

SPELEO SPIEL 396

May - June 2013



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Front Cover: The old editor signs off in graceful style (one last photo of Alan on the cover for his adoring fans). *Photo by Amy Robertson (18-6-2005, when she was still a Ware)*



Speleo Spiel

Newsletter of the

Southern Tasmanian Caverneers Incorporated

PO Box 416, Sandy Bay, Tasmania 7006

<http://southerntasmaniancaverneers.wordpress.com/>

ABN: 73-381-060-862

ISSN 1832-6307

The views expressed in the *Speleo Spiel* are not necessarily the views of the Editor, or of the Southern Tasmanian Caverneers Incorporated.

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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.

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Editorial

My first (and hopefully last) edition as Acting Editor and I'm disgusted to say that standards are slipping already. Fancy publishing an article on sandstone 'caves' in the *Spiel*. It would never have happened under my watch (anyone who mentions *Spiel* 355 will be shot). Get used to it folks – it's all down hill from here.

Alan Jackson

(Acting Editor – until Matt gets his shit sorted)

[Bunty's] Stuff 'n Stuff

BUGS BUNTON

Bugs Bunton reports that the efforts of various STC members in helping Danilo Harms find and murder cave pseudoscorpions have been acknowledged. Danilo had a paper published in the most recent *Australian Journal of Entomology* that described the differences between two species of troglobitic pseudoscorpions found on the mainland. One of these is *Pseudotyrranochthonius eberhardi*, named after Stefan who collected it from Stockyard Creek, NSW. I am not quite sure how we got credit in this paper but we'll take it anyway. As yet his Tasmanian specimens have not been described so look out for future recognition.

Stephen Bunton

MACLURITES

Visitors to JF-7 Frankcombe Cave have often been impressed with the spectacular fossil in the rock face just above the entrance. Popular culture always described this as an ammonite. A recent trip to Welcome Stranger JF-229 with geologist Peter McIntosh of FPA caused a few neurons to connect. The marbled limestone that makes up the floor in parts of the cave also contains impressive spiral-shelled fossils. Peter pointed out that the Benjamin Limestone that the cave is formed in was Ordovician in age and the ammonites didn't arise until 100 million years later. Also the fossils were not segmented into separate chambers, as is the case with ammonites. Chris Sharples, our resident geology polymath, was able to inform me these fossils are of a giant land snail, *Maclurites*. Ignorance dispelled. Now that I know them by name – their own and special name – I'll never look at them in the same mundane way again. They are about 500 million years old!

Stephen Bunton

MORE MILLIPEDES

On a recent trip to Welcome Stranger I happened upon a troglobitic millipede. This was positively identified by Bob Mesibov of QVMAG as *Noteremus infimis*. This species was only described by Bob in 2009. It is the same millipede that was collected extensively by Stefan Eberhard in the late '80s and early '90s. It is the one mentioned on page 108 of Rolan's Junee report to Forestry Tasmania. So the pedants among you out there can now update your records. This species is considered to be relatively abundant, having been collected in numerous caves right across the JF karst.

Stephen Bunton

ROSS WALKER CAVE JF-63 / 64E / 65E

Whilst sleuthing around in my Junee-Florentine nerd files I came across a mystery from the old days. The ASF *Australian Karst Index* 1985 has references to a number of maps of caves that have not, to my knowledge, been published and perhaps

no-one even knows their location. I asked Alan and Ric to do some sleuthing as well. Alan uncovered one of the maps, the map of Ross Walker Cave, amongst the pile of maps he scanned recently. So here it is published for the first time. Note the date: 1946. This must make it one of the first maps produced by the club, given TCC only started in 1946. Unfortunately the map was produced before number tags so we can't tell which entrance is which. If anyone knows could they please let me know, so that I don't have to go out there again. Actually it's a nice cave (see cover of SS:343) so someone should survey it to modern standards ... somebody else, somebody young, somebody with good computer graphic skills. [You'll find the map in question on page 31 – Ed.]

Stephen Bunton

SHOW AND TELL

If you want to really know what is going on in an organisation ask the secretaries, the mail courier or the groundsman. Our groundsman happened to know enough about my past to do me into the Grade 4 teachers as a guest speaker for their unit on explorers.

This was an easy gig. I had done things like this before. I went equipped with a short Powerpoint and a rope pack containing my trog-gear.

I was introduced as "an explorer but not some-one as famous as Magellan". This prompted a hand-up from one bright spark who without being acknowledged said that "Magellan shouldn't be as famous as he is because he wasn't the first person to sail around the world because he died in the Phillipines". The teacher suggested that he "drop-it" but this prompted a second attempt from this youngster to rewrite history. "I still don't think he deserves to be as famous as he is!" Poor little guy just couldn't leave it. Eventually I got to do my act.

Part way through another interesting character came out of the woodwork. He'd been detained in the room next door and immediately I could see why. Without even bothering to put his hand up he just asked: "Have you ever been so scared you pissed yourself?" The teacher who released this little monster from his lair obviously knew how to deal with him – the teacher quickly distracted him with a DK book on medieval castles or something like that and he instantly became engrossed. Yep, they're on the spectrum.

I returned to my Powerpoint and then commenced the show and tell. Most students guessed the sort of gear and stuff you needed to go caving: a helmet, light, gumboots and rope. I dressed one of them up in a helmet and light and another young girl in a harness (there's probably a law against this!) and got the biggest bloke (of Grade 4!) to hold up my trogsuit. The teacher took a photo to remember the occasion and then it really was question time ...

"How do you go to the toilet?" It's the first question every time!!

Stephen Bunton

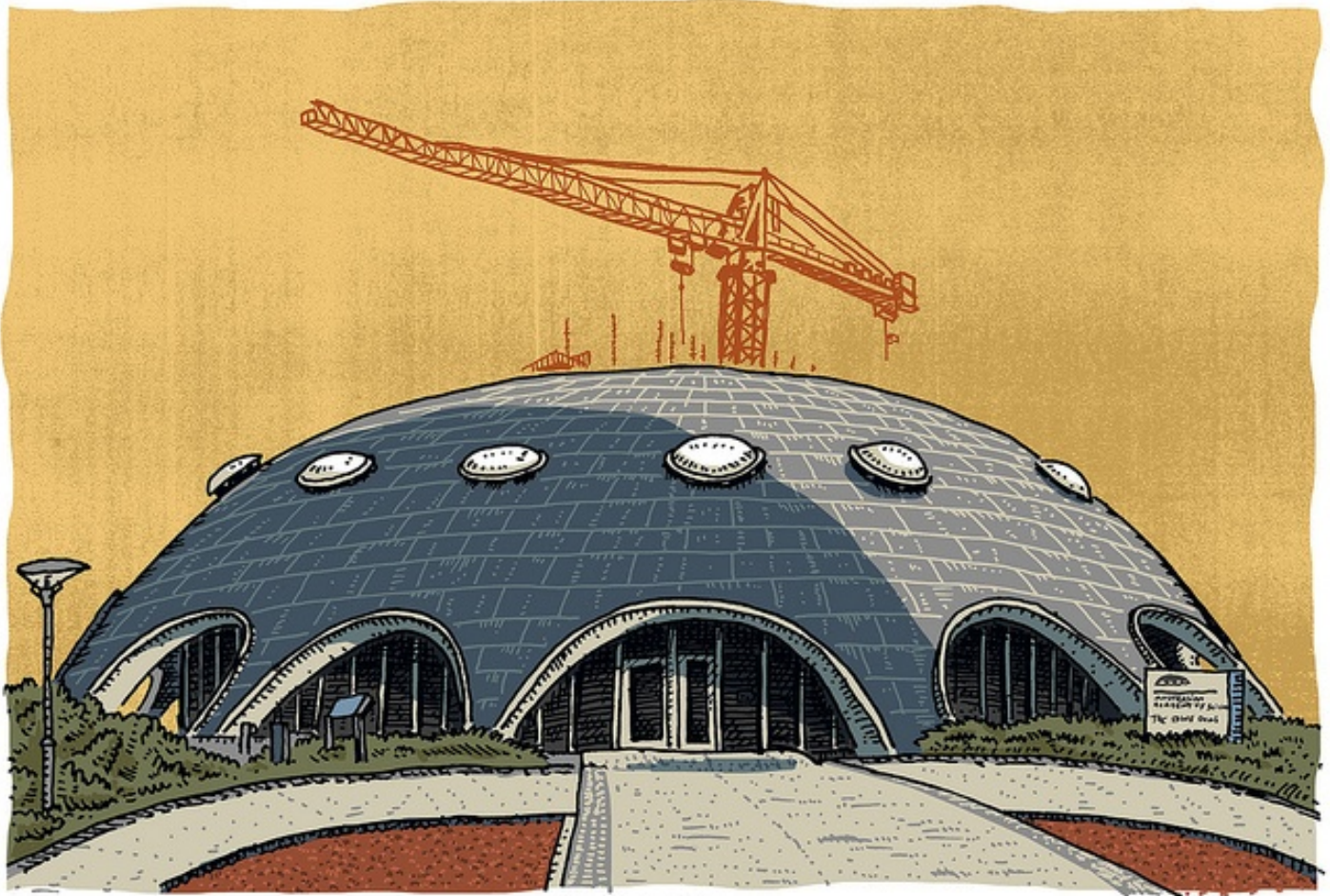
MAINLAND EXPEDITIONERS

Thanks for the very green and short representation of ourselves! [SS395:24]

I link a picture of our base in Canberra.

http://en.wikipedia.org/wiki/File:Australian_Academy_of_Science_-_The_Shine_Dome.jpg

Laure Gauthiez-Putallaz



The Martian Embassy, Canberra.

