to the downstream sump to check that the second duckunder was not blocked up after all of the flooding. It was free of rocks and gravel so a trip to the end of downstream was in order. The duckunders are always fun, sporty and entertaining to the onlookers. Due to the higher than normal water level, several of the wade through passages were at neck level. This is one of the best underground river passages in NSW. There was also an increased flow coming out of Altamira Alley. Unfortunately, we did not get time to search the edge of the karst to identify the sink that might possibly feed into Altamira Alley.

As the week progressed a group visited the old Black Mountain Mine site where a herd of over one hundred brumbies was observed, while others participated in some mountain biking adventures. I think on the next trip I will be bringing a fishing rod as Cave Creek was full of trout. Another day saw a group drive to Yarran-gobilly to view some of the tourist caves.



River Cave and Glop Pot. Map draft by Phil Maynard



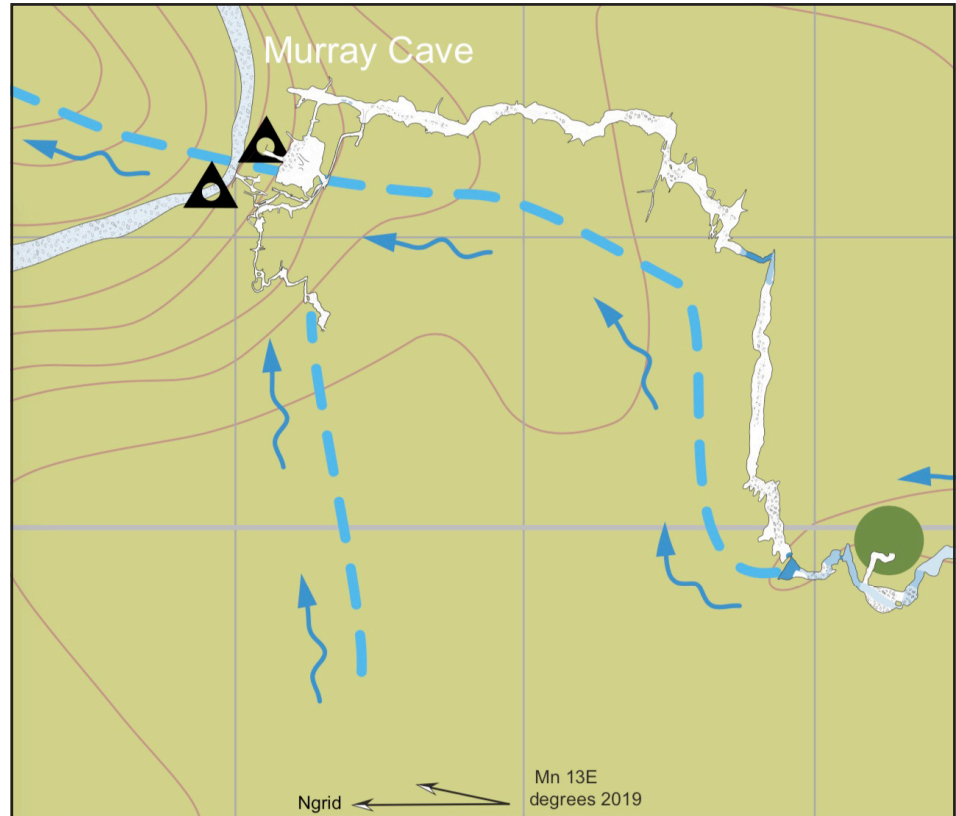
The dive gear, piled up outside Murray Cave. Photo Alan Green.



Rod in River Cave. Photo Cathi Humphrey-Hood

Most days were fairly hot with the occasional short afternoon shower. On the hotter days it's always nice to walk down Clark Gorge to the waterfall. There are several nice swimming holes to enjoy along the way, or you can climb down to the swimming hole at the base of the waterfall.

We spent every night relaxing around a nice campfire regaling the day's events, what a great way to end the day. Towards the end of the week, we were visited by the SUSS and NUCC parties that were camped at Cotterill's Cottage. They were caving at Yarrangobilly over the long weekend. Plenty of food and drink was on offer and we sat around the camp fire until late in the night.



Murray Cave. Map draft by Phil Maynard

Puttering in Piopio

An extraordinarily wet caving trip on New Zealand's North Island

Ciara Smart

January 29 – February 6, 2023

Ciara Smart, John Oxley, David Rueda-Roca (STC), Don Matthews, Alan Pryke, Megan Pryke, Patrick Larkin, Tina Willmore, Phil Maynard (Sydney University Speleological Society), David Stuckey (MSS)

Background

Piopio is a township and karst region in the North Island of New Zealand, 60km from the famous caves of Waitomo. The landscape is agricultural, largely sheep and cattle country, but pickpocketed by impressive streamway caves. If you've ever read the cartoon Footrot Flats, you can probably visualise Piopio (*peew peew*). It is quintessential New Zealand farmscape, complete with feral goats atop karst towers, heavily accented farmers in gumboots, forgotten sheep wandering scrubby back blocks, and cattle crap everywhere. Under the banner of Sydney University Speleological Society, Alan Pryke has been running an annual exploratory trip to Piopio for 16 years, aided by Phil Maynard. Some major caves were discovered in this area in the 1960s, but otherwise the area has seen little visitation. It is still relatively easy to discover large caves here. The caves in this area are warm at about 14°C, relatively horizontal, sometimes extensively decorated, and typically have large beautiful streamways. The trip has particularly focused on extending several major systems discovered in recent years, including the Redirected system and the Off-Gorse system. I last attended in 2018 and 2019. This year, local farmer Matt Sherriff generously offered us a large farmhouse on his property, Rotomate, to use as our base.

29th of January

I'd had an eventful drive from Wellington to Piopio the previous day, navigating landslips and flooded roads. Weather records confirmed that we had timed our visit to coincide with the wettest month on record in nearly two hundred years. Perfect. The previous day, Auckland had received 240mm in just 24 hours. This extreme rain event limited our options as every cave in the region was in flood.

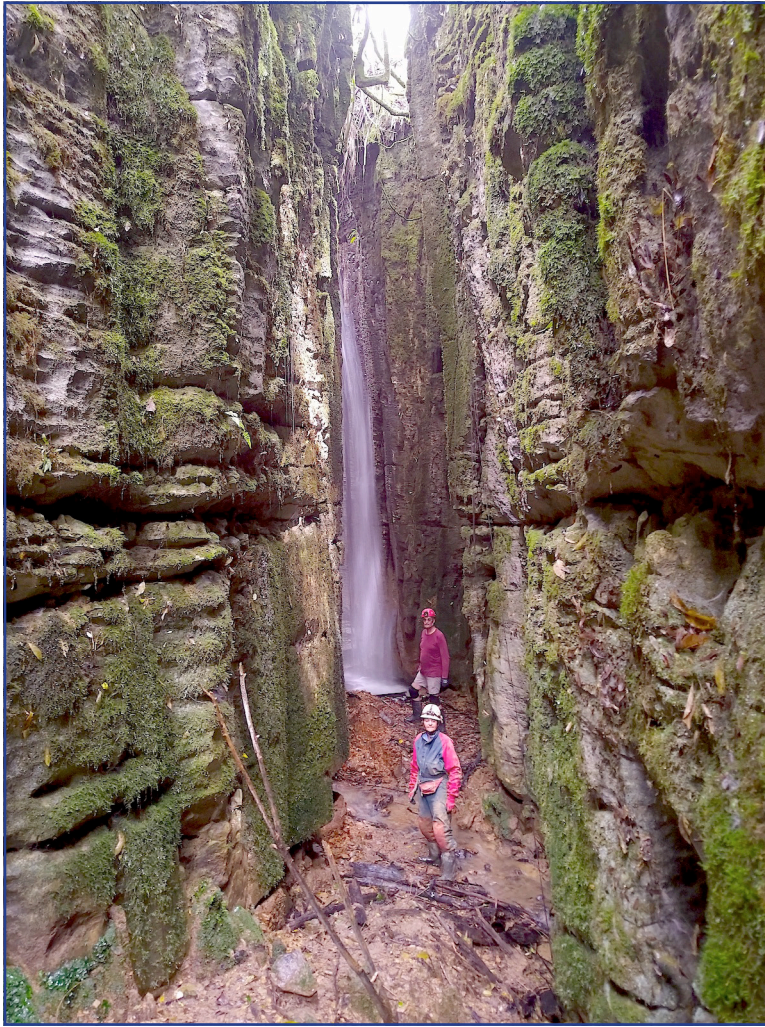
On my first day we decided to visit some prospective holes within walking distance of the homestead as we didn't want to chance driving on the damaged roads. We set off on foot in the rain and tramped up and down, visiting various steep scrubby dolines. We found a few holes but nothing viable. We gave up and descended a steep gully to the road, hoping to find the long-theorised resurgence of the Redirected system. On the way home we investigated a small resurgence just a few metres off the road at a cutting. To our surprise this turned into a viable cave, with about 50m of passage before a climb. We decided to come back to push and survey on a drier day, for the meantime this cave is called 'The Cutting Edge.' David and Don departed the trip today as they had already had several days of caving.

