Speleo Spiel 420

May–June 2017

Newsletter of Southern Tasmanian Caverneers Inc. ISSN 2208-1348

Front Cover:
Grant Rees demonstrating the jaunty helmet angle worn by all the coolest STC members. Photo by Adam Hooper

STC was formed in December 1996 by the amalgamation of three former southern Tasmanian clubs: the *Tasmanian Caverneering Club*, the *Southern Caving Society* and the *Tasmanian Cave and Karst Research Group*. ***STC*** is the modern variant of the oldest caving club in Australia.

Speleo Spiel

Newsletter of the Southern Tasmanian Caverneers Incorporated

PO Box 416, Sandy Bay, Tasmania 7006

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Issue No. 420, May. - June. 2017

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Editorial

We have a bit of a bumper issue this *Spiel*. To the point that not all of the trip reports for this period are included. An editor can never complain when she has too much material. This one won't anyway. Keep those trip reports rolling in, folks. If you add a couple of really good quality photos I will be beyond happy.

To be fair though, quite a few pages are taken up with the "rescue" we did from the bottom of Midnight Hole in March. If you haven't heard about it then here is your chance to get the full details. Even if you did get an anecdotal account you can read the full, unabridged and accurate, version here. Expletives omitted.

Stuff 'n Stuff

Mayberry Hut

Longer term members of STC will be familiar with the Northern Caverneers' (NC) caving hut (Mayberry Hut), located about 1 km before the Guides' office for Marakoopa Cave. Many of you will have stayed there on STC (and formerly TCC) caving weekends to Mole Creek, as we have always been welcome to use the hut. We have had some great times there, with many generations of cavers having fond memories, and entertaining stories to tell. I particularly remember the era of the snoring wombat, that used to live under the Possum Shed.

The local farmer who owned the hut sold the land to the Tasmanian Land Conservancy a few years back, who allowed the hut to continue to be used by cavers. Their intention was always to on-sell the land they own but subject to restrictive covenants.

They have finally found a buyer and have informed NC that the property has sold. Settlement occurred in early April. The new owner is happy to continue to allow the hut to be used by cavers. This is a surprise (to me at least) and a welcome outcome. Below is part of an email sent to us by Cathie Plowman, with an excerpt from the new owner. We know who they are, and have contact details, but I will not publish that information here as this publication is available to the public.

They are very keen that visiting cavers continue to use the hut and they have a very generous spirit in that they feel that people who already have a relationship with the hut block continue to be part of the property. Hence, NC, and STC, are welcome to continue to use the hut. They do ask:

Of course I do expect the premises to be kept clean and whilst cavers are in residence while I am there, to respect my privacy, and no wild parties etc! I will expect cavers entering this property to observe minimal impact bushwalking and caving and take great care with biosecurity. My only other request is that cavers not enter Byards Rising (MC 230) as it will be a source of domestic drinking water and the entrance approach area is quite fragile and prone to erosion. Obviously, there will soon be works commencing to start development for a very small cabin quite a distance away from the hut, and I will be arranging for new roadside fencing and gate by the end of the year. I will keep you informed of any changes to access and keys etc.

As you can read, they will be having a small cabin built and there are very strict Council building conditions that they have to comply with. Re the hut, they are not allowed to use it for any animal use and are not permitted to do major renovation works. They see the hut as the important part of the Marakoopa Cave tourism story that it is and feels that it should be cared for, and the Byard pioneers honoured for their efforts.

This must be the first day's caving. Everything looks clean, including the caver.
Janine McKinnon

Trip Reports

JF-4 Khazad-Dum (KD)

19 February 2017

Adam Hooper

Party: Phil Croker, Pat Fitzgerald, Adam Hooper, Janine McKinnon, Ric Tunney.

When one trip approaches its end, the next trip has already begun and this trip was no different. A quick coffee 12 months prior with Janine consolidated the plan for a dry caving trip in Tasmania for Feb 2017.

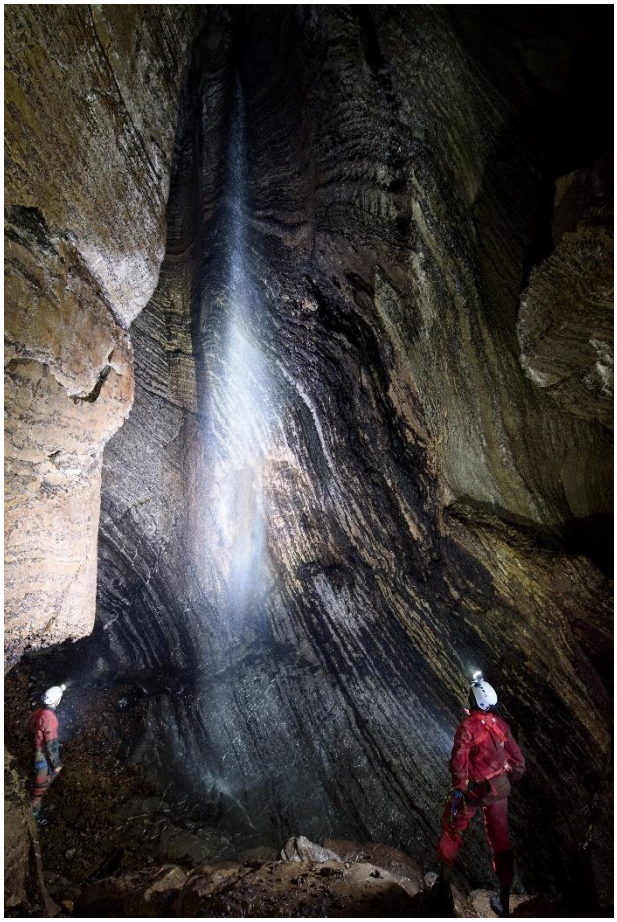
Janine, Pat, Phil and I have enjoyed diving in caves previously together and yet we had never really dry caved with each other, except to access dive sites.

Janine provided the imagination with some suggested caves and a week tour of Tasmania was sketched out. This would be a great opportunity to scope some pretty cave, some sporty cave and the chance to consolidate SRT skills and techniques which are obtained by neither nature nor nurture for those of us in the northern states.

We all convened in Lindisfarne, sorted equipment and discussed options for the trip.

The next morning found us walking through the magnificent forest to Khazad-Dum. The sensory experience of walking through these Tasmanian forests for a mainlander who spends much of their time in dry sclerophyll is wonderful, with intriguing fungus of all colours. The grandeur of century old trees and the mosses and lichens that gently blanket the forest was some-what overwhelming. There is a gentleness and protection that it provides. When we arrived at KD we entered the serpentine and admired a large *Hickmania* spider and its web. Janine explained their egg satchels. That would be great to see and so within the first hour of our week I was already filing away reasons to return to Tasmania once again.

Our team negotiated the first few pitches. I headed off down the main pitch beside the waterfall, scoping a rope from the work that Alan, Janine and others are working on. At the bottom I waited, headlamp off and in complete darkness listening to the tremendous sound of the waterfall and the energy and life that it provides. I found the water and flow provided a definable contrast to the cave. The cave is an environment that is timeless, we observe decorations thousands of years old. Meanwhile the water passes through quickly, its energy and force provides a sense of life within the cave, on a scale beyond that of the familiar troglodytes. A few green leaves littered the water as it passed by and made further suggestions of life. They looked out of place and contrasted with the lifelessness of the cave.



Random photograph of the waterfall from the rockpile Danny Wilkinson

The rest of the group joined me on the rock-pile and we made our way down the cave, negotiating one more pitch before reaching the streamway, then along through the water to the top of the first streamway pitch. As the darkness swallowed the light at our turn around point I found myself envious of the water's unhampered journey onwards. I was not finding it hard to sketch out plans for a return trip to Tasmania.

We returned along the streamway and enjoyed a bite for lunch prior to commencing our way upwards. A few of us with wet feet, and the breeze from the waterfalls, meant that we slipped into that "hurry-up" temperature as we quickly cooled.

It wasn't long and everyone was back in the sun. The forest greeted us and we enjoyed the walk back the car. A gentle day to ease into the week and familiarise ourselves again with each other and our kit.

IB-11 Midnight Hole

20 February 2017

Adam Hooper

Party: Phil Croker, Pat Fitzgerald, Adam Hooper, Janine McKinnon.

The Crew about to start
Adam Hooper

Our walk up to the cave entrance was made special by a male lyre bird that inquisitively lead the way for much of our walk up the hill.