Trip Reports

JF-2 Cauldron Pot – SRT Training Trip

Janine McKinnon

11 April 2013

Party: Anna Ekdahl, Trent Ford, Han-Wei Lee, Janine McKinnon, Ric Tunney

Anna and Han-Wei hadn't been able to get away on a caving trip for several months due to their busy, and erratic, work schedules, so Ric and I picked a day they were free and took them to the entrance pitch of Cauldron Pot to give them some SRT experience. Trent was in Tas at the time, so he came along for the day too.

We had a leisurely start, with a coffee at J & McR, and then headed off in Anna and Han-Wei's car at 8:15 am. We were at the KD carpark before 9:30 am.

At the cave entrance we gave Anna and Han-Wei a quick refresher SRT course, with them showing us how to do the whole show near the pitch head. When everyone was happy that they both remembered what to do, I started down.

I quickly encountered a situation that demonstrated to all why you have to be able to switch back and forth from ascenders to descenders on rope. At the re-belay I couldn't pull the rope up to move my Stop across. The rope bundle at the bottom was jammed somehow. I had left it sitting on a ledge when I came up last trip but it obviously wasn't there now. After a few minutes of tugging, swearing, jiggling and more swearing, I

realised that I'd have to go to plan B. That was to take out the re-belay, abseil down to the knots, prusik past them both, go to the bottom and un-jam the rope. This is what I did. Ric then came down and put the re-belay back in but as we wanted him to come down last, he then went back up.

The other three all abseiled down without incident.

We wandered around in the entrance chamber, Trent took photos; we wandered down Bills Bypass about 20 m, just to give them a taste, and had lunch looking up the pitch.

Meanwhile, Ric came down and replaced the inadequate redirection with two rebelay.

When he called all clear, we started up, with Han-Wei going first. All three of them had some difficulties at the rebelay. There were a few reasons for this but a significant one was their independent decisions to put their top ascender across first (despite assurances that moving the Croll first was much better). Three lessons were learnt, I'm hoping.

Despite this minor hold-up the newbies performed very well and seemed to enjoy the day.

When we were all finally up we had a debrief and headed back to the car.

We were driving home by 4:30 pm.

JF-2 Cauldron Pot Rigging Guide

Ric Tunney

Updated: April 2013

Note: All directions are facing downstream. (Opposite direction to that when abseiling.)

Note: Eyebolts are originals from early exploration. All other bolts are 8x80 mm Powers SS Throughbolts. Except where stated, all bolts have had hangers removed and are marked with plastic tags. Don't forget spare nuts and washers in case you drop some!

Note: Rope lengths will just reach bottom, depending on size of loops and knots.

P1 Entrance Pitch(41 m) [55 m rope (*this is an estimate*)]:

Walk around lip of doline to broad ledge at cliff line beside waterfall. Belay with tape around tree on LHS of waterfall, with backup to upside down bolt underneath small ledge about 1.5 m above ground level. Rebelay off two bolts immediately above lip 8 m down, LHS of rock slab about 3 m off the fall line. (Use a maillon rapide on the lower of the two bolts as a standard size carabiner is a little too long in the spine and creates a bit of bad leverage on the bolt due to its proximity to the edge.) [Rock here was clear when bolts were installed in 2005, but bolts were hidden under moss 2013; bolts are on smooth rock just before corner.] Rebelay off bolt at rub point on projecting rock about 6 m further down. Rebelay off bolt LHS in corner about 10 m further down above final free-hang to bottom.

4 x 8 mm hangers required.

P2a First Cascade (14 m): [36 m rope for P2a & P2b if tape is used around natural.]

Belay to eyebolt on LHS, with backup to excellent natural above bolt.

P2b Second and Third Cascades (2 m & 4 m):

Two bolts on LHS.

2 x 8 mm hangers required.

P3 Chute Pitch (15 m) [22 m rope]:

Belay on eyebolt on LHS at top of pitch. Tie in to previous pitch rope if back-up desired. Rebelay on bolt RHS around corner 5 m down.

1 x 8 mm hanger required.

P4 Eleven Metre Pitch (11 m) [15 m rope]:

Bolt on LHS 2m back from lip. Rebelay on bolt on RHS 1 m past lip.

2 x 8 mm hangers required.

P5 Diagonal Pitch (14 m) [27 m rope will reach to P7]:

Belay on eyebolt 2 m back from edge on LHS. Rebelay on bolt in roof on LHS at lip. Second rebelay bolt in roof approx. 8 m further down to left gives free-hang to bottom.

2 x 8 mm hangers required.

P6 Four Metre Cascade (4 m):

This can be easily free-climbed or a short rope can be belayed around the “extremely dangerous looking boulder” at the top of the climb.

P7 Bolt Traverse Pitch (35 m) [43 m rope]:

Belay off eyebolt in floor on RHS. Descend and traverse around right hand wall; 5 m round and 3 m down (away from waterfall!) to two bolts. The top one is an old carrot and hanger. Rebelay from the bottom bolt, an 8 mm stainless Throughbolt with stainless hanger and a hero loop. [Leave hanger on bolt during de-rig.] Rebelay on bolt about 10 m further down at lip of free hang. Drop to bottom is not totally dry!

1 x 8 mm hanger required.

Pitch 8 Au Cheval Pitch (5 m up, 15 m down) [18 m rope]:

Fixed 5 m rope in situ on up climb. Rig descent rope off same natural as fixed rope.

P9 Firehose Pitch (15 m)

Not dry! Use naturals.

JF-2 Cauldron Pot de-rig

Janine McKinnon

16 April 2013

Party: Janine McKinnon, Petr Smejkal, Ric Tunney

Petr had some free time to go caving, with his mother-in-law visiting to baby sit. With no other cavers willing to go down the cave, apparently, and little likelihood that Rolan would be available to finish our work in the upstream end of the cave before I become unavailable to cave until September, this seemed like the perfect opportunity to get the ropes and rigging gear out of the cave for the winter.

We started underground at just after 10 am, me first, and I was at the bottom of the cave by 10:50 am. God, I love rigged caves.

Ric stayed at the top of the final pitch whilst Petr and I went to the bottom to:

- Get the rope from Au Cheval pitch.
- Petr to take photos, and go to the bottom for the first time.
- Me to do a compass bearing from the bottom of the pitch to Au Cheval for Trevor, who has had a problem

joining the vertical bits with the horizontal bits of his map ... for 30 years.

We spent about half an hour down there and then I started up whilst Petr de-rigged Au Cheval.

Ric took the bottom rope and headed for the bottom of Bills Bypass (BB), to wait for us there. Petr de-rigged, with me staying at the pitch heads to help pack rope and just keep in touch with him.

We rejoined Ric at the top of the pitches and he then started up BB whilst we de-rigged the final pitch in the streamway. Petr had taken all the other ropes and I just got this last one. It is wonderful caving with fit, strong, capable, young guys (it probably doesn't look quite as wonderful from their perspective).

Petr caught Ric just as he exited BB, and I was a few minutes behind. The trip up BB with the ropes was much quicker and easier than I had been expecting, although, from my perspective, a few carefully chosen words were addressed at my pack from time to time when it was a bit recalcitrant in following me up.

Back in the entrance chamber Petr took a few more photos and Ric went up first. Petr stayed in his role of pitch de-rigger.

We were all back at the gearing up spot just after 2 pm. It had been a faster trip than we had anticipated.

Water levels were a little higher than for the beginner's trip five days previous, and the water temperature is definitely dropping. The day was fine, sunny and still cool when we

emerged from the cave. No sun reached the forest floor. So winter is almost here.