30th of January

Since our last trip, one of our friendly farmers, Matt Sherriff, had taken on a significant new lease, 'Pahiere.' This gave us the opportunity to traverse a large block of karst likely to yield new entrances. I set off with Alan, Phil and Megan on foot. The bucolic landscape looked



Don Matthews in Redirected. Photo Tina Willmore.



Tina and David S, surface exploration near Off Gorse.

Photo Don Matthews.

promising, with karst towers and sinking streams in every direction. Compared to the frustrations of Tasmanian scrub, it was an absolute delight to prospect on open rolling farmland. In this terrain, the presence of a cave entrance is often conveniently indicated by a fence line enclosing a small patch of scrub in an otherwise open field. We investigated dozens of dolines but to our surprise we found zilch. I suspected many entrances were now inaccessible because there was a tremendous amount of surface water disappearing into various large sumps surrounded by boulders. Along the way Phil fell into a flooded creek, we all got tangled in blackberries and we had to negotiate several paddocks of inquisitive but humungous bulls – welcome to North Island caving! On the way home we partook in some disaster tourism and went for a drive to ogle at the flooded township of Piopio where the floodwater was threatening to breach front doors.

31st of January

It was still raining heavily. The seven of us drove about ten minutes up the road to head up the Kihikihi valley

into untraversed territory. We scrub-bashed along some very steep cliffs, tracing the limestone contact. We soon found a cave of about 40m in length which quickly sumped. While some of us were investigating, the remainder of the group attempted to rescue three trapped sheep which had fallen between some boulders. The sheep's fleeces were soaked through, making them too heavy to be hoisted. We had to abandon the doomed creatures to their miserable fate. Further up the valley we reached Understorey cave. This cave was discovered in 2020 and is large and exquisitely decorated. We only went a short distance in before we reached a tight section which was likely to become impassable in the predicted afternoon thunderstorm. We surveyed out from there, mapping 290m of passage. On the walk home John got zapped by the electric fence (a hazard in this area) and we walked through heavy showers, making us glad we were not in the cave.

While we had been at Understorey, Pat Larkin had been off surface prospecting in the region south of the Redirected system. He had had some luck! The huge amounts of water in the caves had made it easy to spot resurgences. Pat finally located what we believe to be the resurgence of the Redirected system. It was spewing a vast quantity of water from a relatively small hole, making it impossible to trace upwards. Its location suggests there is still a large quantity

of cave left to uncover, and the system is already almost 3km in length!

1st of February

We awoke to another day of bucketing rain. Alan, Phil, Pat and I drove about 10 minutes to the airstrip on Matt Sherriff's block. Our objective was to check out two undescended holes. These holes were within striking distance of the major cave, Redirected, and we were hoping that they might provide an alternative downstream entrance into the main streamway, ideally bypassing a terminal rockpile. We changed in the pouring rain in the superphosphate shed, attempting to keep the explosive chemicals off our suits to save later trouble with airport security. The first hole looked promising. The cave had some significant formations and went about 35m in total distance before choking in a tight and decorated rift with a stream below. The next hole was also at the base of a large doline and appeared to begin with a 6m pitch which proved free climbable. Unfortunately, the cave bottomed quickly, except for a small hole with a 7m



Tina at the entrance of Understorey. Photo Don Matthews.



Understorey Cave. Photo John Oxley.



Ciara gets to grips with the wildlife in Understorey (New Zealand Long Fin Eel). Photo Tina Willmore.

drop below it. Phil managed to chimney down the pitch. He reported a further 3m pitch, and then it choked out.

We had lunch in the pouring rain and went to investigate a few further dolines in the vicinity of Redirected. At the base of a large doline, we noticed a small hole blocked with barbed wire. After clearing the wire, I could see a 4m drop which we quickly clambered down. Immediately the cave trended steeply down a tight but negotiable rift. Then it reached a small horizontal streamway that was reasonably decorated. I raced about 30m down the passage until the streamway became blocked by formations. After some rearrangements, I was able to just squeeze through a rather painful gap. Phil followed through after a bit more effort. We continued along a serpentine streamway for about 40m, until we reached a short downclimb. We were suitably impressed by the passage, but we agreed to come back with a tape and survey gear. We hoped that this cave would join into the main streamway in Redirected, ideally on the downstream side of the terminal rockpile.

2nd of February

We awoke to a day without rain! Phil, Alan, Megan, Pat, and I headed off to our new cave. Alan and Phil surveyed, while the rest of us rattled down the chute. After a bit of gardening, everyone was able to fit through the formation choke. The climb that had stopped us yesterday was easily negotiable with a tape although it was tricky to anchor as the surrounding rock was crumbly soapstone. After the climb-down, the cave continued to trend downwards, alternating between crawling and stand-

ing serpentine passage, sometimes in a streamway. We soon reached a major junction with another stream, and we hoped that we'd reached the stream from Redirected on the downstream side of the terminal rockpile. We headed downstream, hoping for the unlikely possibility that we might pop out at the resurgence on the surface. The cave became gloriously spacious serpentine passage which broke down into rockpile far too quickly. Megan and I followed the stream under the rockpile through a very wet squeeze. Unfortunately, the streamway became smaller and smaller, until it eventually went through a very wet flattener. The streamway floor was easily diggable, but the flattener was closer to a dive than a squeeze in these exceptionally wet conditions. We left a flagged cairn and resolved to come back in a drier summer.

While the others were lunching, I tried to find a route over the top of the rockpile to bypass the flattener. I succeeded in this, but I reached a bellowing 5m climbdown through exceptionally treacherous and unstable soapstone rockpile. Looking down the climb I was able to see the other side of the flattener, confirming that the passage opened out again. However, there was no way to get down the drop, it couldn't be freeclimbed and there was no way to get an anchor in the crumbling ceiling which looked like it would collapse with the slightest nudge.

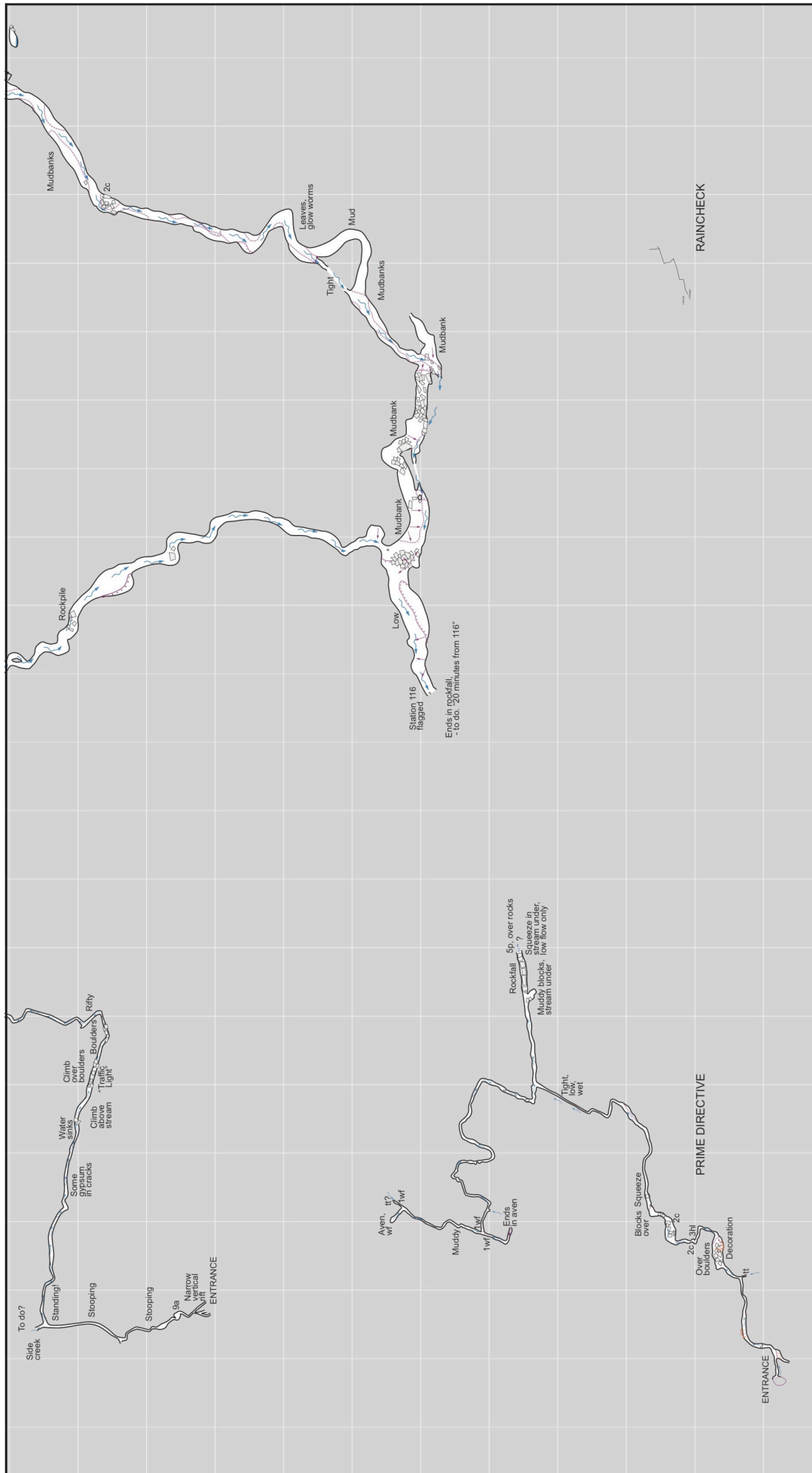
We headed back to the junction and then upstream. Again, we hit outrageously pleasant serpentine passage enabling fast travel. We continued ahead, through progressively smaller streamway passage until we were crawling. We popped out in a very small chamber, with a blind aven to the left. Unfortunately, the stream now