That lyre bird
Adam Hooper

Janine replaced the logbook with fresh pages *(I should really have had a proper, new, log book. A job for next trip-Ed)* and then we headed down several superb pitches to the bottom and Matchbox Squeeze. We wiggled and somewhat wrestled through.

A brief detour in the open section after the small climb down, where we located a flash of tape marking the exit, and the route past the slide named the Laundry Chute. We took the high route which was advantageous to the shorter people in the group *(Guess who chose the route?-Ed)*, and then enjoyed a short detour into Cephalopod Streamway to look at the short waterfall upstream.

A few moments before we exited were spent enjoying the glowworms and then we had a pleasant toddle back to the car.

The open spaces in this cave proved a great testing ground for the prototype Elklight mk6 that adorned Pat's helmet. This is a superbly engineered light, boasting more light and longer burntime than any other light on the market. It is pressure tested to beyond diving depths and uses replaceable, readily available rechargeable battery cells. It is great to see these being designed and engineered in Australia (*I wonder what Steve paid him for that endorsement?-Ed).*

Pat excited to be off
Janine McKinnon

JF-36 Growling Swallet - A scout to the Windy Rift

22 February 2017

Adam Hooper

Party: Pat Fitzgerald, Adam Hooper Janine McKinnon.

By now our week had established a predictable routine of a leisurely start, takeaway Banjo lunch and an unassuming romp underground to orient and familiarise ourselves with the region. However Pat and I were caught off guard when we arrived at the entrance and commenced to kit up. Janine pulled out of her pack a sensational PVC Eastern European pair of overalls. I am very comfortable with PVC, and Eastern Europeans, but not so much when it also involves overalls. Pat and I

looked at each and our standard red overalls. At least we both matched but we were now concerned about what amount of water we may be about to negotiate.

We remained mostly dry - bar one section, which was not a factor of route exposure to water, but rather foot misplacement.

The Cascades - always fun.
Adam Hooper

Our trip down Growling allowed us to explore down to the Windy Rift and then exit again, taking time to take photos which I was beginning to enjoy more and more, whilst also admiring some of the features such as Stal Corner and the numerous waterfalls that are on display during the exit of the cave.

With a taste now of the Growling System the scale of the cave became apparent, and when reviewing the map and the numerous trips possible, a sense of awe of those who have explored GS over the years developed.

I'm not sure if it is the diver in each of us but the water flowing into these systems tugs and beckons at our sense of wonder and draws us ever deeper into the cave.

The old "silhouette of person" shot.
Adam Hooper

Arty waterfall shot in International Chamber
Adam Hooper

MC-120 Marakoopa Cave

23 February 2017

Adam Hooper

Party: Pat Fitzgerald, Adam Hooper Janine McKinnon, Grant Rees, Ric Tunney.

After driving from Hobart and meeting in Mole Creek with Grant we headed to the Northern Caverneers hut and had a quick late-lunch. We then headed for a gentle afternoon up through Marakoopa Cave.

What an unassuming treat Marakoopa proved to be. We waited in the car park for a tourist group to enter the cave and make some progress before we would follow them.

We entered the main tourist path and just prior to the stairs

we dropped into the streamway and followed it. It was shortly after this we realized we were in a tourist aven and a quick "Shhhhh…" was whispered through our team and at the same time headlights switched off. A part of me took pleasure in this illusion of rebellion. Loitering like rebellious teenagers.

When the tourists had moved on we continued and found some palm-sized fossils of shells in the walls. This cave presented several stunning fossils.

At one point the cave exits and within several metres re-enters at an overgrown sign from Parks suggesting permits are required for entry (which we had).

We exited the cave and traversed around the Devils Earhole doline to rejoin the ridge trail which we would also use for Devils Pot the following day.

A quick descent back to the car and the welcome refreshments that were only possible due to Pat's fridge and shed on wheels.

A hand-sized coral fossil
Adam Hooper

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MC-130 Devils Pot

24 February 2017

Adam Hooper

Party: Pat Fitzgerald, Adam Hooper, Janine McKinnon, Grant Rees, Ric Tunney.

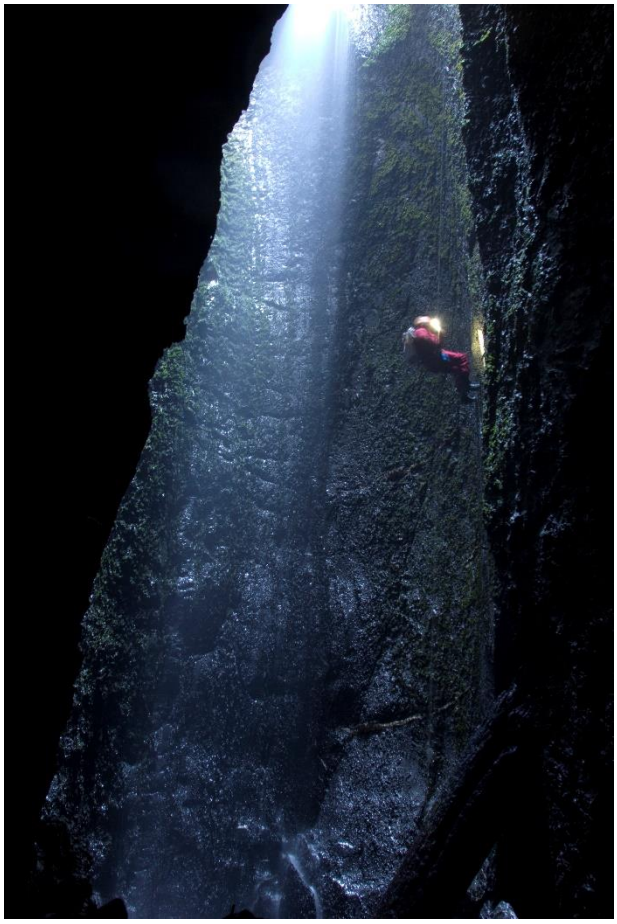
The walk to Devils Pot ensures you are warmed up and ready to go caving when you get to the entrance. After ascending the ridge adjacent to the tourist entrance of Marakoopa Cave we made our way to a superb view of the Devils Earhole doline.

A short way further we crossed the stream which enters Devils Pot, and the canyon route known as Cañón De Los Vejestorios (Canyon of the Old Farts). The water was far more youthful and fresh than its name suggested.

This trip reminded me of a European canyoning trip, the main vertical section of approximately 50 m enters the canyon into a narrow slot of less than 5 m. A short snake–like section through this impressive canyon then presents the main drop consisting of several rebelays down a spectacular mossy wall. Plenty of atmosphere and down to the amphitheatre.

From there headlamps are lit and the canyon is followed down easily with one short section that may prove difficult for some to climb on the way out without aid of a hand line. Shortly after this there is a short drop to abseil. It was at the base of the abseil that we stopped and enjoyed lunch. There is a small streamway at the end of the canyon section with a ceiling height that precludes crawling. Grant's imagination was lit and he vowed to return to explore the wet streamway flattener.

Enthusiastically he and Janine returned the following day and sloshed on their bellies several metres *(More than several metres. See following trip report-Ed)*.



Dolines don't get much better than this
Adam Hooper

MC-130 Devils Pot.

25 February 2017

Janine McKinnon

Party: Janine McKinnon, Grant Rees.

Grant and I had decided to forego the planned trip to Croesus, to push the passages at the bottom of Devils Pot that we had discovered the previous day were open, presumably as a result of the massive floods in the area last winter.

This cave has been proven to connect hydrologically with Marakoopa Cave. Obviously our optimistic plan was to make that connection physically. Dreamers, dreamers.

We both had wetsuits on under our trog suits for the attempt as the passage was very wet and very low. I had a 1 mm suit, Grant 4 mm, thus he was somewhat overheated by the time we got down to the bottom of the cave.

Somehow though, he thought it a better idea that I crawl off down the passage in the 8°C water than him. He muttered something about long legs being a disadvantage. I think I was conned. Sixty-one years old, and able to be flim-flamed by a twenty-five year old. I don't know what that says about each of us, but not good things about my smarts I suspect.

Atmospherics at their best
Adam Hooper

So, off I crawled, or slithered to be more accurate. I soon decided, after about 5 m, that the passage was too low to keep my helmet on, as I couldn't turn my head, and it kept jamming. It was much easier to see once that was off, and being pushed ahead of me. I had about a 15 cm air gap, so that was OK. The passage was a wide flattener, so plenty of room laterally (about two metres) but only about 40 cm high. Not too tight then.