Some of the krabs had a fine fuzz developing on them, after about 10 weeks in the cave.



P. Smejkal



P. Smejkal

MC-130, 131, 132 Devils Pot and Devils Anastomosis surveying

Alan Jackson

26-28 April 2013

Party: David Butler (Northern Caverneers), Anna Ekdahl, Sarah Gilbert, Alan Jackson, Han-Wei Lee, Janine McKinnon, Chris Sharples, Ric Tunney

Day 1

Everyone had arrived at the Marakoopa Hut by 11 am and we headed up to the show cave carpark and slogged up the hill to MC-130 Devils Pot, with a quick scenic lookout on the way in the MC-9 Devils Earhole doline. We split into two groups, with David, Sarah, Han-Wei and Ric continuing down to MC-132 Devils Anastomosis to commence surveying from that end. Janine started rigging MC-130 while Chris, Anna and I surveyed from the top of the first waterfall into the Devils Pot canyon down to the top of the usual access gully that Janine was rigging. The MC-130 tag hasn't been seen for years so we planned to install a new one (at the spot where we started the surface survey).

Eight legs later we were back at the rigging gully and descending into the doline. Janine had carefully left the 10 mm hangers on the ground at the top of the cave so I got to shoot back up the top half of the entrance pitch to get them for her. I had handed over the DistoX to the other survey team as they apparently had lots of narrow side passages with short legs to survey in their bit, so we were stuck with old-fashioned Suuntos. We opted to leave the near-vertical legs down into the doline till the next day when the DistoX was back in my party, as long legs over 50 degrees on the clino are very hard to get accurate compass bearings on with a Suunto. While Janine rigged the second pitch down the dry way (towards the Anastomosis connection), now she had her bolts plates, I sketched the doline and worked out where all the survey stations would go.

At the bottom of the second pitch we picked up the survey again and completed it down to the lower levels where the stream appears again, briefly, and up the ascending muddy slope nearby. I was happy the creek was very soon not navigable so we didn't have to grovel down there with the instruments of torture.

We had expected a rope to drop from the heavens from the Anastomosis team but it didn't come before we'd finished our bit and started for the surface. We met the others on the surface at about 5:45 pm and made our way back down the hill to the cars. The Anastomosis crew had had a busy and productive day but reported a bit more to do the next day.

Day 2

Party: David Butler (Northern Caverneers), Anna Ekdahl, Sarah Gilbert, Alan Jackson, Han-Wei Lee

We lost Chris, Ric and Janine to Kubla on Saturday. The remainder slogged back up the hill and round to MC-132. David had an old map with him indicating that there was a third entrance to the system, MC-131, just down from MC-132. He located this and we popped in to work out where it connected. Not far in, one of the previous day's survey stations was located so Sarah and I started the survey from that station back out to the MC-131 tag. Anna and Han-Wei had to be on the road back to Hobart not long after lunch so to spare them the pains of watching us survey we decided we'd send them off

to do the exchange trip with MC-130 and then they'd depart. David guided them down to the connecting pitch and saw them safely on their way.

Sarah and I finished surveying out to the MC-131 tag, then ran an overland survey to the MC-132 tag. David hadn't returned yet so we started ticking off the various little side passages noted during the previous day but not surveyed. One of them went for much further than anticipated and kept us engrossed for some time. It eventually split into two, the left branch terminating in a small sump (which Janine needs to add to the dive list), the right branch ascending a mud bank before dropping steeply down into larger passage coated in sparkling flowstone. It looked free-climbable but we were filthy from farting about in the sump and the flowstone was pretty spectacular. It didn't seem likely that no one had been there before but it also seemed unlikely that anyone could have been down the flowstone before without leaving obvious muddy tracks. Confused, we shot a ~15 m leg down to the floor of what we could see and turned around.

We found David waiting for us back in the main passage and we headed round to rig a short rope into a pot David had found the previous day. It did nothing so we headed down the pitch towards the connection and picked up the survey again. Complex, well-decorated passage made for slow sketching but finally we arrived at the next pitch head. Sarah and I surveyed our way down and tied in to one of the previous day's stations. David stayed up top and solo derigged Anastomosis while Sarah and I derigged the second pitch in Devils Pot and surveyed from the base of that pitch out to the top of the first pitch on the surface. David met us there.

Darkness was falling and we'd had enough but we decided to quickly run a surface survey down the dry valley to the MC-132 tag. We finished this ~100 m job in the dark and the start of some rain, then whacked the new tag on MC-130. It is located on the right bank (facing downstream) a couple of metres above the stream bed, a few metres before the stream plunges over the first pitch of the wet canyon.

We got back to the cars without getting too wet and were happy to note that Anna and Han-Wei's car was gone and an SMS later on confirmed they'd managed their trip out without incident. The carpark wasn't empty though, as Ric and Janine had popped up after their Kubla trip to make sure we made it back safely, before heading back to Hobart for another engagement on Sunday – nice to know they care.

Day 3

Party: David Butler (Northern Caverneers), Sarah Gilbert, Alan Jackson

Only the hard cavers left now. We slogged up the hill for the final time, dropped down into Devils Pot and rigged a rope down the waterfall side of the doline. We surveyed along as a group of three until the first climb down and plunge pool. David tried to be Spiderman but it ended with an 'oh shit' followed by a big splash. Sarah decided that didn't look like fun and turned around to admire the waterfall pitch some more.

I joined David (without even getting wet socks, but I did acquire a smug look) and we continued the survey until we hit an unexpected ~15 m pitch. David, our local guide, had forgotten (or at least denied prior knowledge) about this pitch and we had no rope for it. Also, the rigging was less than ideal. We noted one totally rusted loxin casing, one totally rusted spit casing and one huge half inch (not sure if it was a bash in or a

loxin) bolt that protruded from the wall about 100 mm. It had a large steel plate hanger with a rusty steel karabiner hanging on it. This was the only apparent rigging option, though Rolan has since assured me that there are naturals on offer if you have the right pro (cams, nuts etc.) with you. That bit of the cave will have to be surveyed another time, though the data shows that pitch is right over the main lower passage of Devils Pot, so we didn't miss much.

On the way out David did an encore of his 'oh shit' and splash performance to a rousing reception. I think I also heard something along the lines of 'smart arse' mumbled as I retained dry feet (and ears) once again; the smug look also endured.

We then headed out, derigging, and were back at the hut by noon.

The whole system is now 90% surveyed. All that remains, that we know of, is the confusing flowstone lead we were too conservation-minded to destroy – what is STC coming to? – (and the nearby sump if it goes), the 'oh shit' streamway pitch and the wet canyon route into the Devils Pot doline (which Ric and Janine are in the slow process of bolting).

All up we gathered 1209 m of data (978 m underground and 231 m of surface links).

Thanks very much to all those that helped, particularly David and Sarah for their three day effort. That's two three-day visits to Mole Creek already for me this year, and I enjoyed them both. Who'd have thought?

MC-29 – MC-1 Kubla Khan through trip

Chris Sharples

27 April 2013

Party: Janine McKinnon, Chris Sharples, Ric Tunney

Despite being advertised well in advance so that the permit could be organised early, in the end only three punters turned up for this trip through one of Australia's finest decorated caves, beneath the inauspicious (and dubiously-named) Grunter Hill at Mole Creek. However this resulted in a pleasant well-paced trip with plenty of time for gawking at pretty things but little time wasted standing around waiting for a turn at the vertical pitches.

Following a day surveying in Devils Pot and Devils Anastomosis above Marakoopa Cave, we made our way down the bumpy access track in Chris' well-dinged car. After rigging the bottom entrance (MC-1) for our exit, we adjourned to the top entrance (MC-29) by around 10 am and descended the three pitch entrance with a minimum of fuss and bother.

Given the well-explored and often described nature of this cave, I won't dwell on minutiae, although at one point during the trip I was moved to remark that it seems extraordinary that a cave of such renown and significance still lacks a good cave survey (a worthy follow-on from *Extravaganza?*).

The key scenic vantage points were visited and oohed and aahed at in turn, including the Forbidden City, Khans Army, Opium Den, Silk Shop, Watergate, and of course the enormous and (let's face it) very phallic 'Khan' stalagmite, which all proved worth the return visit. However as usual it was the incomparable Pleasure Dome that most forcefully reminded us that we were actually in one of Australia's very finest caves.

Personally, this was my third trip through Kubla Khan, and two things in particular stand out to me as worth mentioning on this occasion (apart from the sheer beauty of this cave, ho hum). The first is the enormous amount of work that Dave Wools-Cobb and his fellow Northern Caverneers have put into protecting the cave from the trogging pressures that have in the past resulted in damage and muddying. Between wash-down stations, track marking and installation of portable soft steps in critical spots, a great deal has been achieved to reduce the likelihood of future trogging impacts.