went through a small muddy slot. With a bit of digging, I was able to fit through, becoming thoroughly soaked in the process. I was glad to be wearing my fleece undersuit. Unfortunately, there was another squeeze on the other side, which will probably be passable in drier conditions.

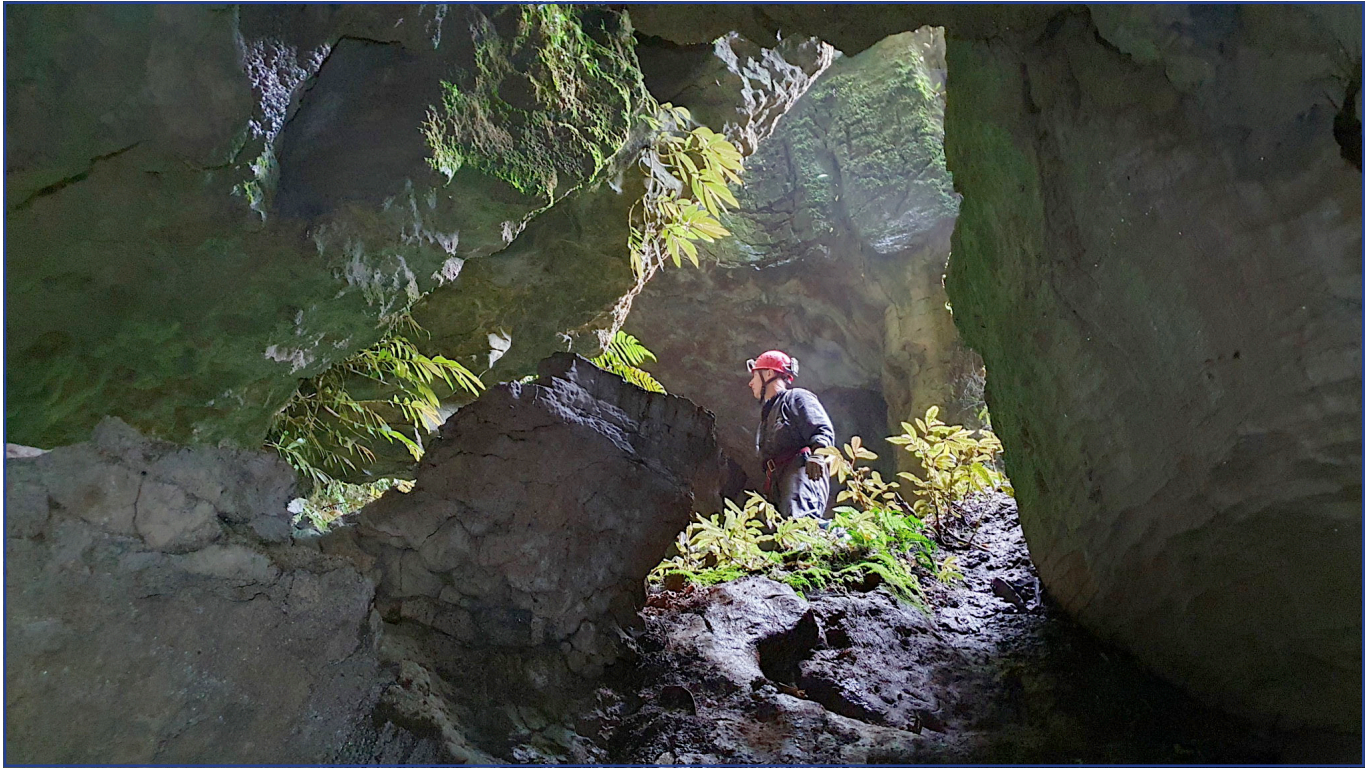
The three of us headed back downstream to the junction. There we met Phil and Alan who had surveyed to that point. I hung around to give Phil and Alan a hand with the survey. We surveyed all the passages that we had just explored, minus the terrible gravel to the flattener and the loose traverse across the death rockpile. This was 88 sta-



Exploration near Prime Directive. Photo Don Matthews.



Downstream end of the Redirected system. 25m grid. Map draft by Alan Pryke.



Phil at Phloughte Cave. Photo Alan Pryke.

tions in total, and 480m in distance, quite respectable for the soggy conditions. To everyone's surprise, we had not broken into the Redirected system, despite the entrance being only 200m away and heading in the right direction. We tentatively decided on the name, 'Prime Directive,' to align with the naming scheme for the Redirected system but also as a nod to the 'Prime Directive' in Star Trek – to make no contact.

On the walk back I decided to have a look at a nearby doline which Alan said was unexplored. An apparent entrance was blocked by an actively decomposing sheep. I wrote off that hole and immediately found another significant entrance taking a considerable flow of water. It turned out to be a reasonably sized cave. I journeyed about 30m into the cave before turning around to catch up to the others. That evening it rained heavily.

3rd of February

We awoke to torrential rain. This northerly system just wouldn't shift. After some time spent despairing over breakfast, I decided to return to the cave I had discovered yesterday. Phil and John came with me. By the time we had suited up it was only lightly drizzling. The cave began in a canyon, darkened by a dense roof of blackberry. There was a significant flow of water going into the cave, and before long another two streams joined the main streamway. We surveyed about 30m before we reached an easy formation choke at which point we stopped surveying because of the sheer volume of water. I went through the choke, followed by Phil but not John

as it was slightly too tight. The passage became smooth walled and serpentine. After about 15m we came to a 3m waterfall that was completely impassable in these high water conditions. The waterfall appeared to end in a deep swirling pool in a spacious chamber, before going down another drop of unknown heights. The sum of water going through the cave, and its strategic position, makes it likely to connect to the Redirected system. 'Rain Check' will have to wait for non-catastrophic weather conditions for a proper investigation.

In the afternoon Phil and I headed out to the Ronaldson's property, conveniently just across the road from Rotomate. This area is of interest because we want to find an entrance into the Moia system. The upstream entrance to this system is just below the Ronaldson's homestead but it is unfortunately no longer accessible. The resurgence emerges about a kilometre downstream but it's a pitch entrance. We suited up in the rain and headed into a scrubby doline. While fighting a particularly vicious patch of blackberry, I felt a tingling inside the sleeve of my oversuit. From the corner of my eye, I caught a glimpse of a striped insect buzzing about my head. To my horror I realised we had stumbled upon a European wasp nest, and there was a wasp caught inside my suit. I barged headfirst into the blackberry but I didn't move quickly enough, and sustained half a dozen stings on my head and arms. They had obviously liked my red suit. Phil, in his black suit, wasn't bothered at all.

We continued prospecting after some wringing of hands in the endless blackberry scrub. In our excitement,

we didn't double-check the map and we inadvertently rediscovered a known cave. It was an exciting find, with an easy 3m tape climb followed by an 8m pitch which we did not descend. We made it back just in time for dinner and for Alan to accurately describe the details of the cave we had just 'discovered.' It was still raining.

4th of February

Today was heavily overcast, but not raining! We seized the opportunity to do some non-project work and enjoy a fun day underground. We headed to Rimu, an A-list cave of the area known for its spectacular wet streamway. The cave was at the base of a beautiful gully filled with native bush. After passing through some highly decorated passage, we reached the main streamway which was spacious and highly scalloped. The streamway was deep in places, and it was more like an underground canyoning trip than caving as we hopped from pool to pool. Although we were wet to chest-level, the water was relatively warm. The cave concluded at a large window look-



Ciara in Rimu. Photo Tina Willmore.

ing out into a scrubby valley, with a waterfall dropping away through the gap. The window was decorated with windblown epitrochic speleothems growing towards the light. To exit, we retraced our steps up the stream and climbed steeply up the Togyp side stream. There were a series of tomos, and we had some trouble picking the exit. We scrambled up a treacherous mudbank, which I doubt was the traditional exit, and emerged into the sunlight. From there we climbed steeply up an exposed cliff line to ascend out of the valley.