After about 10 m it did a sharp turn to the left. This was as far as Grant had gone the previous day. As a "guesstimate" I dragged myself about 40 m along this section of the passage with no change to its dimensions, before the roof lowered just enough to make the passage a sump. I backed in as far as I could without drowning, and it seemed to stay about the same height. So, dive possible BUT very, very unappealing.

After dragging my freezing butt (and everything else) back to the start of the crawl, but before I actually crawled out of the water to warmer climes, Grant cheerfully suggested that I should try the parallel passage we could see branching off a few metres into the passage. The problem with this passage was that getting to it was very tight. Very, very tight. Grant thought it was worth a try though (by me), so I shiveringly sighed, and went for a look.

Meanwhile, Grant headed off to dryer places (in his 4 mm wetsuit) to check a few leads.

Back at the wet crawl, and I had to dig a trough through the gravel to fit myself along about 5 m, but then I reached bigger places. For about 3 m I was actually upright, out of the water, and walking, before it was back to the same type of passage I had just come back from, literally next door. This passage seemed to parallel the other one, with similar dimensions, sumping in a similar manner, but after about 20 m. Same story; room enough to squeeze through as far as I could backwards without submerging my head.

Heading around onto the wall
Janine McKinnon

I arrived back at the dry chamber about 45 minutes to 1 hour after starting into the first crawl. I had been fully submerged (except for my head, of course) for this whole exercise. I was pretty cold by then, and shivering continuously. A 1 mm wetsuit has its limitations.

Grant soon arrived, complaining of heat stroke!

Another benefit of the dive Scurion.
Grant Rees

Not finished with cold immersion therapy yet, we both then went for a look at another puddle of water he had found off the main passage. I again backed into it to determine dimensions, and again it was big enough to fit for a body length. I don't think this one is very promising though. I suspect it is a perched pool. But I could, of course, be wrong.

All options covered, we started out.

I was still shivering continually, Grant still very overheated. We were an odd pair.

As we pulled up the rope on the bottom pitch it snagged somehow. All attempts to free it failed, so Grant re-rigged it and went back down. This slowed our progress somewhat, and didn't help me warm up at all.

We stayed together until the bottom of the doline, and then, due to my thermal inadequacy, I headed straight up to the top of the pitch, leaving Grant to de-rig the rebelays. Even that prussik wasn't enough to warm me up, and I was still shivering when he arrived at the top of the pitch.

I sent Grant ahead, and out of the cave, and I de-rigged the top pitch.

I had almost stopped shivering by the time I was up. The walk down the hill completed my rewarming.

The others had finished in Croesus and I was pleased to see them waiting to give me a lift as I arrived back at the guides offices.

Conclusion:

1. I have pushed about 40 m beyond the previous exploration limit in tunnel #1, and 20 m, or so, in tunnel #2. Distances are only estimates.

2. "Someone" should survey this if we want an accurate map.

3. Looking at a Marakoopa map to see what the gap distance is would be interesting.

Note: I have contacted David Butler of Northern Caverneers, and he tells me that Henry Shannon has surveyed the cave, but David is not aware of a map being produced. David will follow this up with Henry.

4. Each of those crawls is potentially diveable IF a small person can actually crawl along the passage in diving kit.

5. As a dive would just be connecting two known caves, the pain seems out of proportion to the benefits gained, in this diver's opinion, at the moment.

MC-13 Croesus

25 February 2017

Adam Hooper

Party: Pat Fitzgerald, Adam Hooper, Ric Tunney.

Pat, Ric and I headed to Croesus while Janine and Grant returned to Devils Pot.

Arriving at the entrance of Croesus in a wetsuit and seeing the resurgent outflow instantly ignited my imagination for diving possibilities for the rest of this trip. We travelled up the pleasant stream, rich in decorations.

We saw the remains of aged platypus scat but were not greeted by its company. As we walked through the clear water I found Pat and I looking at deeper sections with a vague sense of hope that our eyes may just catch the sight of a hole to dive.

After reaching the rising flowstone of The Golden Stairs we turned around and headed out.

As one trip was drawing to a close another was just beginning. Back at the hut that evening loose plans for the next trip had their seeds sown, now all they needed was occasional watering with a few S*peleo Spiels* to read as motivation and some sunlight provided by a few memories of this week.

Many thanks to Janine and Ric for their warm hospitality and good company. Also thanks to the Northern Caverneers for use of their hut at Mole Creek.

Well it's almost diving.
Adam Hooper

JF-4 Khazad-Dum (KD) – Wetter is Better (47 years in the making)

4 March 2017

Alan Jackson

Party: Serena Benjamin, Stephen Bunton, Alan Jackson, Janine McKinnon, Petr Smejkal.

46 years ago original exploration of KD was temporarily halted by a bloody awful waterfall pitch (for ladders) near the bottom of the cave. Thankfully for the exploration team a dry alternative was found from the Brew Room, 'thank god for that' was uttered and Kevin Kiernan emerged from the wet pitch head as the only person to have even attempted it – until now (Kiernan 1971 Khazad-Dum Expedition. *Southern Caver*, 3(1): 6-9).

With the cave mostly rigged it was a delightfully fast and easy trip to pitch 3 of the original 'streamway pitches'. Here Petr and I scooped up the bag of rope left by Stef and Pat on the previous trip and rigged the four other original streamway pitches. Janine and Serena toddled down behind employed with the task of switching the crabs on the (permanent) traverse to stainless steel maillons. Bunty was doing his own thing to check out the new and improved Wet Way as far as the second original streamway pitch.

Petr and I stood and stared at the final wet pitch head for a few minutes trying to work out the best way to get down it in a semi-dry manner. It looked like after an initial plunge the optimum line would be to head right (left once abseiling) to traverse out of the waterfall. So we started with that in mind but quickly discovered that doing so would require heaps of rebelays to avoid drowning in low water levels, let alone high ones. So I changed tack and headed for the other wall. A rebelay a few metres down allowed me to swing further right around an arête onto a ledge where a hang completely out of the water, even in high conditions, could be achieved.

Another rebelay here and it was all good to the bottom of the first ~15 m drop. From here was a ~3 m cascade (probably climbable) but a simple redirect allowed this obstacle to be negotiated on the rope from above. A small deep plunge pool perched on the edge of the next drop almost resulted in overtopped gumboots. From the lip I could see the usual landing spot in the KD basal chamber but it was still ~20 m away and the waterfall hits a ledge halfway down and sprays in all directions. A keep-out-of-the-water rig was installed, landing on the sloping ledge below which then allowed me to walk sideways out of the water to a bridge of rock between the wet way and a dry fossil route down. Another rebelay here allowed a traverse to an almost dry hang to the floor. It had taken 60-something metres of rope to get down with all those rebelays – not as efficient as the dry route (~40 m).

Janine and Serena had bizarrely turned around without coming down the new wet pitch so Petr and I savoured the moment for twenty seconds then headed for home. While waiting for Petr to derig I'm fairly happy I found a much nicer way to start the last wet pitch series (by climbing up first and dropping down a dry hole rather than the awful first couple of metres of the wet hole).

At the fourth original streamway pitch ('chute pitch') we stumbled across a cold Serena waiting patiently for a heavy bag to carry out; we were only too happy to oblige. Somewhere on the Wet Way pitch 2 Petr found Janine and handed over one of his two bags. We surfaced around 4:30 pm (very respectable) and headed for home. The gearstore now has rope in it again!

A rigging guide for the Wet Way is provided on page 14. We'll get around to installing long-life eyebolts on the final pitch(es) in the not too distant future.

IB-8 Mini-Martin track wanderings.

2 April 2017

Janine McKinnon

Party: Janine McKinnon, Amy Robertson, Ric Tunney.

It had been a couple of years since we last visited Mini-Martin. It really was well overdue for a leisurely wander along the track for a pleasant day out in the bush. Amy was keen for a day out, so we picked her up along the way and reached the car park around 10 am.

The walk to the Mini-Martin (MM) turn off went fairly quickly, with the odd stop to enjoy the view. We decided to have lunch before we started up the MM track, and as it was a warm, fine day, this was actually enjoyable.

Once we started the hike up to MM travel slowed very considerably. It took several hours to reach the cave entrance.

Very conveniently, the trip back was much quicker, and we walked back to the cars in about an hour.

JF-237 Niggly Cave -350 m camping, climbing, exploration and filming.

7-9 April 2017

Stephen Fordyce

Party: Ben Armstrong, Dave Bardi, Serena Benjamin, Stefan Eberhard, Stephen Fordyce, Petr "The Machine" Smejkal, Sandy Varin.