The second – and possibly more ominous – aspect of this trip was the very noticeable dryness of the cave. Janine and Ric considered the cave to be drier than they have ever seen it before, and this was most noticeable in the Pleasure Dome, whose 'summit' spring was completely dry, as was the

normally-full pool immediately beside the summit dome. Although it is unclear how frequently (or not) such dry conditions have occurred in the past, it somehow strikes me as potentially relevant that recent climate modelling for Tasmania by the Climate Futures project of the Antarctic Climate and Ecosystems Co-operative Research Centre (UTAS) indicates that whilst Tasmania's overall future rainfall is not expected to change much, it is expected to become increasingly characterised by longer dry periods than previously interspersed with short periods of intense rainfall – with some predictable drying and flooding implications for caves.

With this in mind, and wetsuits on, the final wade up the River Alph (which at least was still flowing) did not seem so bad, especially since the small group size again meant less (in fact, no) standing around in neck-deep freezing water while the person in front fusses and wimps about trying to find their footing!

We finally emerged from the lower entrance (MC-1) via the short but somewhat annoyingly grovelly prusik at around 4 pm, after a stress-free six hour through trip, and assured ourselves we could easily have done it in three hours if we hadn't made such a leisurely sight-seeing trip of it.

Some Observations by Ric from the trip:

My previous trip to Kubla Khan was 3 Dec 2011.

Some observations:

1. In Sallys Folly, just below the 3 m climb, where there is a restriction through some formation to the swing-around-on-the-shawls pool, there is a pile of large broken shawl fragments. I could not see where they had come from. I do not remember seeing these on my previous trip.
2. At the very top of the Pleasure Dome, there is a low flat area covered by rimstone. This is where the water comes in to the Pleasure Dome. Someone has crawled onto this area and smashed some of the rimstone walls. I do not remember seeing this on my previous trip.
3. I think I would remember the above damage. If I had seen it, I would have reported it. Most likely I would have seen it. [*On an even more recent trip Ric confessed to me that it was likely the only reason he noticed it was because it was so abnormally dry, so the damage wasn't obscured by flowing water. He now thinks it possible that the damage is historic – Ed.*]
4. The whole cave was very dry; the driest I have ever seen it. The pools in Silk Shop were almost empty and all the pools in the Pleasure Dome, including the big pool near the top, were dry.

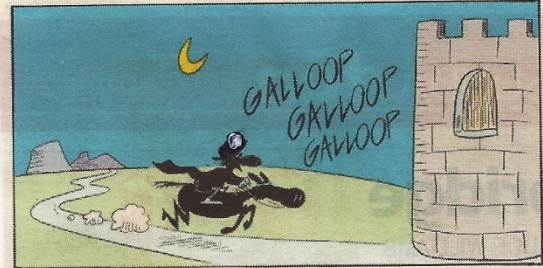
Wizard of IDA BAY

The 60's



A long time ago.

Cave exploration was difficult.



Some trips were too tough + some cavers weren't tough enough!



They relocated to a kingdom in the tropical north.



But times changed.



And so, the caving, political + geographic landscape of Taswegia was changed forever!

History ①

To be continued...

Junee-Florentine Mini-Expedition

Alan Jackson (& Mark Euston)

18-26 May 2013

Party: Mark Euston, Alan Jackson, Andreas Klocker, Peter MacNab (Snablet), Andy McKenzie

JF-382 Dissidence has been generous over the years so we figured it was time to impose on her hospitality once more. The original dissident, Andy McKenzie, had a week free, as did the legendary NZ-residing pom, Snablet, so we lined up some dates in late May and extended invitations to likely punters.

The last Dissi push, in Easter 2012, had tidied up most of the remnants of the winter 2011 extensions with one major exception – upstream Green Dreams. There were also the usual myriad leads that had been keeping me awake at night since the 2008 exploration period. We hoped to get them all ticked off this time round and leave a clean slate (as if).

After the snow camping experience in 2012 we pursued the soft option of renting a house in Maydena. Despite the relatively mild and dry weather we experienced for the week this proved to be a very pleasant arrangement – warm dry beds, civilised cooking facilities, heaters, undercover space to hang out filthy caving gear to dry each night. One could get used to such salubrious post-caving conditions.

Day 1

A typically slow start getting organised, driving to Maydena, sorting out the house and then finally heading in to the cave to rig it. The non-stainless steel bolts in this cave were placed in 2007-08 so they're getting a bit long in the tooth (and rusty on the outside) and ideally need replacing with proper stainless glue-ins in the next couple of years. We placed additional bolts on the 4 m pitch and the traverse line between Imperial Thirty and Spent Force pitches, as these only ever had a single bolt on them and the consequences of either of those bolts failing wasn't worth thinking about.

At the junction of Yabby Creek and Union Jack we split into two parties. Andreas and I had a cave expansion mission at the head of the undescended 8 m pitch in Yabby Creek and the others were off to continue the rigging and assess the leads in Smooth Operator.

Paper Scissors Rock was as wet and awful as usual but the dig at the 8 m pitch was pleasant enough; we managed to keep pretty dry and clean. It didn't take much to enlarge the pitch head and a y-hang later I was at the bottom of the pitch. There was zero extension to be made at the bottom of the pitch, the water disappearing into the narrowest of wet shitty holes. We packed up and headed down to join the others in Smooth Operator.

The others had re-checked the original dig lead on the far side of the chamber and confirmed what Serena had found: tight, drafting and with a soft diggable floor if you're mad keen. The potential vadose continuation overhead looked as inviting as it had when I'd first noticed it while derigging this pitch in 2009. A crazy plan was hatched on how we would reach it the following day. The wall below the lead was very overhanging so aid climbing straight up to it was folly. A pendulum traverse was the preferred option, as ~30 m or so back from the Smooth Operator pitch head one can climb up (at the Bum Stal) a good 20 m above the pitch head and pop out high in the aven.

We left most of our gear behind for the next day and exited the cave after only five or six hours underground; a good soft start to ease into things.

Day 2

We got away reasonably early and back underground. Andy and Snablet headed off to Smooth Operator while Mark, Andreas and I lugged the digging gear down to Quiet Desperation (on the wrong side of the rockfall). Andreas and I were planning to enlarge the drafting squeeze there while Mark headed up to Green Dreams to shift cobbles. Knowing how small Mark is I suggested he have a quick go at the squeeze to see if he could save us the effort of making it grow. The little runt managed to get through it and reported continuing passage. He explored it quickly, returning to report that it swung left (north) and terminated in drafting rockfall with the sound of a stream. This all added up to a connection with Euphony/High Fidelity so it didn't seem worthwhile making the squeeze big enough for us all to fit through, only to find that moving boulders would simply reveal a new, more difficult way into Euphony. We passed the DistoX through to Mark and he solo-surveyed the new passage so we could confirm our suspicions on the computer when we got out. He surveyed about 20 m of new passage.

We happily dumped the digging gear and all relocated to Green Dreams. Mark set to work on the cobbles while Andreas and I picked up the survey nearby and headed in to him. By the time we reached the low point Mark was through and out of earshot. He soon returned with mixed news. He'd pushed a good 40 m of reasonable passage but had ended up above the stream in a sloping rockfall chamber (much like a bit further downstream) and that it didn't look all that good. Either way it needed surveying so I headed through, getting a nice lie down in the stream in the process, and we started surveying. Andreas started to follow but decided it was a bit tight for him and he didn't feel like getting stuck face down in the stream. He would await our return. Austrians are soft.

The passage was low and wet for ~10 m, then the stream issued from a crack in the wall. A dry bypass was available to the left which reconnected to the stream a little later. Here the cave was narrow but taller with a series of small drops and plunge pools to negotiate (and very short survey legs). The stream then become unfollowable, coming out of a long but very narrow rift, but passage opened up to the left into rockfall. We reached the point Mark had pushed to and had a quick poke around. An easy crawl headed off to the west which lead to a decorated side chamber (after Mark shifted some rocks), which in turn lead to a descending muddy tube that intersected the streamway again. From here the cave just got bigger and better, and before long we were strolling along 3 m wide, 4 m high stream passage and pulling out 10+ m legs, giggling uncontrollably all the way. A junction was noted at a bit of rockfall but we stuck to the main stream, which continued up a 2 m climb/waterfall. The walking passage descended to stooping passage but just kept going. The roof was solid and of phreatic origin and the floor was cemented dolerite cobbles that had obviously once filled the passage to the roof but were slowly being washed away again. Many metres later the cobbles started getting even closer to the roof and we were on our bellies grovelling in the stream and scraping our helmets on the roof. It didn't look like getting any better so we left a marked station and turned around. We checked the side passage back at the 2 m climb which connected into a ~15 m

high aven/chamber with a small amount of water falling in. There was a very tight lead heading off to the south from this chamber but it wasn't very inviting. We surveyed this passage in and headed for home.