5th of February

It had been 36 hours since the last rain event so we decided to chance visiting Off-Gorse to push a low roof-sniff. On the drive we serendipitously ran into another local farmer, Andrew Neale, whose farm is adjacent to Matt Sherriff's. This gave us an opportunity to ask for permission to visit his property.

At Off-Gorse, Phil, Megan, and I entered through the 'Main Course' entrance which involved negotiating a very slippery 7m tape climb into a doline. Alan and John wisely decided to avoid this risk and enter via the low and wet, 'Off Course' entrance. Of course, that entrance was sumped, so they never re-joined us. The three of us proceeded up the main streamway through the 'Main Course' and 'Concourse' sections. The main streamway was aesthetic and spacious. After the 'Side Course' passage joined the main streamway we entered the rockpile in the 'Off Source' section and reached the roof-sniff. To our dismay, the 12m roof-sniff was definitively sumped. I made a few dejected pokes at the rockpile attempting to find an alternative route while Phil dug into the streamway to lower the water level. Both attempts were futile. We know that there is at least 200m of unsurveyed passage beyond this roof sniff, but it will have to wait.

On the surface we reunited with Alan and John and decided to spend the afternoon prospecting on Andrew Neale's land. We jumped the fence and went to look at some obvious dolines which we could see on satellite imagery. There's a good chance that there are additional branches of the Off-Gorse system travelling under this farm. There were dolines everywhere and many sinking streams. Sadly, it quickly became clear that many entrances on this farm were blocked. We found about half a dozen obvious but impenetrable entrances. We located one passable entrance in a redwood plantation which went for about 20m before sumping. This cave appeared to contain a whole car engine. After some hours we called it quits, but there are still plenty more dolines to investigate on this property, likely requiring the assistance of some heavy-duty secateurs. That evening we had dinner at the local restaurant, where we ran

into another local landowner. This provided the opportunity to ask for permission to visit Murder Canyon. The group visited this the next day while I flew back to Hobart.

Although our intentions were frustrated by the outrageous weather conditions, the trip was still great fun and

good company. After two years stymied by Covid, and one by weather, Piopio's going leads can wait one more year. Thanks as ever to Alan, Megan, and Phil for their organisational efforts.



Pitch entrance of Off Gorse. Photo Don Matthews.



The window entrance of Rimu. Photo Tina Willmore.

11th & 12th February 2023

By Julius Pucci and Rowena Larkins

Participants: Rowena Larkins (Trip Leader), Max Midlen, Simon Murphy, Stephanie Murphy, Julius Pucci.

Saturday

In general accordance with plans for trip attendees (AKA SUSSlings) to meet at the top of Two-Mile Hill above Jenolan at 9am on Saturday, I set off from Sydney just after 6am. By around 8:45am Max and I were waiting at 1200m elevation, in the short queue of cars to be escorted down to Jenolan behind a lead vehicle. Rowena, Simon and Steph followed shortly after. Being three years since the fires, floods and closure of Five Mile Hill, and after the subsequent partial failure of the Two Mile, that was the way we got to Jenolan. First came a wait at the top of the Two Mile for a Jenolan vehicle to lead the convoy. We then drove in series down the (up to 1:6 grade) hill, regarding the various dilapidated road sections, temporary traffic barriers and flame-thrown trees, before being directed to parking in the Number 2 Carpark at around 840m elevation. From here the general public were advised on the Jenolan website: “wait to catch our free shuttle bus, or walk the last 500m downhill to caves and hotel”, the latter option giving laden tourists with modern expectations the opportunity to relive an approach to the Caves as it was in the late 1800s... without the assistance of horses.

Having sorted gear, and following a late dash by Max down and back up the Six Foot Track to retrieve cave gate keys from the guides’ office, we SUSSlings set off just after 10am down the closed-to-tourists concrete path from the Elder Cave doline (J1), past ‘The Balcony’ (J153), to McKeown’s Creek and the valley floor. The ‘no-entry’ tape we stepped over at the top of the closed path could well have been marked ‘Welcome to Thistle Valley’, such was the number of Scotch Thistles on and off the neglected path, clearly finding growing

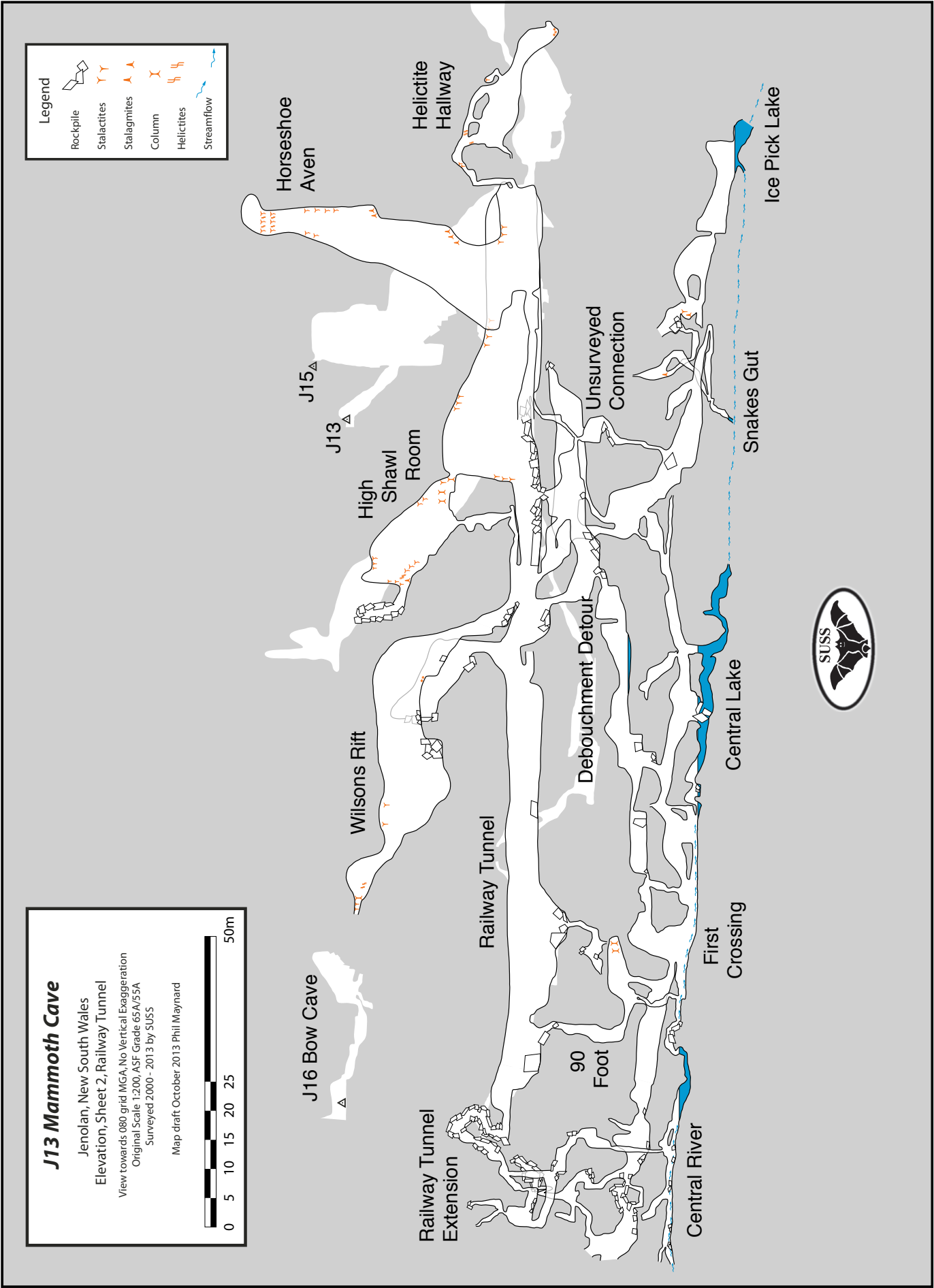


Mammoth entrance chamber. Photo Julius Pucci

conditions in the valley ideal. Our destination for the day? Well it was described by Trickett (1890) as “of large extent, and difficult and dangerous to explore... whose floors are strewn with huge rocks”.

It was forecast to be a warm day of around 30°C, and by around 27°C we reached Mammoth Cave entrance. The hammering Jenolan has received over the last few years, essentially initiated by the December 2019 fires, has sadly left much of it looking a little post-apocalyptic. However, through the Mammoth entrance gate and into the coolness lay the spectacular sloping entrance chamber, subtly lit by its upper entrances, and likely looking as it has for thousands of years.