The weekend saw a hardy crew of cavers head back to Niggly Cave with much gear and determination to push the terminal rockpile and anything else we had time and motivation for. To make the most of the ~350 m vertical trip down we camped at the bottom for two nights, emerging just as the light was fading on day 3. The mainland contingent headed straight from cave to airport to board our flight home, still with very muddy faces.

Sadly we had to give up on the terminal rockpile (although one may be able to access the passage beyond by a horrible remote sump dive in another cave) but found some other interesting new passages. One of these required rigging a flying fox across the face of a waterfall to access!

Day 1 was mostly concerned with getting the 7-person team and all our gear down to camp, in preparation for a big day on day 2 with an excursion to the end of the Mother of God (MoG) passage (the deepest point in the cave). The well-laid plans were thwarted when we regrouped at the bottom of the final pitch and discovered that the three key static ropes had been left at the start of the Tigertooth passage (several hundred metres and some horrible squeezing above). With 35 m of prime static rope from the infamous "Microwave Pitch" available 120 m vertically back up the cave Stephen Fordyce took one for the team (in return for the prime campsite) and went up to get it while the rest of the team headed over Mount Niggly to drop things off at camp.

Ben getting to push exciting new passage-not.
Stephen Fordyce

A quick tourist side trip to see the waterfall near the base of the descent showed it to have considerably less flow than usual, so we took the opportunity to explore this area - dropping into the base, with Ben Armstrong following the water about 40 m downstream through tight, muddy, squeezy and very wet rift passage (complete with flood debris all over the ceiling) to a horrible sump. Not dive-worthy - definitely written off!

Meanwhile Sandy and David made a good job of setting up for an aid climb up next to the waterfall. Stefan Eberhard (returning to Niggly 24 years after discovering the Mother of God passage) pointed out the fridge-sized dolerite boulders at the base of the waterfall which had to have come down a massive shaft from the surface. With time getting away, we noted leads on the other side of the waterfall chamber and a steep ramp leading up into a good-sized passage in the ceiling which was the most likely path of the big boulders in question.

Various concoctions were eaten over the next 12 hours, some better than others - Uncle Ben's Mexican Style Rice was again independently verified as terrible (and Arnott's Shapes with side dish of beef jerky reverted to for dinner and breakfast) and well prepared Back Country Cuisine was the frontrunner in terms of culinary delights. Serena Benjamin's psuedo-nougat deserves an honourable mention. A solid sleep was had despite the chilly cave temperatures.

As usual with cave camping, it took a while to get going in the morning, but the alarm went off at 6:30 am and we were off on our way to the very end of the Mother of God passage two hours later.

The trip there was uneventful, being easier than last time as we didn't have to break trail on the mud climbs (and with low water levels meaning dry feet were a luxury some were able to enjoy, while yours truly and others resigned themselves to the fact that "we can't all be awesome" - it took about two hours to get to the giant chamber near the end.

Here the party split - with one group (Petr, Stefan, Serena and Ben) staying to climb into the lead identified by Andreas Klocker and to survey this and adjacent passages (see addendum to this report), and the other group (Steve, Dave and Sandy) going the extra few hundred metres to push the terminal rockpile and/or aid climb above it. It was interesting to note that the stream in this final section of the cave wasn't flowing at all (despite the significant flow of the main stream further back), and the water in the streambed was distinctly yellowy brown.

The end party looked at the aid climb we'd dragged a lot of gear to do and decided it looked less exciting than memory dictated, especially when leads in the rockpile were pushed almost to the top of the climb. Petr & Steve had pushed hard at stream level last trip and so Steve and Dave pushed at mid-level until being stopped by a drop that needed an etrier. A retreat was made to regroup.

The other team had successfully made the climb and all disappeared into some nice horizontal passage beyond (with more upward leads - perhaps a job for next time). Eventually we regrouped properly, and Petr and Steve went back to the end while the others checked the large side leads in the big chamber - they were big and cool but not much more.

Gourmet eating
Stephen Fordyce

Petr and Steve proceeded to push the terminal rockpile at the mid-level (installing an etrier allowed access to some lower sections which were in fact accessible by another way) and then as high as possible, possibly reaching a sort of ceiling that was mud-free, but with no way on. Light but definite drafts were felt in a few different spots but they were eventually lost - hard to tell if they indicated passage through or surface connection above the rockpile. We saw traces of previous exploration in most places we went (although all showing signs of having been flooded). Sadly it must be reported that we have pretty much written off any further exploration in the terminal rockpile.

With heavy gear bags, we met up with Serena and Stefan for a welcome cup of hot miso soup and to wash off the worst of the sticky rockpile mud in the stream, then we all headed for camp (the rest of the crew had made themselves scarce already). It was a bit of a slog back, capped off with some exciting squeezing and slippery climbing (really need to rig a few permanent handlines next time) and the climb up and over Mount Niggly as final punishment. We arrived at camp about 7 pm. It wasn't long before the food competition was over, deposits made in the communal poo tube, and lights were out at 8:30 pm.

Day 3 and the first alarm was ignored, but bladders dictated someone make the first move with the second alarm at 7 am. At various speeds we faffed about, installed each other's contact lenses (ewww!) and packed our gear for the haul out. Ben won the prize for managing to shove one more deposit into the poo tube (luckily the plastic bags held), which was very efficiently packed this trip. While the others began the climb, Petr, Steve and Ben were going to have a crack at the climb up the other side of the waterfall to the passage we could see beyond.

It took two hours, but thanks to some heroic (but well-protected) aid climbing from Petr, he and Ben gained the passage on the other side - approx. 10 m above the base of the waterfall. Steve stayed on the home side to yell encouraging things, video as possible, and lower down stuff that had been forgotten. With our allotted time nearly up, Petr and Ben had time for only a quick look at the nice new horizontal passage (ending in a passable rockpile squeeze) before bombing back across on the awesome flying fox we rigged across the drop. With camera and light batteries dying at the end of the trip, we will have to return to capture the full awesomeness of this feat and explore the passage beyond more thoroughly.

A climbing assault on the waterfall passage itself (approx. 8 m above the new passage or the usual waterfall viewing area), as well as another lead approx. 4 m above the new passage gained is on the cards for future trips. The 24 m dynamic climbing rope (D/S) has been left in there for this purpose (and to avoid carrying it out!).

The trip out with bags full of heavy, muddy gear was the usual epic grind - the 105 m and 85 m rope pitches an exercise in patience and burning muscles, the squeezey Tigertooth Passage an exercise in de-snagging bags and inching forward one step at a time. The waterfall epic of the morning had taken up a lot of time, and after starting the climb at midday, we arrived on the surface about 4:30 pm and by the time we had walked back to the cars, got changed, and packed, the mainlander crew made a beeline for the airport - muddy faces and all.

Big thanks and congratulations to everyone who came along, organised gear, and carried stuff - it was a real epic. There is still plenty yet to get done in Niggly, we will have to go back.

JF-237 Niggly Cave.

Addendum:

8 April 2017

Stefan Eberhard

On the 8th April Petr and Ben did the climb into the high lead identified by Andreas. The lead is a horizontal passage about 10 m up the wall in the large chamber at Station 36 near the downstream end of MoG passage. This chamber has some spectacular mud formations on the floor, which we taped off to protect them from trampling. Petr climbed his way up the muddy, near vertical, slab into the lead. We captured parts of the climbing on video. The passage led a short distance past an aven and another potential climbing lead then through a crawl and a short down climb to the base of a second aven. A ledge and possible horizontal lead could be seen 19 m up this aven. The climbing looked straightforward on fairly clean and solid rock. From the bottom this climbing lead looks like a vadose inlet, as opposed to an old phreatic upper level which might be prospective for bypassing the terminal rockfall in the main MoG streamway. I saw few signs of old phreatic upper level development in MoG (besides the trunk passage itself), unlike "Necrosis" in Growling Swallet which was key to the breakthrough into the "Mainline" streamway. With Ben's help we surveyed the new passage, and left the rope rigged for anyone keen to return and continue climbing. While the climbing was going on, Stefan and Serena surveyed two passages leading off from the mud formations chamber. The passage on the left while facing the climb leads down a slope and along a muddy streamway to a mud choke. On the other side of the chamber a large rockpile ascends steeply to end in a very spectacular high chamber with no enticing climbing leads. Altogether we surveyed 282 m of passage.