About two hours into our four hours of surveying we remembered Andreas and figured that he'd have near frozen to death and headed out by now to hook up with the others in Smooth Operator. When we did get back we were surprised to see that he'd only managed the first bit. Four hours! He wasn't a happy camper but hid it well. I wasn't a happy camper either when he admitted to raiding my food stash and eating all my snakes. Not sure how well I hid it though.

We got moving pretty quickly to get Andreas's blood flowing again. We had the unenviable job of carting the digging gear back up through the rockfall. I left the drill and batteries at Quiet Desperation for the planned aid climbs in Euphony. In a surprising bit of unplanned synchronicity we met the smooth operators at the bottom of Negative Reality Inversion (42 m pitch). Andy had spent an epic day pendu-plummeting around the chamber while Snablet also slowly froze to death watching. They acquired their target but the lead turned out to be nothing but a side branch of an inlet and didn't go anywhere. Bummer.

We headed out in convoy and made a late night of it by the time we cleaned up, cooked dinner, entered survey data and (some) drank too much. The data indicated we'd collected a bit over 300 m in the Green Dreams extension and it headed NW (the usual direction). The end point we reached was located about 60 m just south of due west of the entrance. Interesting.

Day 3

A late start for most. Andreas had a meeting in Hobart so he headed off reasonably early. The rest of us fuffed and tried to think of things to do other than head back into Dissidence again. Surface bashing? Couch surfing? Tourist trip? Eventually Mark opted for loafing about the house cleaning gear while we three others went touring. We collected the Tim Shea key from the Adventure Hub (\$300 deposit!) and took a look at the always stunning view from up there. It gave Snablet a good overview of the karst area and how the pieces of the puzzles we'd uncovered so far slotted in. We then took a spin in a fairly noisy/wet Growling as far as Herpes III. The highlight of the trip was Andy face planting in the Cascades section of the main streamway. Luckily he didn't hurt himself – just a bruised ego.

Day 4 – Dissidence

Refreshed from a rest day we primed ourselves for another big day. Andy and I would head back to Dissidence to push the new stuff beyond Green Dreams, hoping it would get big again. We also had the Euphony aid climbing to tick off. Andreas came back out to join Mark and Snablet in JF-463 Constitution Hole to see where Hang Glider Chamber might lead to. The astute amongst you who maintain cave name origin databases (i.e. Greg) will notice this cave now has a name, and demand an explanation. Just after the second excursion to this cave our mainland members/ explorers/ discoverers were quite entertained by the glut of emails on the STC listserver regarding the fictitious constitutional crisis Arthur was insisting we were having at the time. This debacle provided the inspiration for the name.

Andy and I started with the unfinished aid climb on the northern side of Euphony chamber. Two bolts later Andy confirmed that the right branch ended even more disappointingly than the left branch had back in 2012. I got the joy of tackling the slightly easier climb into the lead on the

southern side of the chamber, adjacent to the connecting crawl back to Quiet Desperation. Two bolts got me into continuing passage and another climb. Andy joined me and between some well-placed hands on my bum (always appreciated) and some choice skyhook placements I scaled this face with another two bolts. The whole place was plastered with the stickiest mud in the world which made for challenging conditions. Andy checked the way on via a short climb but it was just a dead side branch. While he checked that I corkscrewed back around over the previous pitch and bridged across the top into ascending passage. This opened out into a nice little chamber with yet another climb. The bottom of this was free-climbable and the crux at the top, over a couple of large wedged boulders, was protected by threading a rope round the boulders. The passage above this climb terminated in narrow rock-filled rift and the only potential way on was a 7+ m bolt climb that appeared to be similarly blocked and not worth the effort. We surveyed back out and headed down to the stream below Euphony for a thorough wash.

Next we bombed up the new stuff from two days earlier to the extent of exploration. We decided to push the low stuff and only survey back out if we found something good on the other side. After only 30 m or so the passage improved to crawling, then stooping, then standing, then rockfall. A quick look suggested it was over so we set up a station and started surveying out. Then Andy spotted a lead low in the rockfall and bloody well found his way through. The survey was abandoned and we started pushing again.

After almost 100 m of mixed passage (some solid walls, some crawling, some walking and some collapsed stuff) we hit a blockage. There were masses of large dolerite blocks and all the signs of a large collapsed inlet. We didn't poke all that hard and didn't bother pushing into a higher level collapse chamber we could see beyond some easily moved rocks. We were over it. We started surveying again and clocked up almost 100 m by the time we'd tied back in with the last station from day 2's trip.

The trip out was long and arduous with massive heavy bags up through the rockfall. We dumped a bit of excess gear at the bottom of the 42 for later recovery. It had been a good old fashioned Andy and Alan trip – good times, new passage and plenty of inappropriate banter culminating in two partially broken bodies and minds.

We were surprised to see the others' car still in the car park (around 8-9 pm). We hoped it meant they'd found something good rather than something requiring a rescue. In another incidence of surprising unplanned synchronicity they marched out of the bush ten minutes behind us. They'd had an awesome day, collecting nearly 300 m of survey data with leads abounding.

Another late night entering data and talking rubbish. The survey tally in Dissidence was 145 m and the end of the upstream extension was now about 120 m due west of the entrance. It was heading straight for Warhol, and ultimately, JF-463. The aid climbing had gained nearly 25 m vertically and trended in the direction of the bottom end of Run Rabbit Run (hence the rockfall blockage?). Dissidence data is plotted in Figures 1 and 2. The JF-463 data showed that Hang Glider Chamber was located almost directly below the entrance and after a few pitches they'd then been barrelling off to the SE again in large fossil meander but a good distance south of the other sections of the cave. Lots more interesting work to be done in this cave evidently.