Grateful to have escaped the heat outside, the five of us filed down the well-trodden route to Railway Tunnel. Moisture levels from the entrance chamber to Railway Tunnel seemed around average, with earth/mud paths



Elevation view showing Wilsons Rift relative to Railway Tunnel. Map draft Phil Msynard.

easily negotiated, but also some wetter areas and rock surfaces. First on the agenda was an ascent of Wilson's Rift, so those more familiar with the cave set about looking for the entrance. Simon enjoyed pitting Max and Steph against each other in a race to find it, only to realise that he himself had forgotten the most convenient point of access. We soon found it and we set off up the series of 2 to 5m high, invigorating climbs, aware that they may be a little unnerving on the way back down.

Up in the heights of the Rift, some 10m above the last mapped point on the Mammoth Cave survey, we remarked upon Jeremiah Wilson's 1891 signatures, and what a brave chap he was to have made it up there with just a candle... most likely held between his teeth up and down the dicey bits. Also near the top of the rift is some lovely formation, including a fallen, now near-horizontal stalactite from which newer, glassy stals are heading downward. Happily the formation is out of reach, and pristine. Max volunteered to be the first of us down the somewhat blind down-climbs within the Rift, and I was grateful for it.

Back at Railway Tunnel it was decided that Simon, Steph, Max and myself would go and have a look at a possible way on near Abusive Intrusive, while Rowena would exit the cave to investigate some other matters listed on the permit. The four of us then set off to enjoy the delightful squeezes, shafts and geomorphology associated with the route towards Snakes Gut via Davy Jones Locker. From Abusive Intrusive, Simon also made a quick trip over to assess moisture levels in Dry Syphon, and was able to confirm that it was of average dryness, complete with its usual pool of water. Simon added that the well-trodden route through Middle Bit is looking less conspicuous than usual due to lack of use since the area was recoated in mud in the floods, and that First Crossing is no longer a swim.

After an encouraging assessment of a large solution tube around Abusive Intrusive heading gently down and to the north-northeast, we took the scenic route back to Railway Tunnel via Central Lake, Central River, First Crossing, and Debouchment Detour. This is an excellent, sporty route. It is also difficult not to become a little muddy along the way, nor, speaking for myself, con-

fused. It is said that Wilson only got lost once in his 40 years of caving at Jenolan, and that was in Mammoth.

We had decided to make full use of our available caving time, noting the 4:30pm carpark curfew imposed upon us by Jenolan staff. This made for a speedy exit from the cave, and I was four fifths done by the time we surfaced at 4:05, into the remains of the hot day. No time for dawdling though, and we made it back through the thistles and up the hill to the carpark by 4:30ish. We joked about having Simon run the stairs back up from the valley floor, but he stubbornly refused. Until, that is, sufficient badgering and a tendency to show off overcame him. We regrouped with Rowena at the car park and joined the next available car convoy back up the Two-Mile.

The day was pleasantly concluded with dinner at the Reef Reserve Campground, overlooking Lake Oberon. The lake serves as a useful substitute for a shower in summer and a convenient place to remove the Mammoth mud from clothes, gear and ears.

Sunday

We aimed to get in the first run down the Two Mile so rose at 7am.

While making coffee and drying tents out we got a message from Julius that he was heading home. We got our gear in the cars and chuffed off to the Two Mile. Rowena was the last in the convoy and arrived at the top of the Two Mile just in time to see the last of the convoy leave. The controller at the top station had a quick word with her and on learning she was a caver, waved her on. Goal achieved.

At the carpark we trogged up and headed down hill to tag J368. The hole was drilled with the correct bit, the tag stamped, and the rivet gun seized from 2 damp years in storage. Max and Simon both had attempts to rivet the tag to the rock face and failed.

Rowena's plans for the weekend were complete and she left to perform some family commitments. Rowena was given the Mammoth key and agreed to drop it at the guides office on the way. Simon and Max headed up the valley to prospect for new cave entrances.

March Jenolan

11th & 12 March

By Elise Summerhayes

Participants: Elise Summerhayes, Stevie Oehm, Keir Vaughan-Taylor, Phil Maynard (Trip Leader), Annie Martinez, Jarvis Mumford-Day, Júlia Fuentes, Alan Green.

On Saturday we drove down to Playing Fields in the morning and the whole group went into Mammoth Cave together. We entered mid-morning and decided to go into the south side of the cave. From the entrance chamber we headed down some narrower passages until we reached “Oolite Cavern”, which had some really nice formations. We then headed down to the “Lower River”, which was very high compared to how it normally is and running quite fast with almost crystal clear water.

We headed back to the entrance chamber then several of us went down a bit further towards the north side and went just past the “Skull and Crossbones” tag which was spray painted on as a reference point for cavers many years ago.

On Sunday we split into two groups – Alan, Jarvis and Keir went to explore some smaller caves whilst Phil, Stevie, Júlia and myself went back into Mammoth cave, this time going into the north branch, which apparently consists of about 80% of the cave.

From the entrance we went towards the left and headed towards “The Railway Tunnel” which we could easily walk through most of, until we reached a tight, narrow passageway which led through to “Hell Hole”, which was a series of numerous, large holes in the floor. Thankfully Phil knew the correct one to climb down until we reached the passage to “Naked Lady Chamber”, which had some beautiful formation in it.

From there we headed down a few small, long passages until we reached “Ice Pick Lake”. There was a small squeeze that you would usually climb through to gain access to the lake, but the water was so high it was close to the top of the hole, so we couldn’t go through without swimming! We followed our path back out the same way and returned by early afternoon.

It was a fantastic weekend, we got to see some awesome formations and scenery, and we were very grateful to have the opportunity to come along on the trip!



Keir in Hell Hole. Photo Annie Martinez.



Oolite Cavern. Photo Annie Martinez.

Tuglow Caves

27-28 May 2023

Text and photos Cathi Humphrey-Hood

Participants: Cathi Humphrey-Hood, Rod O'Brien (Trip Leader), Phil Maynard, Gabe Naylor, Alan Green, Emma Bonwick, Jarvis Mumford-Day

The temperature at the Dingo Dell campground late on the Friday afternoon was only just above zero, and the sun was still above the horizon (just). With everyone bearing firewood, Alan, Phil and Gabe arrived first, closely followed by Rod, Cathi and Emma, and the most important thing of the whole trip - the roaring fire - was soon blazing away. Alan's kitchen camp was efficiently established, taking on its usual momentous proportions. Jarvis turned up just before nightfall. There was the usual camaraderie around the campfire but the lure of a warm camp bed and prospects of a long day in the cave on the morrow meant that it was not a late night. Things that were not in a nice warm camp bed became slightly frozen overnight.

The next morning dawned fine and so commenced the packing of the gear and piling into vehicles for the run up to the cave. The temperature hovered around zero as we left the cars around 9am and headed up the track to the cave. The track was overgrown but still discernable for the most part. On reaching the cave, Phil and Rod went in with slings and ropes to see if they could find the new bolts. The route was rigged pretty quickly (because Phil is good with things like this) and Phil remarked later that he thought the bolts had been well placed. The packs were chained down to the top of the first abseil to avoid the twisty bit below the entrance to the cave. It was much warmer inside! The first abseil was fairly straightforward and went smoothly. Even with the three re-belays on the second pitch it still took time to get everyone down to the streamway. Some of the team went downstream to get changed into wetsuits at the bottom of Ward's Chimney while the rest changed at the bottom of the pitch. The stream was flowing well and everyone was looking forward to the waterfall abseils. To get to these, however, one has to go upstream.

Upstream is a beautiful section of cave with a lot of variety: some lovely rimstone pools; sharp, steeply dip-



Phil over the main waterfall.

ping slate bands; one large chamber (Knights Knobbly Knob chamber) with some gorgeous decoration; and shawls forming a portico entrance to where the stream goes over the first waterfall below the start of the abseil. Rod climbed up to fix the rope and because of the mix of descenders, Phil set the rope so people could abseil on one strand or the other, or both. Rod was to come down last as he had a rack and could use both the ropes, leaving them free for the pull-through. The start of the



first abseil is a bit awkward as there was a bit of rock sticking out around where the rope came down. This is a short overhang abseil which drops straight down into the shale band and a pretty pool. The waterfall comes in about halfway down on the far side, flowing over a notch in the shale. It then goes from the pool, around a corner and down a small drop (which was downclimbed), to the main waterfall abseil. Phil rigged this as before, from a bolt on the right-hand side, and Alan went down first so he could blast everyone else with a blinding number of lumens from his Very Large Light. The shale borders the limestone here, so there is some decoration above you as you descend. The abseil goes right down the waterfall, and while I didn't think the flow was that strong, Rod decided to make it stronger by dumping more water on my head when I was halfway down... for the purpose of making the photos look better (or so he claimed). The



Cave hazard (Petrica Boodang).

bottom of the abseil ends in a shale rift, which is the streamway, and from here it was a matter of making our way back to the point where we abseiled in originally.