Petr's addition:

After we finished the climb Ben and I did not have much time to explore. Anyhow, while Steve and I were getting the flying fox ready for our return Ben had a quick look and discovered a rockpile after ~50 m of a corridor. The corridor was easy to walk with straight back, except for a few muddy puddles it was dry. The rockpile had a little opening that will be OK to crawl through and there was more passage behind it. There was flood debris all around the place but this was very likely related to the big floods reported last winter. On the way back to the flying fox we also spotted two easy climbs that might lead to the corridor above and possibly even to the waterfall stream way. The return by the flying fox was certainly a highlight of the day. Well I can't wait to go down again, it is hard not to think about those leads we found.

JF-4 Khazad-Dum (KD) revised rigging guide

Alan Jackson

Further to the revised rigging guide in *SS*408:5-6, the 'Wet Way' (following the stream from the entrance to the start of the traditional streamway route) has been p-hangered. A rigging guide for just the 'Wet Way' is provided here.

Khazad-Dum (JF4)	**Rope (m) required**	**Anchors**	**Notes**
The 'Wet Way'			
P5	9	1x p-hanger approach line on right wall. 2x p-hanger on right wall over pitch.	Join the dots.
P31	**66** (see notes) *PB-RB1 13* *RB1-RB2 9* *RB2-RB3 6.5* *RB3-RB4 7* *RB4-RB5 11* *RB5-RB6 9.5* *RB6-floor 9*	Large natural centre of passage for approach; single p-hanger on sloping face (right wall) just before lip of waterfall; [RB1] 2x p-hanger around corner on muddy face; [RB2] 2x p-hanger on alcove wall on sloping boulder-strewn ledge partway down pitch; [RB3] 2x p-hanger at edge of ledge (one with permanent tight line installed) ; [RB4]2x p-hanger around corner on tight line traverse section 1; [RB5] 2x p-hanger at end of tight line traverse section 2; [RB6] 1 x p-hanger	This pitch is rather technical and bloody wet. High water levels make it even wetter (hence all the rebelays). The 66 m rope length allows for using the rope around the initial large natural and completing the final ~3 m cascade on rope. Using a sling on the initial anchor saves 4 m of rope. Free-climbing the final cascade saves an additional 4 m. The abundance of relatively close rebelays [RB#] allows easy joining of multiple short ropes if a single ~60 m isn't available. Rope lengths required between RBs are listed but wherever you make a join allow extra rope for tying a rethread fig-8 knot to tie in to next rope. RB3-RB4-RB5 has a permanently rigged traverse line for clipping into while abseiling.
P30 (Traverse Pitch)	**37** *PB-RB2 19.5* *RB2-floor 17.5*	Bolt traverse (permanently rigged) gains access to primary anchor (2x p-hangers). [RB1] 1x p-hanger; [RB2] 1 x p-hanger	Both rebelays are well left (while abseiling) of previous hang to avoid water at high levels. Minor acrobatics required. As per previous pitch, joining rope options are listed.
P3	5	2x p-hanger	Free-climbable at low water levels (spectacularly not so at elevated levels).
P22 (Animal Pitch)	**39** App.-RB2 18 RB2-floor 21	1x p-hanger high on right wall for approach line; 2x p-hanger primary belay high on left wall; [RB1] 2x p-hanger around arête; [RB2] 1x p-hanger	Rig approach line as a low loop to protect approach without having to climb high. RB2 located a short distance below and left of RB1. As per previous pitches, joining rope options are listed.

Other Exciting Stuff

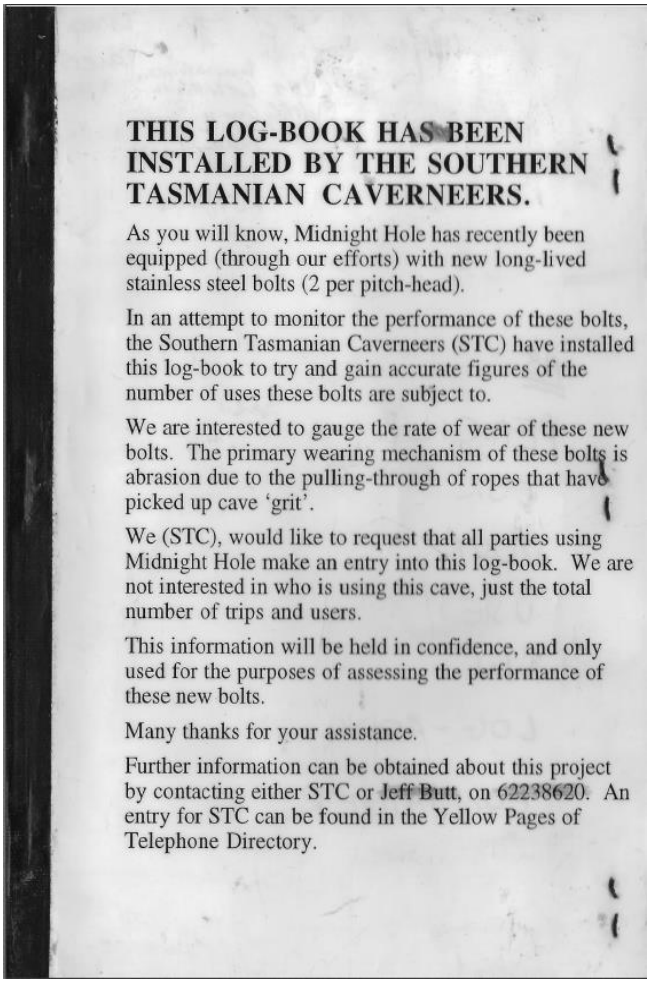
IB-11 Midnight Hole Log Book

January 2004 to January 2017

Ric Tunney

Permanent anchors (P-hangers) were installed in Midnight Hole in September / October 2001. By 2003 it was noticed that the hangers were wearing. In January 2004 maillons and rings were installed on the most worn hangers (*Speleo Spiel* 340). On the same trip the log book was replaced. (Years later, the maillons and rings were replaced with chains and rings.)

The log book was over-full and was removed on a trip in February 2017. This report covers the entries in the logbook over a thirteen year period.



THIS LOG-BOOK HAS BEEN INSTALLED BY THE SOUTHERN TASMANIAN CAVERNEERS.

As you will know, Midnight Hole has recently been equipped (through our efforts) with new long-lived stainless steel bolts (2 per pitch-head).

In an attempt to monitor the performance of these bolts, the Southern Tasmanian Caverneers (STC) have installed this log-book to try and gain accurate figures of the number of uses these bolts are subject to.

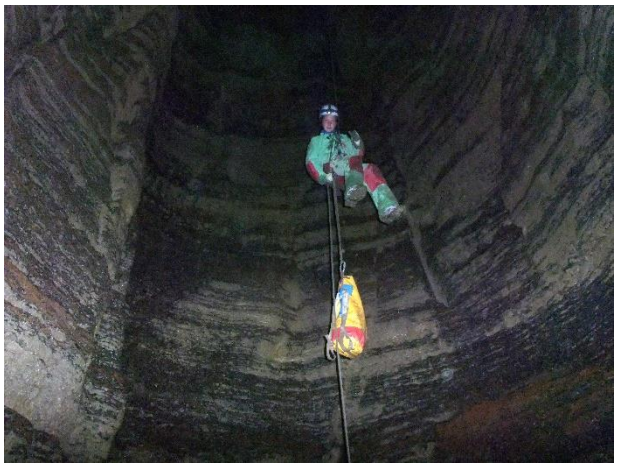
We are interested to gauge the rate of wear of these new bolts. The primary wearing mechanism of these bolts is abrasion due to the pulling-through of ropes that have picked up cave 'grit'.

We (STC), would like to request that all parties using Midnight Hole make an entry into this log-book. We are not interested in who is using this cave, just the total number of trips and users.

This information will be held in confidence, and only used for the purposes of assessing the performance of these new bolts.

Many thanks for your assistance.

Further information can be obtained about this project by contacting either STC or Jeff Butt, on 62238620. An entry for STC can be found in the Yellow Pages of Telephone Directory.



Gemma Umbers on the bottom pitch, Midnight Hole. Janine McKinnon

The cover sheet has the following statement *"This information will be held in confidence, and only used for the purposes of assessing the performance of these new bolts."* So STC is limited in what can be reported, but I think it's legitimate to report the following aggregated data.

Year	Parties	People
2004 (after 27/1/04)	6	33
2005	9	48
2006	2	7
2007	5	22
2008	3	11
2009	5	23
2010	5	27
2011	1	6
2012	4	18
2013	2	9
2014	5	21
2015	2	8
2016	3	14
2017 (to 26/3/17)	3	20

The wear on the hangers should be independent of the number of abseilers (but it may not be!). Each party, having to pull the rope down, should cause a quantum of wear.