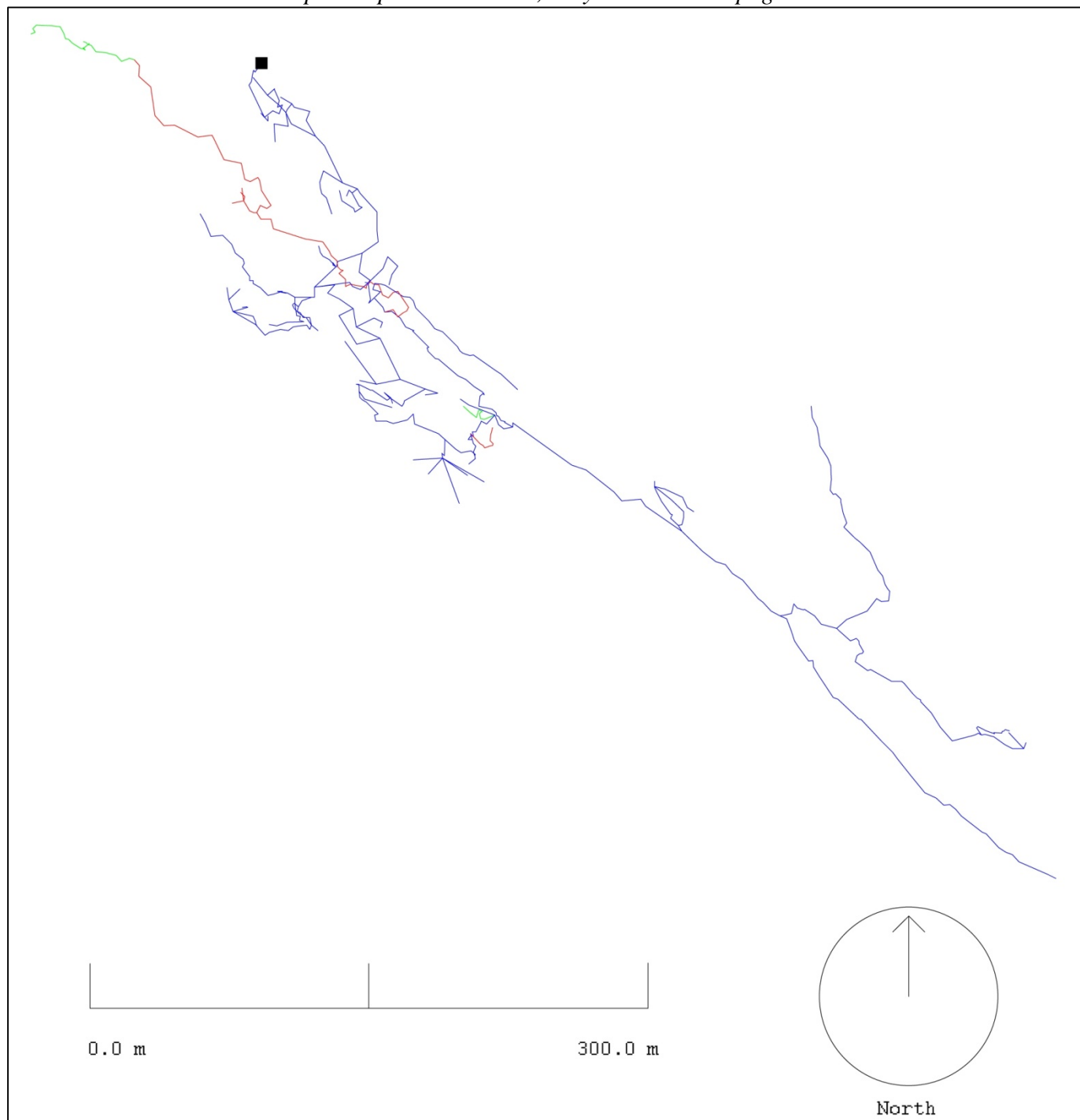


Figure 1. Plan view of JF-382 Dissidence survey line plot. 19/05/2013 data are indicated in red, 21/05/2013 data are indicated in green; all earlier data are indicated in blue. The black square denotes the entrance.

Day 4 – Constitution Hole (Mark Euston)

Andreas, Snablet and I opted out of surveying what we thought would be the miserable part of the Dissidence streamway and decided to go to JF-463 Constitution Hole. Constitution Hole was only three months old and had a fairly big and open pitch that needed descending. This pitch goes into Hang Glider Chamber, so named because Andreas exclaimed that it was big enough to hang glide into.

The cave had been de-rigged, but the hangers on the way to Hang Glider were left in place, so it was fairly quick to get in. I went first with the drill and a dozen bolts to add a rebelay at the top of Hang Glider pitch and to continue down below the flowstone dome. Andreas and Snablet followed and continued the survey from the bottom of the 2nd pitch.

The rebelay went in with only about five minutes of faffing, which was a marked improvement on my previous 1+ hour

efforts at bolting. That got me down to the flowstone dome, which Andreas had reached on our March trip.

There were several options to continue descending, including Andreas' "Rift/Pitch/Motherfucking-shithole". I started chimneying down this, until I was able to see past my feet - the walls opened out and it was at least a 10 m drop, so I backed out of that climb pretty quickly. There was an obvious continuation to the immediate left, but the floor sloped away with no way to look over the edge, so I climbed on top of the dome to scout around a bit more.

On the far left of the dome you could lean over and see rockpile floor only 5 m below, so I opted to rig a short pitch down there to see if there were other leads or a way to climb down the remainder of the pitch. I rigged off two stalagmites, but was a bit stingy with the rope meaning that Andreas and

Snablet had some issues getting off the rope and we all had to pendulum off the top of the dome on the way back up.

Down on the rockpile I could see to the bottom of the "immediate left" pitch – it was at least another 15 m. Straight ahead (in the direction of the passage leading to Hang Glider Chamber) went into a rift that looked like it might continue. Andreas and Snablet had caught up at this point and continued surveying up this rift whilst I rigged the "immediate left" pitch. We rigged off another stal and backed it up to a 2 m boulder. A rebelay was put in a few metres down and then a redirect about 5 m from the bottom. It would be better to do this pitch as a continuation of the top pitch and put a rebelay on the left hand wall.



Andreas commences descent into Hang Glider Chamber.

At the bottom of Hang Glider Chamber was a well-decorated area and you could see that the dome was formed on top of a ~10 m diameter boulder hanging in mid-air. It was also apparent that above the dome is only the top third of Hang Glider Chamber. There were a number of options but I just followed the largest most open route which was mostly scrambling down on top of collapsed rock. There was a hairy climb which got me down into a serpentine passage with a trickle of water flowing and a partially calcited mud floor. Downstream got small quickly so I went upstream which was mostly walking, except for a few 1-2 m climbs over sediment blockages. I got to a point where the water was coming down through an easily negotiable rockpile, but decided to check out a larger opening to my left. This turned into a larger serpentine passage about 2 m wide, 10 m tall (and still going beyond sight) and with a dry sediment floor. The walls were smoothly sculpted, unlike the jagged meanders in the other parts of the cave. I quickly got to a pit where the floor had been eroded down about 2 m and decided to head back and get the surveyors.

Having scooped 100 m of great cave, I decided to take on instrument duties, only to find I was rubbish at it. Snablet took over the instruments and I did book – my sketching was appalling, but I think I wrote the numbers down correctly. We managed to survey past the pit that I'd reached and then up a climb and some more passage. Another pit revealed that we'd been on a false floor for about 10 m.



Andreas and Mark enjoy some squirms in Hang Glider Chamber.

We stopped surveying at 4:30 pm as we encountered a strong breeze and started getting cold. We followed the serpentine passage to a tall mud blockage and we climbed up a bit of it as there's definitely a way over the top. The climb is quite high though so we left it for another trip.

We then followed the breeze down under some false floors and found a huge breeze coming out of the floor, blocked by 5 cm thick plates of rock that were cemented together with black spikey formation. Andreas got exploration fever and started digging and we could see all the dust blowing back up from the breeze. We got through and I dropped down into some smaller, crappier stuff with some water flowing down. I followed the water down a 60 degree rift for several metres but it looked like it was choking up in another few metres, so I went sideways and found another bit of big serpentine. It stopped fairly quickly, but with ways on over the top. No obvious way on but the breeze is still going in there.

The survey showed the serpentine passage tracking underneath the first meander, but where the first meander meets the first pitch and turns hard left (and then circles back around to under the entrance at Hang Glider), the serpentine keeps going south east towards the main system and other known caves. It got to about 110 m deep, which is a bit below Heart of Darkness pitch and about 50 m horizontally away. It doesn't look like they'll link up though, which is a good thing as it could be going to a lot more passage.

Constitution Hole is definitely going, and with the size of the breeze it could be going to something big. The serpentine passage is also quite well formed – smooth sculpted walls, reasonably wide and very tall. It may have undergone several periods of infilling and erosion due to numerous false floors

and pits. There are at least a dozen good leads that we didn't have time to push and another 20 less promising ones. Andreas is organising another push trip for August.

Day 5

Andreas and Andy were up early to head back to Hobart and collect Luke (one of Andy's rope access mates) from the airport. Andy returned with Luke late morning just in time for Mark and I to pack up the ute and head for Hobart ourselves – the carnival was over for the two of us and Mark flew home that afternoon.

The others introduced Luke to caving with a sedate trip into New Feeling, Growling.

Day 6

Dissi derig.

John (Big Nose) Palmer, (Tas-based pommy caver from way back), joined the other three for the derig. They had a tourist in Run Rabbit Run before stripping all the gear in a relatively gentle day.

Day 7

Clean the house. Defile the Derwent with cave mud. Final wash up at AJ's. Hit the town with Trevor and Big Nose ...

Day 8

We'd organised a Kubla permit through the Bristol Exploration Club (Snablet's club in the UK) and Ric had kindly offered (was coerced) to lead the trip. Chris Coxson tagged along to make up the six. I collected Chris at 6:45 am and the others at 7 am in the Gas Works Bottleshop carpark and wasn't overly surprised at what I found. Six people fell out of a five-seat car; Trevor was one of them, which didn't bode well. They'd managed to procure (read kidnap) Andreas out on the town the night before and he'd managed to grow an impressive moustache since I'd last seen him on the preceding Wednesday, courtesy of Monsieur Bic's permanent marker range. A very seedy-looking Andy, Snablet and Luke collapsed into the back seat of the ute and giggled for 15 minutes before falling asleep; the two hours they'd already received hadn't proven sufficient. Chris and I enjoyed the fresh brewery air for the tedious 2.5 hour drive to Mole Creek.

We met Sir Richard at ~9:45 am and headed to Kubla. It was a sedate trip with short periods of caving interspersed with long periods of lying on the ground groaning. Snablet was far from his normal chirpy self. We ticked all the must-see boxes of Kubla, had a post trip beer (hair of the dog) and relocated to Sheffield for pizza at Naomi's

Kitchen. Nomes used to work with Andy when he was based at Lake St Clair. Fabulous pizza was consumed in the kitchen beside the pizza oven (the rest of the place was booked out with a private function). If you're in Sheffield then get your bums in for a pizza – bloody good stuff. We adjourned to Devonport to crash at my parents' place that evening.