The streamway is quite tight in places, and also quite deep in a few parts. At this point I discovered that my watch had made a successful bid for freedom sometime earlier (if anyone does ever come across a Casio waterproof watch in the Tuglow streamway, I wouldn't mind having it back)... So, no watch – but it was probably about 3pm-ish when we arrived back at the bottom of the entrance pitches. Emma went first and sailed smoothly up the ropes. I followed and all went well except for my ascender getting stuck at one point at the top of the second re-belay – fortunately I managed to get it unstuck before the rescue team (who were underneath me) felt compelled to come up and do it for me (I

say fortunately, for I would never have heard the end of it). As if to make up for the frustration, I did find a small black torch at the top of the main pitch, which looks like it had been there for a little while (if the torch is yours please let me know, I would be happy to return it to its rightful owner). Gabe came up next and then Alan. Gabe took some of the packs out of the cave then hastily retreated back inside in order to keep warm! I discovered the wonders of the evening climate when I exited to pull Rod's thermal top from out of my pack to hand down to him. Darkness was descending and the temperature was still around zero. Phil and Rod de-rigged and everyone walked out in whatever they were wearing when they left the cave – by the time we got back to the cars it was quite dark, and very cold. The fire was lit as soon as we returned to camp – having warmed up on the short car-ride back no one wanted to strip off again to even have a shower, it was just too cold. There were a couple of 4WDs camped next to us – they had some firecrackers and managed to leave some singe marks on the road and demolish a small NPWS sign, but apart from that they were mostly quiet.

The next morning was overcast - not quite as cold as the day before, but it was only a matter of a degree or two! Phil lugged the ropes down to the creek to rinse them off, but that was about as energetic as things got. No one had much enthusiasm for exploring so we packed up and headed to a café in Oberon to finish off the trip before everyone headed home.

New discoveries in Thampanna Cave, Nullarbor, WA

Text and photos Alan Pryke

“You’re gonna like this, Alan!”, Max relayed down after a short climb. Above was a large chamber chock full of halite and gypsum formations, including forests of up to two metre straws and columns. A thick three metre high halite column is a centrepiece.

In March 2018, Alan convinced Max Midlen to take his van the 2700 kilometres from Sydney to Mundrabilla Station, west of Eucla, WA on the Nullarbor Plain. A full three days of driving.

So Megan and Alan Pryke, and Max, met up with Nullarbor veteran Graham Pilkington, and VSA’s Peter Freeman, for two weeks of cave exploration and mapping.

During this trip Thampanna Cave was visited as a day trip from our Webbs Cave camp. The cave was rigged and the party descended first to the “U Tube”, only to find it flooded. A breeze was felt from the direction of the sump, but Graham explained it as air passing through tiny “vughy” holes in the limestone above the

Tube. The party then moved on to “The Drains”, usually a 20 minute crawl, and the way on to the rest of the cave. Unfortunately, “The Drains” entrance was half a metre under water. Graham had never seen this before, although he had seen it containing pools. Disappointed, the group started the ascent out of the cave.

On the way up Graham noticed a rather obvious breeze that Max found to be issuing from one of the dead-end side passages, identified at the time as probably “The Crypt”. We entered this area, intent on following the breeze as, due to the sump in “The Drains”, air was presumably escaping from an alternate route.

After a mixture of squeezing, crawling around, stooping and walking, the team found themselves at an impasse, with obvious air movement. Alan looked at a low tunnel, which became very low... then too low, whilst Max was climbing into the roof noting a slot in darkness. We gardened the slot for some time to make the way up safe,



Max surrounded by halite in The Big Bamboo.



Megan in Cryptography.

and Alan squeezed through, noting many loose boulders. A fair amount of stabilisation needed to be done before proceeding.

Once up, Alan found himself in a large dirt-floored tunnel with old weathered formation, heading off in two directions. He immediately headed off in the most obvious way on over boulder pile, with a good roof overhead, shortly followed by the rest of the group. Alan guessed he had travelled at least 200 metres before turning around, realising a survey should be started before any more “booty scooping”.

The following day, rather than head up to Old Homestead cave as per our schedule, we resolved without much encouragement to survey and explore the new passages.

After the new northeastern passage disappointingly ended in rockfall, we retreated via a lower tunnel, which reconnected to the main passage. Half way along this wall, a small phreatic passage was found to be blowing a gale, so the survey continued through a low tortuous passage into a low maze. Graham remained behind and checked out side leads.

Max was up ahead ferreting around following the breeze, and after negotiating a few squeezes, side passages with “coffee” were noted. (Not sure where the “cream” was?). The group was careful to avoid the deposits. After quite

some time surveying short awkward survey legs, Max found a climb up into a decorated chamber. We were all excited to find a reasonable size chamber with rich deposits of one metre or so high halite columns, and other salt decorations. After the survey was completed here, and many photos taken, the group nearly made the decision to leave the rest of the leads for another day, but Alan convinced the others (not sure about Peter..), to continue, and before too long Max climbed up a similar climb, into the much larger halite-strewn chamber mentioned earlier.

Alan abandoned the survey, attempting photos with the only camera at hand, a waterproof snappy camera. Megan began DistoX-ing the walls. We realised that we would be out quite late and retreated, picking up Graham on the way.

Back at camp, the sketching of the data was lined up with the cave map to see where it all fit, and whether the final decorated chamber was already known about, from one of the many leads heading off which were not looked at. The shape of the chamber that Megan had drawn was remarkably similar to one on the old map, “The Great White Angle”, and we assumed we had possibly connected to it, although it was not exactly where the new survey said it was. This led to speculation as to the accuracy of the original survey, and we were all baffled, including Graham.

Fast forward to October 2018, and the area was revisited by Megan and Alan Pryke, with Jim Crockett of MSS as part of MSS’s Nullarbor trip. The obvious objective

¹ Coffee and Cream is a mixture of coloured spalling which seems to be unique to the Nullarbor, and is treated with care.

CRYPTOGRAPHY / THE JUNGLE

Cryptography and The Jungle discovered March 2018
 Original scale 1:2500 Alan Pyke, Mrs. Miller (JLBS)
 Graham Pilkington (CEGA), Peter Freeman (VSA), Jim Crockett (MBS)
 Drafted by Alan Pyke, Sydney University Speleological Society