Currently there is no logbook, just some pieces of paper. I have made a new logbook and I am hoping the next STC party could take it in for the next decade.

IB-11 Midnight Hole. Rescue.

26 March 2017

Janine McKinnon
Stefan Eberhard

A warning to readers. This is a rather long, dry report. It doesn't even have photos. However I think that as clear and detailed an account of this rescue as possible should be made for the record.

Party (STC): Serena Benjamin, Stefan Eberhard, Janine McKinnon, Petr Smejkal, Ric Tunney (at entrance).

Illawarra Speleological Society (ISS): Fergus McCracken, Brian Evans, Andrew Scobie (at entrance), Bob Kershaw (at car park) Wal Waerner (victim).

10.40 pm Sunday night, and are we nicely tucked up in bed after a long day? No, we are picking up Petr, and starting to drive to Ida Bay. Stefan and Serena have been called and are organising to join us.

Why, and who, are we rescuing, you ask? Was it an injury, hung up rope, lost in Mystery Creek? No.

Scenario:

A group from Illawarra Speleological Society (ISS) had done a standard through trip of Midnight Hole / Mystery Creek earlier that day and one of their members, Wal, couldn't fit through Matchbox Squeeze. They had left a single rope rigged on the bottom pitch of Midnight Hole as they apparently were concerned this might happen. Wal had started up the pitch, after failing to get through the squeeze, and had declared after a couple of metres that he wouldn't do the prussik, and came back down. He then sat down to await rescue.

The Call out:

Petr received a call from ISS at 9:40 pm. They outlined the situation and asked for STC to effect a rescue. Petr called me, and then Stefan. We fixed a time and place to pick up Petr, and also discussed what gear we needed and who else we might call to assist.

Our information:

As we were packing our kit at home Ric took a call from Brian, one of the ISS members on the caving trip. He outlined the situation as follows:

Once it was determined that Wal couldn't prussik back up Midnight Hole the rest of the party headed out to organise a rescue. Wal wanted to wait alone, which they agreed to, and thus left him by himself in the cave. He had food and water with him, some spare clothing, and a foil emergency blanket. They told Wal not to prussik up as there was a rub at the top of the pitch (which there isn't).

At 10 pm, when Brian was speaking to Ric on the phone, the group was back at the huts at Ida Bay Railway and were planning to go back to Midnight Hole, rig the cave down to the bottom, and start getting Wal up the bottom pitch if they could. They had a sleeping bag to help warm him if he was suffering from serious hypothermia. We were warned that Wal weighed more than 100 kg, which meant problems with a counter-balance lift; Peter, our heaviest, is only about 80 kg.

They said they had sufficient ropes to rig the cave, and also rig a counter balance.

Progress to the cave:

10.40 pm saw Ric, Petr and myself starting the drive to Ida Bay from the uni. We had several phone calls along the way with Stefan and Bob (at the ISS base camp at the huts). Stefan was given our current information. We planned to go to the huts first, get a current situation briefing from Bob, and move on to the cave ASAP.

We arrived at the Ida Bay huts at 11:50 pm. Bob told us the others had left for the cave, as planned, gave us a couple of thermoses of hot tea, and we departed within 5 minutes.

We kept regular contact with Stefan, updating him on our progress and checking his. He was about 1 hour behind us.

We got our kit sorted at the car park and started walking at 12:15 am. We had two ropes with us; a 50 m and a 62 m. These were just in case extras were needed, but we expected the ropes the ISS members had with them to be sufficient. Petr had brought a 200 m rope down but we decided to leave that behind as unnecessary, and lots of extra weight to carry. We had extra carabiners and a few pulleys.

We left the tea at the car for later.

We reached the cave at 1 am. There was no-one there and no rope down the first pitch. We were bemused. Petr started calling out, thinking that they were lost in the bush. We had phone coverage so called Bob to re-check that they were meant to be here, and ask what time they had left to come to the cave. 11 pm was the answer. We also kept Stefan updated on the situation, and told him to bring any extra ropes he had so we could start rigging the cave if the others didn't appear before Stefan got there.

Petr kept calling out.

After some time (ten minutes?) we heard a faint reply yell from off down the hill and towards the quarry. We thought they were on their way. They didn't continue to return Petr's calls. Petr continued to call out, and every ten minutes or so we would get a response, briefly, from a different direction, and then nothing. Petr's voice was getting hoarse. Ric was suggesting one of us went back to the car for that 200 m rope. We were on the point of doing so when Stefan reported being at the huts.

Eventually the ISS party arrived from further UP the hill, an hour after we had arrived. It was now 2 am.

They reported that they hadn't been able to find the taped track when they did the cave earlier in the day, but had a GPS location for the entrance and had bush bashed from the Southern Ranges Track. They just repeated that route to return to the cave in the night. When we asked why they hadn't come to our voices, or answered Petr's calls, they said they thought it was another party that was lost. We DID ask them why they hadn't hurried to help this "lost" party.

The Rescue:

Petr and I (Janine) were all kitted up and ready to go, so as they arrived I started rigging the top pitch with our 50 m rope. I was worried about hypothermia for Wal and wanted to get down to him as quickly as possible. He had been alone in the cave for at least 8 hours, and probably longer. We discussed with the ISS cavers which ropes of theirs should come into the cave, and then I started down, carrying our 62 m rope, so I could continue rigging down the cave. Petr followed me. Ric had elected to stay on the surface as he had packed one of my trog suits by mistake (and thus didn't have one to wear), and he thought there were enough people to do the rescue without him.

Petr and I expected the three ISS cavers to be right behind us (Ric later reported that only two of them actually went underground. The third stayed on the surface).

I ran out of rope at the bottom of Pitch 4 (8 m), with Petr just behind me, but there was no sound of the others. We waited for some 10 minutes, and there was still no sign of them. Petr decided to use this enforced waiting time to go back up and change the ropes on the first two pitches to give us more rope to use for rigging. I continued to wait.

Petr obtained some rope and re-joined me and, having liberated my 50 m rope, we now had enough rope to get to the bottom of the cave. I continued rigging down, with Petr following closely.

At the top of the 49 m pitch we discussed plans. We were still the only two cavers present, and we still had no sound of the ISS cavers coming down. We decided that I would go down to Wal and assess him, and hopefully start getting him ready to do an assisted prussik. Petr would set up the counter-balance rope that he was carrying.

We would do an assisted prussik with counter balance.

I found Wal sitting in the little alcove at the bottom of the pitch. He stood up when I walked over and introduced himself. So, he was ambulatory and alert to place and situation. His speech was normal. He was keen to get out and willing to follow directions. This was all good. The negative was that he was shivering continually, slow in his movements and fumbling. He was definitely in early hypothermia and didn't need to sit around too much longer. He had eaten and still had water available. He claimed to have slept a little. He said he was very cold and exhausted.

I explained his options:

- Prussik out under his own power.
- Prussik with counter-weight assistance
- Wait for Police S&R to arrive, and as they had not been called to assist yet, just notified of the situation, this could take many hours.

It was now 3:30 am.

Petr was still sorting out the counter-weight and no-one else had arrived at the top to help him, so I suggested that prussiking up himself was the quickest way for Wal to start warming up. I was worried that if he sat for much longer his hypothermia would degenerate significantly. He packed his bag (very slowly), and I started helping him into his SRT kit (which he needed to be wearing whatever we did). He was very slow and poorly co-ordinated. At this time I heard someone coming through Matchbox Squeeze. It was Stefan. Stefan reported that Serena was walking up to the top entrance, bringing a 70 m rope and Stefan's emergency kit. At the same time the counter-balance rope arrived down the pitch from Petr. Stefan had hot Miso soup, which Wal was very happy to have. He was unable to hold the cup as he was shivering too much, and Stefan had to hold it to his lips. We discussed options, with Stefan firmly of the opinion that we should just do a straight counter-balance dead lift up the pitches with Wal. After thinking about it for a couple of minutes, I agreed. Stefan's added weight should make this possible.

I discussed with Stefan whether I was coming up the cave, or out the bottom, and he suggested that I might be useful if I went back up. I was still expecting more cavers to arrive at the pitch head to help us with the lifts and de-rig, and thus wasn't sure if I was now unnecessary.