[Chris took some pretty nice photos with just a hand held snapper. Putting them all in the Spiel was going to take too long and choosing just a few proved too difficult, other than the convenient space filler below, so go and look at them all yourself at the following link – Ed.]

<http://www.flickr.com/photos/chriscoxson/sets/72157634005298762/>

Day 9

Crepes for breakfast followed by a tedious three hour drive back to Hobart via Great Lake. A spot of lunch in Salamanca to ensure Andy and Anna reacquainted themselves and then we bundled them onto a plane.

Awesome trip for all involved with some good new stuff pushed, old friendships rekindled and new ones started. Hopefully I'll be seeing more of Andy and Snablet in Vietnam next year.

Dissidence is now 3.45 km long and Constitution Hole almost 600 m (plus the unsurveyed stuff from March).

Remaining leads in Dissidence?

Of course there are. We need to poke the thinnest man alive, Mark Euston, down Stockholm Syndrome to see where that goes. Upstream Green Dreams was hardly pushed comprehensively by Andy and me on day 4, and the side passage and aven party way up this extension might be considered more interesting by a party that hadn't just scooped several hundred metres of much shinier cave. Who knows what else a fresh set of eyes might turn up in ten years time. For now I think I'll turn my attention in this area to nearby entrances that could connect in (JF-381, Punishment Pot and JF-380 would be my first targets).



Pleasure Dome, Kubla Khan

C. Coxson

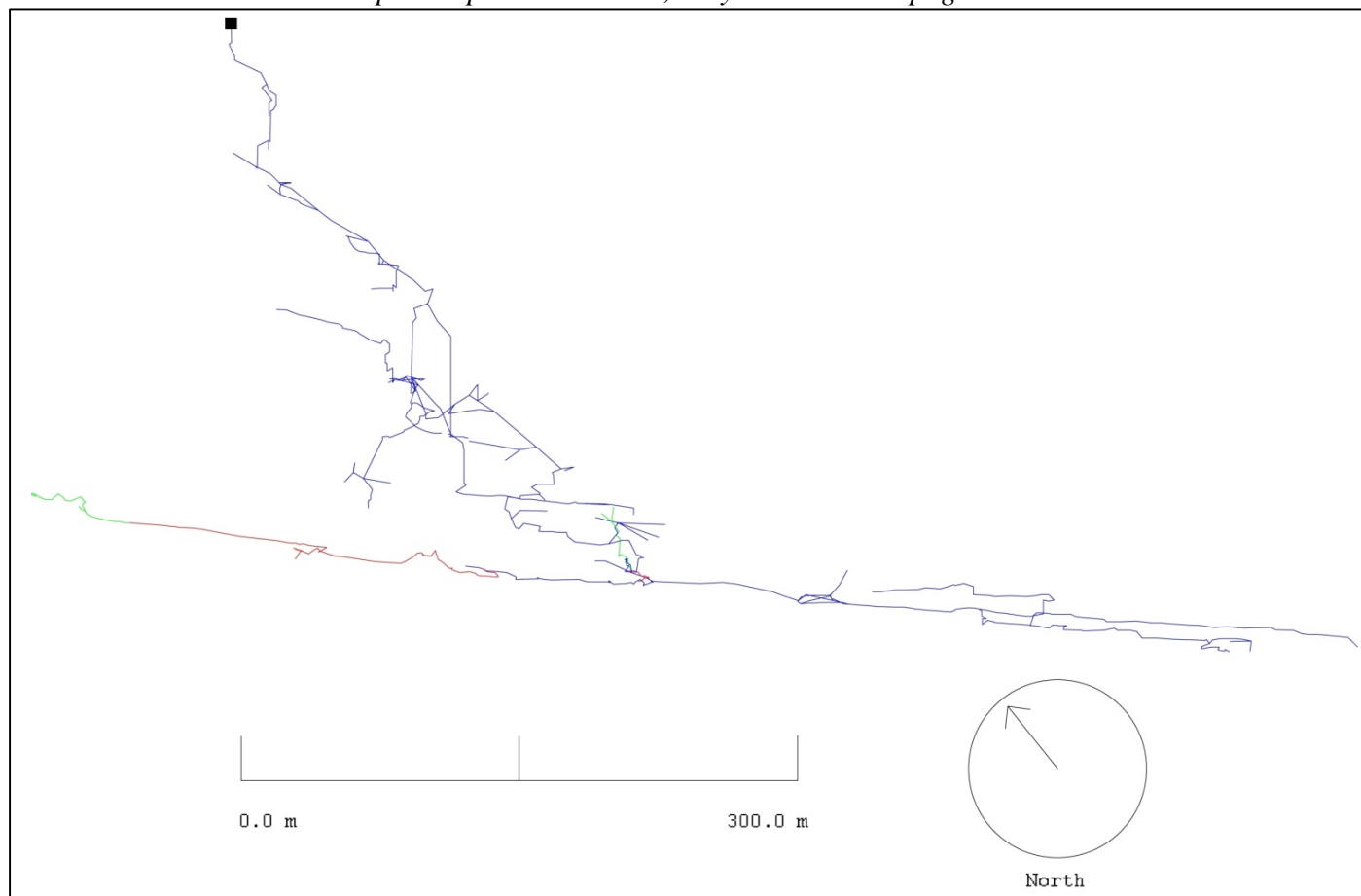


Figure 2. Vertical section view of JF-382 Dissidence survey line plot. 19/05/2013 data are indicated in red, 21/05/2013 data are indicated in green; all earlier data are indicated in blue. The black square denotes the entrance.

H-2 Vanderstaays Vault – Daddy Day Out

Matt Cracknell

19 May 2013

Party: Matt Cracknell, Petr Smejkal

It had been a while since we dads had been caving together. The last trip was in September last year where we visited the area between Erebus and King George V caves. On that trip I didn't bring enough rope to get to the bottom of H-2 Vanderstaays Vault safely. So the aim of the adventure for the day was use a 40 m rope to drop the entrance and survey H-2. If that didn't take too long there were a couple of plan B's up my sleeve.

We were both expecting to be rained on as we made our way south. Despite being cold, the sun was shining (and birds singing?) as we started up the KGV track from Chestermans Rd. We got a little bush-whacked finding H-2 as we had somehow managed to walk too high up the ridge. Both poor GPS coverage on the south side of the ridge and the gap containing the entrance to H-2 being just an open hole on an otherwise featureless slope weren't helping our cause. After about 10-15 minutes thrashing about in the scrub we found what we were looking for. We rigged the entrance pitch from a couple of moderate-sized trees at the edge of the doline/hole. I then descended gingerly past a pile of precariously balanced overhanging organic debris stuffed into the opening.

Once inside the cave a pungent aroma filled our nostrils. The culprit was a dead echidna, complete with a hairy coating of mould. We set to work surveying the single chamber at the bottom of the ~ 25 m pitch. A slight draft could be felt coming through the rockfall under our feet but apart from a small hole

that didn't go anywhere, there were no potential leads. We finished the survey, took some photos and headed out for lunch.

H-2 has formed in dolomite directly beneath the unconformity with the overlying Permian mudstone. The apex of the "vaulted" ceiling displays a pinkish hue, similar in form and appearance to many of the cave passages at Hastings that are located close to this contact. The northeast wall of H-2 is the bedding plane between two types of dolomite with different characteristics – coherent and thinly bedded forms. There didn't appear to have been any movement along this discontinuity so I am not convinced it is a fault.



P. Smejkal

Real cavers wear knitted blue beanies and scarfs – Petr in H-2.



P. Smejkal

Stinky echidna in H-2.

H-2 appears to have developed primarily within the thinly bedded dolomite. These beds are ~ 10-20 cm thick and dip steeply toward the southwest in the ceiling and subvertically toward the northeast at the floor of the cave. The bedded dolomite contains boxwork quartz veins parallel to bedding. Many beds were pink and soft to the touch, which suggests that they have been altered to clay. I suspect that H-2 is a subjacent karst feature, developed in rock susceptible to collapse into a cave passage below.

After lunch we headed southeast and followed the contact back to the road. On the way we passed a deep damp gully that smelt of cave. Petr found some muddy holes and there were lots of small fissures with exposed dolomite. I managed to get a vague GPS fix in a clear spot just to the east of the gully, which put us almost right on top of where Cub Hole should be. It all felt very ‘cavey’, which is not surprising I guess as we were basically walking over the chamber that holds Lake Pluto.

We followed the Permian unconformity without a problem and found our way to Wolf Hole entrance (another subjacent karst feature). We then seemed to lose the unconformity pretty quickly as we moved east. All I saw on the ground were chunks of Permian mudstone. We eventually met up with Chestermans Rd and walked back to the car.