10m GRID
 Date: 02-2019

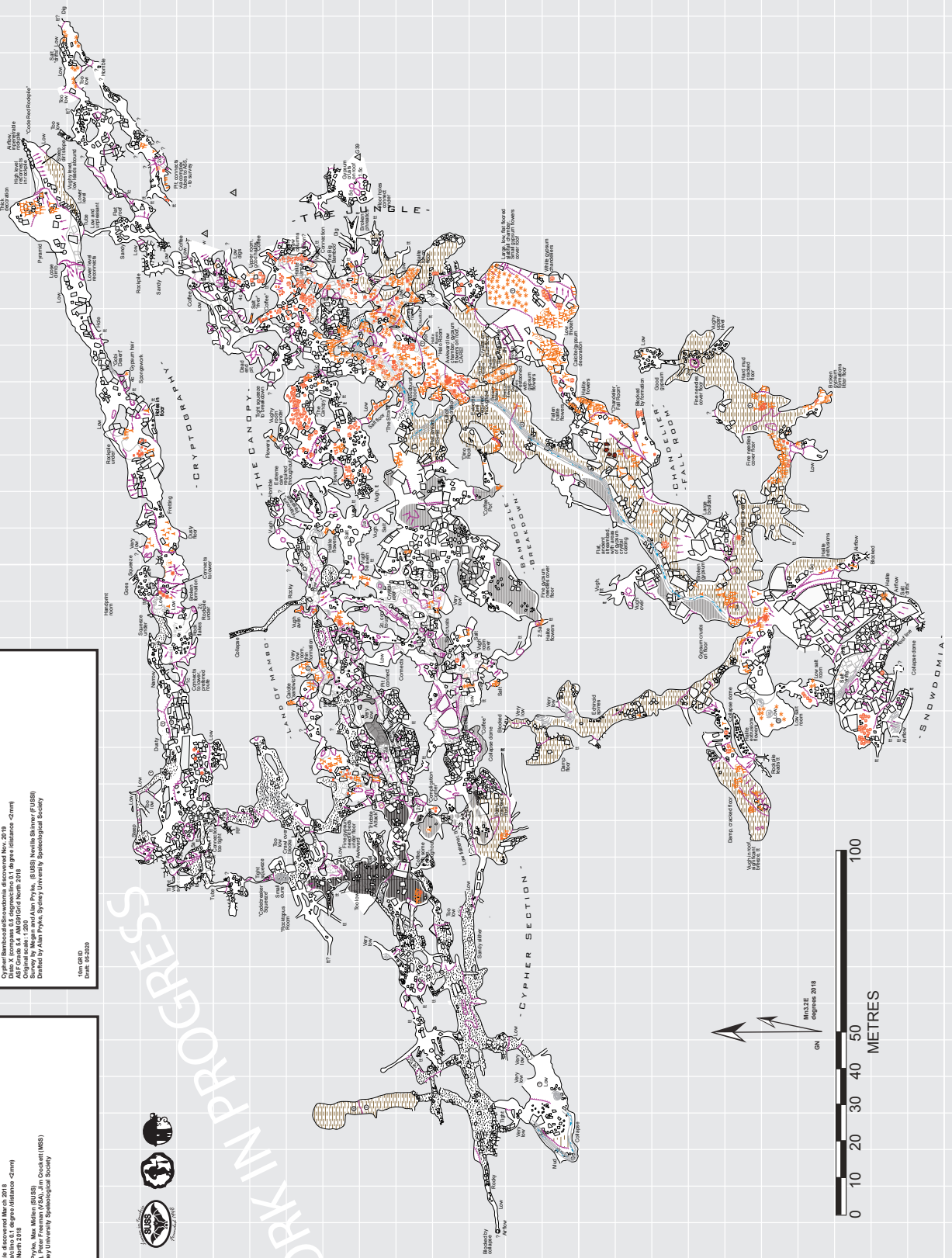


CYPHER/BAMBOOZLE/SNOWDOMIA

Cypher/Bamboozle/Snowdomia discovered Nov. 2019
 Original scale 1:2500 Alan Pyke, Mrs. Miller (JLBS)
 Drafted by Alan Pyke, Sydney University Speleological Society

10m GRID
 Date: 02-2020

WORK IN PROGRESS



was to complete the survey of the new chamber. It soon became apparent that the chamber was definitely not “The Great White Angle”. The passages all led to heavily decorated areas that were tip-toed through as we surveyed.

The “Cloudburst” room was discovered next, which had a “cloud” of gypsum/halite? with many straws under it as “rain”. Continuing on was a final low chamber chock full of gypsum flowers. By this time Jim’s brain had imploded with the beauty of the find. All the new pas-

sages are confirmed to be new, over 400 metres of survey, with the extent of the halite chamber over 60m. Many small leads remain, many of which cannot be entered due to extensive decoration. Two short days were spent surveying the chamber, with many photos taken. We named the new chamber “The Jungle”, with features “The Cloudburst”, “The Big Bamboo”, “The White Hole” and “Halo Room”. Graham assisted Alan tying in the new discoveries to a known station. More work needs to be done here in many areas and it is expected that more discoveries await us. Stay tuned!



The Cloudburst.

Comboyne Caves

Obscure Caves Part 6

By Rod OBrien

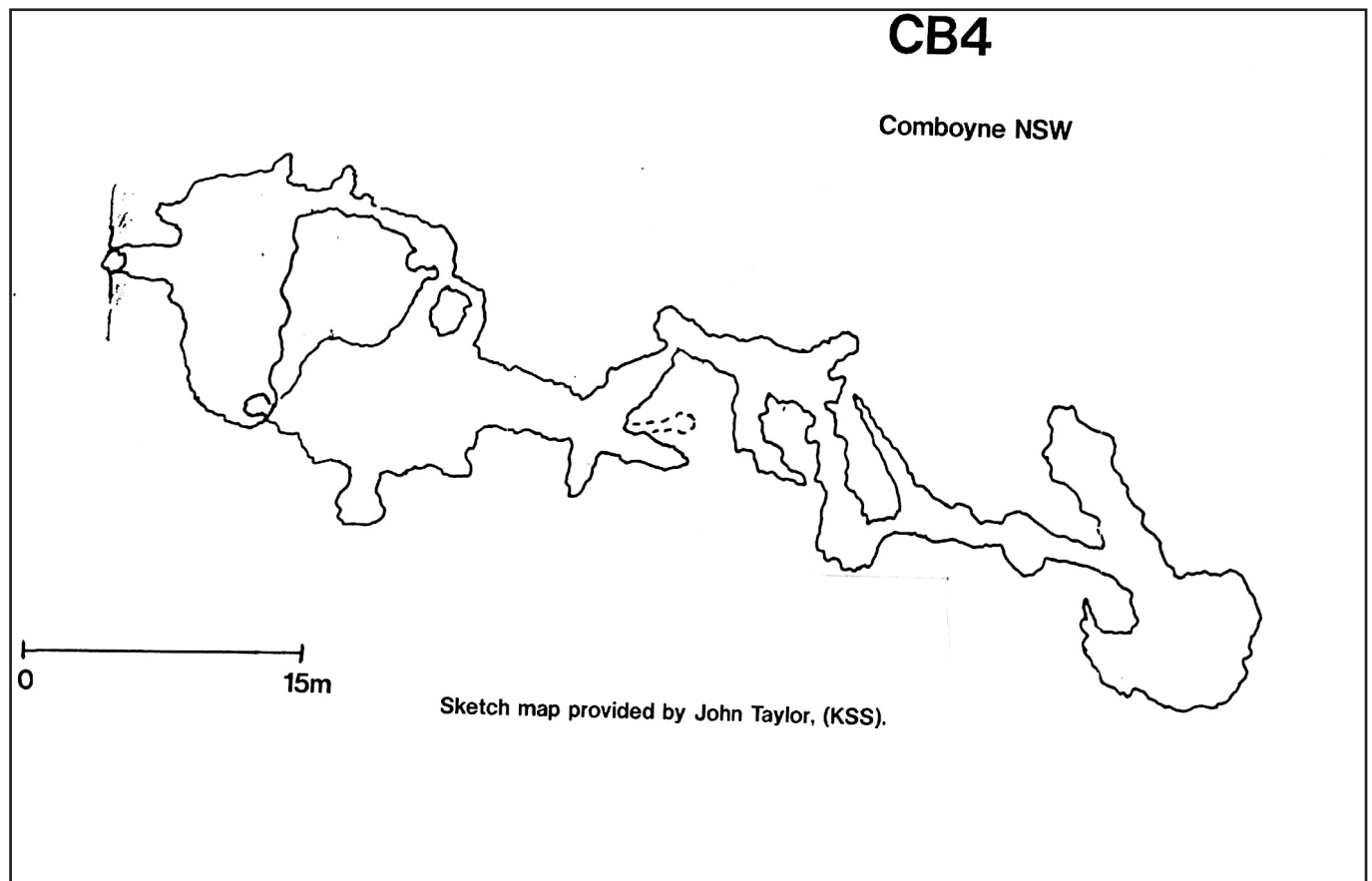
In March 2023 we visited the caves in the Comboyne region which is situated in the New England Range. Permission to access the caves is required from the local property owner. We camped at Ellenborough Reserve, which is a free campsite on the banks of the Hastings River. Bathing facilities are also free ie. by swimming in the river. The water was quite pleasant but best to do it before the sun goes down. A regular at the campsite (KSS Caver) warned us not to swim in a deep hole near the river bank as a particularly territorial catfish had a habit of chewing on people's toes.

The Comboyne limestone outcrops are from the Early Palaeozoic era (possibly Silurian) around 430 million years old. The limestone is typically surrounded by volcanic rocks, basalt and serpentinite. There are some smaller limestone lenses surrounding the largest limestone bodies. A few crinoid and coral fossils can be found. By the end of the weekend, I got the impression that there is more limestone here but it is covered with overburden.

The closest cave to our parked vehicles was CB-7 which is situated at the top of the hill we needed to walk over

to reach Cave Creek. Heading for CB-7, we split into two groups and as we ascended the hill we searched the steep slopes for any new caves. We found an interesting area on the limestone surface boundary that looked like it could act as a spring during wet periods but I could find no way in. Several limestone bluffs also looked promising but the snakes and very thick lantana denied us access. Garry was blocked by one snake that would not move and was rearing up at him like a cobra. I was hit on the leg by one while scrambling up a steep slope in thigh high grass.

CB-7 is located on top of the hill, hidden in the bush and dense undergrowth. I had to fire up the GPS to relocate it. It is a small rift cave 6m long, 1.2m wide and 5m deep roughly running north-south. Dropping down the southern end of the rift 2.5m, one then follows the sloping floor north to the other end of the rift where a small hole drops into a tight passage running underneath the entrance passage back south. Two cavers attempted the lower passage but it was too small. No cave formation was sighted. I did a quick sketch map of the cave and lost a litre of blood to the leeches doing it.



After picking the leeches off us we trogged over the hill and started descending, finally relocating CB-4 after dodging several snakes along the way. This cave is on the side of a steep hill and is the largest cave at Comboyne with around 150m of passage. It is also home to a good-sized bat colony. We found some nice crinoid and coral fossils scattered through the cave. Some cave coral and stunted formation was present. We took our time in here taking photos and escaping the heat of the day.