We got Wal attached to the haul line, Stefan got on the primary rope and started prussiking up alongside Wal, and Petr commenced hauling. However he was still alone at the top. Movement upwards was extremely slow. The haul rope was only 2 m longer than the pitch, so Stefan couldn't add his weight to the counter balance until the mid-point of the pitch. Petr thought we were doing an assisted prussik (as he and I had discussed) and was thus just hauling bv himself with no mechanical advantages. It took him a couple of minutes to realise we were, in fact, doing a dead lift. Luckily Fergus (ISS) then arrived and added his weight to the haul rope as a counter balance with Petr. When Stefan reached the mid-point of the pitch he was able to add his weight to the counter balance too and the speed of ascent of Wal increased greatly. I didn't time how long they took to get him up the bottom pitch.

When they had Wal at the top, I put Wal's (quite heavy) pack on the rope and Stefan hauled it up and then dropped the rope for me. I prussiked up after them, carrying my pack and Stefan's. Stefan appeared at the top to help me get the two packs off the pitch head, then returned to the process of evacuating Wal. He, Fergus and Petr were still the only other cavers present.

I de-rigged the pitch and packed the rope to carry out.

Meanwhile, Petr tied the haul rope to the pitch rope, which gave him 60 m of rope, this, with the counter balance rope added in, gave him enough rope for the 39 m pitch (pitch 5) for Stefan to add his weight to the counter balance haul. This improved the rate of hauling considerably.

At the top of Pitch 5 (39 m) Fergus kept going straight out and Brian (ISS) was waiting there. He and Petr, together with Stefan's assist with weight from the bottom, counter balance hauled Wal up the pitch.

By the time I was ready to ascend Pitch 5 Brian and Petr had Wal off it and Stefan was about to ascend. Wal's pack was still at the bottom of the pitch as there was no-one else there to deal with it. Stefan prussiked up carrying his pack and Wal's. This was a heavy load.

Wal managed to prussik the 8 m pitch (Pitch 4) himself but refused to help by doing a prussik assist on the 34 m pitch (3). He waited to be hauled up. Petr went up this pitch and was pleased to see that Fergus had put 3 rope protectors in place where the rope rubbed (this cave is

rigged for pull through, or careful prussik at best).

He found Serena waiting at the top. Fergus continued out of the cave.

Serena then helped with a counter weight on the 2nd pitch, but as she is lighter than Fergus. This made the haul more difficult.

Brian stayed at the bottom of Pitch 3 and so Serena and Petr hauled Wal up pitch 2 (11 m) from the top alone. This was hard work for them.

Serena and Petr went to the top of pitch 1 (20 m) and Stefan had arrived at the bottom of this pitch by then to assist with the counter weight haul up pitch 1. A twisted rope half way up the pitch delayed the haul, and made the haul physically harder. The team was getting very tired by this time. Once the twist was fixed (by Stefan prussiking up to release it) the haul proceeded easily.

Meanwhile, back down the cave, I followed, continuing to de-rig pitches 5 and 4, and adding the rope to my pack, which already had the 60 m from pitch 6. I did not see another caver until the bottom of pitch 3, where I found Brian. Wal was almost up that pitch at the time, still being dead-hauled all the way.

I came up this pitch (3) last again, de-rigged, and then Brian (who was waiting alone) suggested I go ahead of him and he would carry this last rope that was in the cave (the top rope would be hauled from the surface), and de-rig the second pitch. This I agreed to. I already had 120 m of rope in my pack.

Wal was out of the cave when I arrived at the bottom of the first pitch. When I reached the surface I checked my watch. It was 5:30 am.

The first group, which included Wal and some with full packs, started walking back to the cars before 6 am, and the rest of us waited for Brian to emerge from the cave, and followed about ten minutes later. The two groups reconnected as we made our way down the hill.

Wal was alert and seemed quite well. He was capable of walking back to the cars at the same pace as the other members of the party.

We found Bob and Carrell at the cars with hot tea, at 7:15 am. This was very appreciated.

Stefan informed the Police of the successful outcome.

For our vehicle, it was 11 hours Hobart to Hobart, including a break at Banjos on the way home.

Aftermath:

I received this message from Brian a few days later.

I feel privileged to be part of the caving community. I've been deeply involved in many activities and I don't think I've ever felt so well "looked after by mates" as on Sunday night. We've all caved well since and spent much time reflecting on what happened, alternate ways of responding and the competence and support of those who "helped out mates" even if they did not know us. Thanks, each of you, and STC as a whole.

Analysis: Janine's personal view.

I will start by saying this is a rescue that shouldn't have been needed. There was no physical injury, no hang-up of the pull-through rope, no damage to ropes, no flooding, no-one lost, nothing to physically stop the caver from exiting the cave. He should not have undertaken the trip as there was doubt he would fit through the squeeze (which proved true) and he was not capable of going back the way he had come. This may seem a harsh assessment; however considerable inconvenience was the result for quite a few people and, more to the point, the outcome may have been much worse for the "victim" if things had gone a little differently.

ISS.

1. As they knew they had an overweight member of the party who might have trouble with the squeeze, the party should have visited the Matchbox Squeeze from the Mystery Creek side to assess the tightness before they undertook the through trip. This way Wal would have known that he couldn't get through. They would have had the added bonus of route checking through Mystery Creek Cave.
2. They used mostly 11 mm ropes, but had used a 9 mm rope on the bottom (49 m) pitch. When Wal attempted to prussik back up this pitch after failing to fit through the squeeze, Brian reported that he only climbed a couple of metres before descending again, complaining that the rope was too thin, bounced a lot, and wasn't "safe" to go up. The party should have determined beforehand that the "emergency" rope they were leaving in place for the person to prussik up (if they failed to get through the squeeze) was one he was prepared to use. *Note: I am confused with this as they told us there was a rub at the top of the pitch (although there isn't), but they had planned for at least Wal to prussik up if needed.*
3. They took an extremely long route to the cave because they did not have local information on following the track. Several of us in STC are always willing to help visiting cavers with location information, route guides, rigging guides and any other information that may help their trip be a success, and safe. Being independent is commendable but asking locals for information that may save you from getting lost, or reduce the chance of needing a rescue, seems like a good idea to me. We lost one hour of rescue time waiting at the cave entrance because they hadn't asked for track finding help.
4. A person should never be left to wait for many hours in a cave alone if a rescue is planned. Even though Wal was not injured, hypothermia is a serious threat. As he only managed to do one pitch (8 m) out either his mental state, physical strength, or a combination of both, was poor. This is not a person you should leave alone in a cold cave for 6-8 hours. He could have made some very poor decisions in that time.
5. They did contact STC quickly when they realised the group did not have the skills or capacity to rescue their stranded member.

STC.

6. As we had been told the ISS crew were going back in to start the rescue, we assumed that would happen. This was a mistake on our part. We should have taken the extra 200 m of rope up the hill and been prepared to do the full rescue ourselves. We knew nothing of the group or their capability. We should not have assumed they were capable of doing what they said they would, or in a reasonable time frame.
7. Ric should not have assumed that the ISS group would be efficient in the cave, and that he was thus not needed. Only two of them went in, and they did not go to the bottom of the cave. Only one of them went as far as the top of the bottom pitch. He left the cave after only two lifts. Another caver at the top of each pitch would have made the lower pitch hauls much quicker and easier.
8. Petr and I assumed that ISS was following us down the cave to the bottom, to deliver the extra ropes and to help with the lift and gear retrieval. We implied/assumed as much when I said to them that we (Petr and I) would head straight down and they could follow. We didn't actually discuss this with them beforehand though. This was a mistake. Not only were they not close behind us with the ropes we needed to get to the bottom pitch, they were not there with the mass we needed for the haul. Also, whilst I was capable of de-rigging the cave alone, it would have been nice to have someone else to help with hauling out all that gear.
9. Stefan made the correct call when he suggested I go back up the cave from the bottom, not walk out Mystery Creek. I thought I would be redundant but proved necessary to de-rig. We should not make assumptions about unknown cavers doing what we would consider reasonable (like coming to the bottom to help with everything).
10. Stefan's suggestion to do a dead haul out, rather than an assisted prussik, was the right one I think. My assessment of Wal as the process progressed was that he would not have been capable of prussiking efficiently enough to add to the speed of his extraction.
11. Our inability to communicate from the bottom of Pitch 6, with Petr at the top, slowed the first haul. As stated in the body of the report, Petr expected an assisted prussik. When Stefan and I changed the plan to a dead- weight haul we could not communicate this easily with Petr, 49 m up. ISS had two VHF radios at the surface. When we entered the cave Petr and I left the radios for the ISS party to bring down. This was a mistake. We should have taken them to the bottom of the cave and they would have been available for communication on each lift. *Note: ISS took one radio in to the top of pitch 3 and left it there. Serena bought the other one down to the top of pitch 3 (as far down the cave as she went), which meant when she got to the top of pitch 3 there were now two radios there, and none anywhere else in the cave. Thus they were not used for the rescue.*
12. I think STC's response to the call out was fast and efficient. We did alert the police to the situation but told them we would attempt the rescue without their assistance. They did not object. As a first approach, I think this was a good idea. If asked to do the rescue the Police S&R would have started a massive process that may not have been needed, would have cost the community a lot of money and pulled many more people out to assist when it wasn't actually necessary, as in fact it wasn't in this case. They were alerted though, so they had the opportunity to start any background (time saving) preparations they thought fit.
13. We went with minimal rescue kit, aiming for speed, based on the information we had. If Wal had needed more attention we were insufficiently supplied with gear, such as proper medical kits, stretchers etc. I think this was the most sensible response as time is important, but the point does need to be noted. Perhaps we should have had a "B" team coming later with these added emergency supplies? That would have meant official paramedics probably. Further discussion in the club on this could be considered.