Travelling further down the steep slope into the gully is CB-3. It is located on a cliff face in amongst the rainforest and Stinging Trees which were growing abundantly. It has a small entrance hole leading into a single chamber totaling around 12m of passage. We noted several bats at the back of the cave and a patch of cave coral on one wall.

Just around the cliff face from CB-3 and still in the rainforest is CB-2/6. CB-2 has a large cave-type entrance. A crawl passage runs off the back of the cave parallel to the cliff face, through several chambers then exits back out on the cliff face via CB-6. There is around 70m of passage. Some formation exists in the entrance chamber along with some cray-back style stromatolites. A large colony of bats live in this cave. It is best to exit the cave via CB-2 as it is a bit perilous getting back around the cliff face if you exit via CB-6.

A long walk down the valley brought us to CB-1 which is located just outside the old limestone quarry boundary. To do this we opted to traverse the side of the hill instead of following the creek down. This avoided most of the stinging trees, although the cave entrance is located in



Cathi Humphrey-Hood and John Taylor in CB4. Photo Rod OBrien.

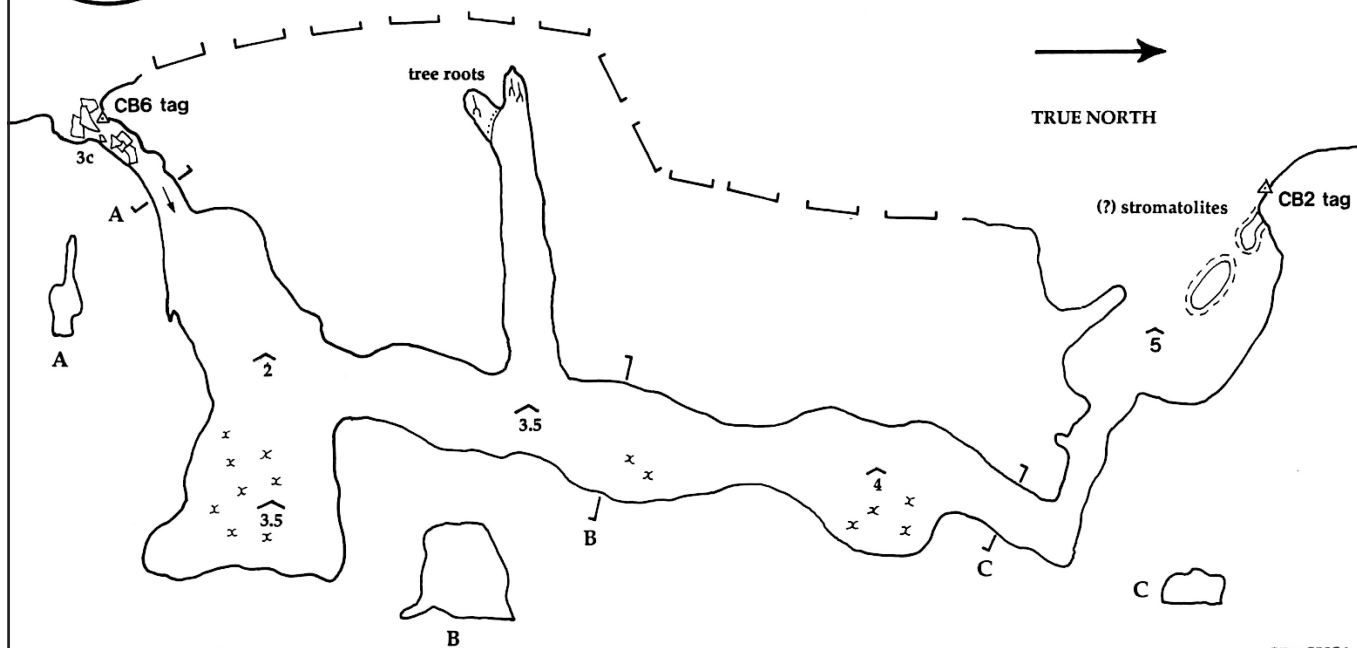
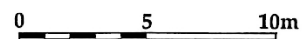
a pocket of rainforest that would have halted Indiana Jones. At the back of the entrance chamber is a squeeze that is easily dug out leading to another 40m of passage. Some small formation was noted. This cave is also home to a colony of bats. I do not know how this cave has survived the quarry blasting but I'm glad it did.

Despite the vertical nature of the topography, the toenibbling catfish, aggressive snakes, blood-sucking leeches, stinging trees, and the ticks – Did I mention the grass ticks? Garry dug 11 of them off him the next day – it was a great weekend and good to do some caving again with the KSS crew.

Comboyne NSW



Length: 77m Depth: 8m



I. Cooper, A4 draft, 22/9/1994

2CB2.SUS1



Entrance of CB2/CB6. Photo Rod Obrien.



Entrance of CB2/CB6, Comboyne Plateau. Photo Cathi Humphrey-Hood.



John Taylor in the CB2 entrance. Photo Cathi Humphrey-Hood.



Empress Canyon. Photo by Simon Um.



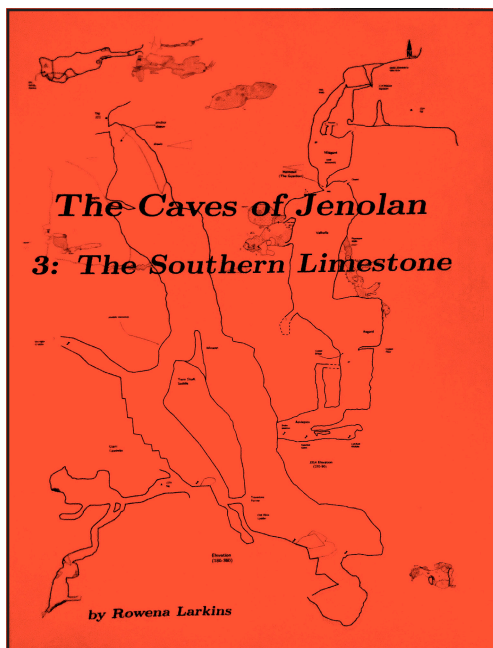
Max Midlen in the halite formations of The Jungle, Thampanna cave. Photo Alan Pryke.



Megan Pryke in the Cloudburst Room, Thampanna cave. Photo Alan Pryke.

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.



The Caves Of Jenolan 3: The Southern Limestone

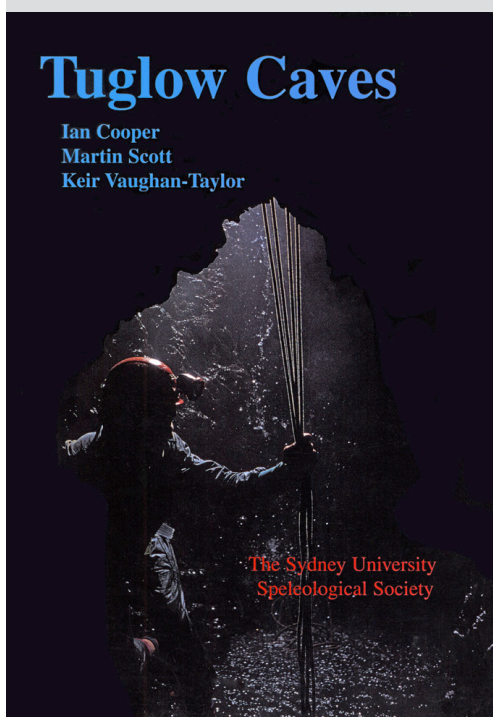
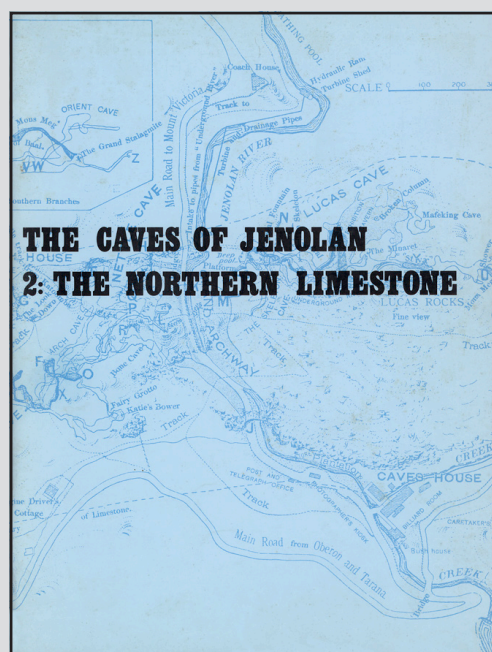
Just published!! By Rowena Larkins. 2020, 90 pages. Contains maps and descriptions of every known cave in the Southern Limestone of Jenolan plus notes on the geology and hydrology of the area.

Price is \$20.00 + 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: Understorey cave, Pio Pio, New Zealand
Photo Tina Willmore*



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