Supplement to Midnight Hole Rescue Report

By Stefan Eberhard

Janine's detailed report above describes the rescue and provides some analysis. The ISS members we helped have already published in their own club newsletter, honest and self-critical accounts of their experiences. Following is a brief compilation of some recollections, impressions and thoughts which have lingered from my own experiences during the rescue.

Time was of the essence due to the risk of hypothermia. The bottom of Midnight Hole is a draughty and cold place. My paramount thought was to get to the stranded person with some warm drink as quickly as possible. Wal had been alone in the cave for more than nine hours by the time we first got to him with a small thermos of miso soup. The warm soup helped, and highlighted the value of having thermoses and/or a stove as part of rescue kit. I had planned on taking in a sleeping bag and foam mat as well but traded-off these bulky items, which would take time to lug in, against the need for expediency.

Communication was a real problem on the 49 m pitch. Due to the echo, Janine and I, who were at the bottom of the pitch, couldn't properly communicate with Petr, who was at the top. This caused confusion during the hauling set-up because we subsequently changed the pre-planned method from a self-prussik with counterweight assistance from Petr at the top, to a counterweight haul without self-prussik. Slightly amusing in hindsight, for a short while, Janine and I were pulling down with all our weight on what we thought was a counterweight line which in fact was tied off at the top! I attributed the lack of upward movement to the relative weights of Wal and Petr, plus the friction in the system – the last pitch has deep rope grooves from pull-downs, which trap the rope and add significant friction. The other pitches also have grooves and bulges adding friction. We established a human deviation to overcome this problem on the entrance pitch but on all the other pitches we didn't have enough people in the right place at the right time. We also didn't have enough people to have a controller, so the job of controlling and counterweight was done mostly by Petr from a fixed position at the top of each pitch, with

counterweight assistance provided from the bottom.

Back near the bottom of the 49m pitch, our prospects did not look good as the hauling system did not seem to be working. With brute strength Petr had managed to slowly haul Wal a few metres off the deck. I was prussiking next to Wal on the fixed line, and pushing him upwards as best I could to synchronise with Petr's pulling. At this point I thought to get Wal either: (a) off the rope and back on the ground so Petr could set up a 2:1 haul system, or; (b) assist Wal onto his prussiking gear so he could at least start moving himself in an upwards direction. I couldn't do either of these manoeuvres without a pulley and a spare ascender, which I didn't have because I had given them to Serena to bring in from the top where I thought they would be most useful. I made an abortive attempt with karabiners and the gear on hand but friction precluded it. So, all fell back to Petr, who mostly single-handed, and against great opposing physical forces of gravity and friction, pulled Wal to the top of the 49m pitch! Petr repeated this feat on the next five pitches, with assistance from others, and all went smoothly albeit with increasing fatigue, until everyone was safely on the surface.

Despite the slow and slightly wobbly start the rescue succeeded with just a small team, however if our team had been any smaller we would have struggled and taken much longer. Undoubtedly Petr's strength, fitness and determination were key ingredients in the successful hauling. All the hauling was done on small diameter lightweight pulleys – large diameter pulleys would have helped of course. Another key ingredient to success was the experience gained from STC's annual rescue training exercises. When it came to the real thing on this day, the rescue concepts and methods taught by Al Warild were already synchronised in the minds of the STC club members, and therefore immediately and (almost) seamlessly translated into action.

Fatigue was a significant factor. The ISS team were already tired from their long day's caving, as were the STC team, some of whom had been caving or diving earlier the same day, as well as the day prior. Serena and I were fortunate to be driven to Ida Bay, and home again afterwards, which greatly helped our own fatigue management. If more cavers had been available that would have made the rescue less demanding and stressful, albeit two of our core rescue team were overseas at the time. We called the Police radio room and informed them of the situation and our intentions, and that we would call if additional assistance was needed. Asking Northern Caverneers for assistance was considered, but due to their long travel time, this option was reserved until we had assessed the situation.

This rescue was a very valuable experience with a happy ending. My thoughts for the future include:

- Respond quickly. Send someone with provisions to the (prospective) casualty as quickly as possible. Take thermos and/or stove for warm drinks, food, clothing, sleeping bag, foam mat, where practical, to stave off hypothermia.
- Efficient and effective communication. Have phone numbers of all potential cave rescuers entered in phone contacts list ready for when a call-out happens. Small handheld VHF radios would have been very helpful on the long pitch.
- Personal SRT kit: a rescue pulley with oval karabiner, spare small ascender and 2 to 3 m cord for counterweight lift offs on-rope, small knife.
- Rescue training: attend annual rescue training exercise, and practise rescue techniques with other club members regularly.
- Club rescue equipment: Petzl cave stretcher, rescue pulleys (large diameter), Petzl Stops for tyroleans, karabiners and short ropes (9mm cut-offs) for rigging, cordless hammer drill with additional batteries, communications gear (Michie phones, UHF radios), first aid kit. It would be good for the club to have this equipment, especially the stretcher, to train with at the next rescue exercise in December, and before any real rescue.

Two reports of the rescue from the perspective of the Illawarra cavers have been published in their April Newsletter. It is available on their website at the time of writing. It can be found at: http://iss.caves.org.au/Download%20files/ISS_April_2017_Newlsetter_HQ.pdf

An open letter to STC from Wal Waerner.

28th March 2017

Dear Southern Tasmanian Caverneers,

I am writing to express my immense thanks and gratitude to members of your club, specifically Janine, Stefan, Peter, Serena, Rick and Bronwyn (in order of when I met you). Chris and Bunty provided phone support, my thanks to them also. I'd come to Tasmania as part of a caving expedition with Illawarra Speleological Society, this time round visiting caves in Ida Bay, Junee-Florentine, and Mole Creek. I've previously spent a week caving around Mole Creek in 2015, so I was keen to see more caves around Tasmania.

On Sunday the 26th of March we visited Midnight Hole, at Ida Bay. I'd not been here before, but had heard about the Matchbox Squeeze in conversation, and that I'd be okay with getting through. We rigged as a through trip, and successfully got to the squeeze. Sadly, and despite 3 very solid (and varied) attempts at it, I wasn't able to get through the squeeze after all. I then tried to prusik back up our last line on the 49m pitch. I'm normally a strong prusiker, but wasn't able to get up beyond 10m due to fatigue and stress; I managed to turn around and head back down for the inevitable wait.

Thankfully the rest of the group was able to get through the squeeze, so were able to get out as a group. In the meantime, I hunkered down to wait for the group to return after needing to re-rig the top 5 pitches. I'd packed on some extra layers and a space blanket before settling in, but despite this I had been very, very cold by the time STC and the ISS group found me early the next morning (around 9 or 10 hours after I bid farewell to the ISS group). It was great hearing the voices coming through the cave! I wasn't able to get out under my own steam so was physically hauled out by the team.

I found my predicament was really challenging, both physically and psychologically. I was acutely embarrassed at having caused such a huge fuss requiring people to come and rescue me (I've caved regularly for 30 years, and never been in this situation before), I was horrified that my energy and ability had disappeared (despite being otherwise fit and healthy), and I was also shocked at how fast it all happened from my first attempt at tackling the squeeze. I am so very grateful to the STC Team for getting out of their beds in the middle of the night to drive to Ida Bay and rescue a fellow caver in distress. Your efforts were really appreciated, from the initial encouragement, the soup and tea, the ongoing encouragement, good humour and support, and the sheer physical effort expended in hauling me out of the cave. Exiting the cave around 18 hours after entering it was a massive relief.

Thank you Janine, Stefan, Peter, Serena, Rick and Bronwyn.

Yours sincerely,

Wal Waerner,

Illawarra Speleological Society