We still had a few hours of daylight left so I suggested to Petr that we walk up the Adamsons Falls track and visit H-215. He was keen to stay out as long as possible so we kitted up and talked as we walked. I showed Petr the Permian fossils in the

uprooted tree stump about 500 m along the track. It is good to see that they are still there if you look closely.

We met up with a stream feeding H-215 and trashed our way through the dense rainforest. You have to be careful when you get close to the edge of the H-215 hole. It just appears out of nowhere, a sheer rectangular pit about 10 m deep on all sides. Funnily enough this is a subjacent karst feature too. However, despite taking a flow of water ~ 5-10 L/s, the bottom of it is rather disappointing.

We rigged the south side of the H-215 pit from a couple of large trees, one of which is growing about 0.5 m from the pit edge. The abseil was great, it has lovely sheer mudstone walls with an occasional fossil. We spent 10-15 min bumbling around at the bottom of the pit before the fading light motivated us to head home.



P. Smejkal

Matt gets excited about vaulting and bedding planes in H-2.



Wizard of IDABAY *The 80's*

So caving became too difficult at the Creek of Moles.

CASTLE UPKEEP... BILLS, PAYROLL, MEETINGS...

I SEE TREES AS A SOURCE OF INCOME

I NEED A DIFFERENT SUIT FOR RECON

LET'S LEAVE IT TO THE HIPPY HERBAL WEIRDOS + N.C.C.

SCARIEST THING I'VE EVER DREAMT

WHERE ARE YOU GOING, RODNEY?

CAVING IN SOUTHERN TASMANIA. AGAIN!

NICE KNOWING YOU

Suddenly the two caving clubs, that split from one, were now back caving in the same areas.

It'll show them who is the Superior Caving Society!

START LOADING THE COW PIES!

UMM...

ISN'T THAT A LITTLE JUVENILE, SIR?

ALL THEY DO IS SMOKE + DRINK + GO CAVING!

And so for many years there was rivalry in the caving world and Burning Down the House!

History ② To be continued....

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Other Exciting Stuff

Crystal Ball Cave and other sandstone features, vicinity of Arve River, Southern Tasmania

Greg Middleton

DISCOVERY AND RECOGNITION

Early in 2012, Forestry Tasmania staff surveying forest coupes in the Arve River (a tributary of the Huon) area of southern Tasmania came across a valley with unusually prominent (15–20 m high) sandstone cliffs. Weathered into these were a number of caves, overhangs or tafoni features. Because of these the place was reported to the Forest Practices Authority (FPA) which is responsible for overseeing forestry activities in Tasmania and, where it considers necessary, imposing limits or constraints on logging. Such limitations may result from the existence of highly erodible soils, steep slopes, features of particular scientific or other interest, Aboriginal occupation or likely heritage sites, karst, etc. Peter McIntosh, geomorphologist with FPA, inspected the area with Stephen Reeve of Forestry Tasmania on 27 June 2012 (McIntosh 2012).

McIntosh reported a “large cave with overhang c. 15 m across at widest point, near top of 15 m sandstone cliff”. He noted some weathering features (iron concretions) but no signs of ancient art or artefacts. He thought Aboriginal occupation of the shelter would have been unlikely due to the vertical drop of about 10 m immediately in front of the opening. Further along he noted a smaller cave with a 5 m wide entrance containing “a sandstone ball about 0.5 m wide” hanging from the ceiling (Photo 1). This he attributed to spheroidal weathering following concentric spheroidal iron banding in the sandstone. He recorded that the cave had been “informally named” Crystal Ball Cave by the officers who first came across it (McIntosh 2012). He noted that the cliffs would require 10 m reserves out from their bases and back from their tops. (There is more to the name than just the shape of the feature. At the time there was some doubt as to the future of Forestry Tasmania and some wit suggested this ‘crystal ball’ might be able to reveal the future of the organisation if asked in the right way.)



Photo 1. The ‘Crystal Ball’, Crystal Ball Cave
[First photo of the feature: Peter McIntosh.]

Subsequently Adrian Slee of the FPA (and sometime STC member) nominated an area including the cliffs, the caves, tufa mounds deposited below the cliffs and “an impressive 4 m tall arch formed by two boulders” spanning the creek in the bottom of the valley for inclusion on the Tasmanian Geoconservation Database, maintained by the Dept. of Primary Industries, Parks, Water & Environment (DPIPWE). The TGD is “a source of information about earth science features, systems and processes of conservation significance in the State of Tasmania,” the principle aim of which “is to make information on sites of geoconservation significance available to land managers, in order to assist them manage these values.” (DPIPWE 2012)

VISIT 12 SEPTEMBER 2012

In September 2012 a visit to the site was arranged to enable officers of DPIPWE to make an initial assessment of it in relation to the TGD nomination. I was fortunate enough to be invited to join Rolan Eberhard and Michael Comfort of DPIPWE, Peter McIntosh of FDA and earth scientist Chris Sharples on this visit.

From the nearest forestry road we walked down into the valley and along the foot of the cliffs to Crystal Ball Cave (Photo 2).



Photo 2. The fern-fringed entrance to Crystal Ball Cave.

Although we had seen photographs of this unusual feature, it was quite extraordinary to see it and be able to walk around it. None of us had ever seen anything quite like this before and it is difficult to understand how the sandstone could be broken down and weathered away to leave an almost perfect sphere attached to the roof by a rock bar. There was, of course, much discussion of its likely genesis by the experts (Photos 3, 4). It seemed generally agreed that the ball probably comprised an iron-rich concretion which had resisted erosion better than its encasing sandstone. The closest I could recall seeing are some rounded weathering features on the wall of Ghost Cave (Photo 5), a sandstone cave in Pictograph State Park, near Billings, Montana, USA – but whether the modes of formation are similar I cannot be sure.

After looking at the ball from all angles and taking numerous photos of it and the small cave in which it has formed (Photo 6), we checked further along the cliffline but, finding no more overhangs, climbed up to the large cave referred to by McIntosh as “large cave with overhang 15 m across”. The most striking feature of this cave is the mass of yellow lichen which has grown to cover most of its back wall (Photo. 7) – so we called it Yellow Lichen Cave.



Photo 3. Chris Sharples, Peter McIntosh & Rolan Eberhard in Crystal Ball Cave, musing on mode of formation of the ball.



Photo 4. The spheroidal nature of the banding in the ball is best seen from directly below.



Photo 5. Residual sandstone rock balls, Ghost Cave, Pictograph Cave State Park, Montana, USA. (7 August 2011)



Photo 6. Looking out of Crystal Ball Cave from directly below the ball.

In Yellow Lichen Cave we also noticed the iron concretions protruding from the wall, but after seeing the Crystal Ball, they hardly seemed significant.



Photo 7. Approaching Yellow Lichen Cave; the distinctive colouring on the back wall is immediately obvious.

We then walked down to the bottom of the valley, picked up a four-wheel-drive track and followed it a few hundred metres up the valley before heading down to the creek where we soon came across the “Arve Valley Arch” reported by Slee (2011). This is indeed an impressive feature, the better for having the small creek flowing through it (Photos 8, 9). Slee notes that the stream has actually eroded notches in the sandstone walls at older, higher stream flow levels.



Photo 8. Arve Valley Arch looking upstream.



Photo 9. *Rolan in d/s entrance to Arch.*

From there we walked along the other side of the valley, following a broken line of sandstone cliffs and checking various overhangs (Photo 10) and small caves. One contained a small stream and another, masses of tufa – calcium carbonate deposited in the open air, some in the form of stalactites (Photo 11).

Back at the car, we all agreed the area was of considerable interest, should be protected and that its listing on the TGD would be justified. As there is some concern about vandalism, I believe the exact location of these features should not be publicly advertised.

VISIT 28 DECEMBER 2012

The “official” inspection hadn’t allowed time to survey any of the caves, so I was keen to return to do that. The opportunity came when Erik Halbert of Sydney Speleological Society paid a short visit to Hobart in December 2012.

We went straight to Crystal Ball Cave and, after Erik was suitably impressed (Photo 12), we carried out a quick survey (Fig. 1). We then climbed up to Yellow Lichen Cave and surveyed it, too (Fig. 2; Photo 13). We descended to the 4WD track and followed it up the valley. This time we noticed another large rockshelter/cave just south of the road (“Arve Cave 3”). Of course we had to survey it (Fig. 3; Photo 14).

Then we headed down to the creek and quickly located Arve Valley Arch. In carrying out the survey I went through the arch and noted a small cave on the east side, just south of the upstream opening of the Arch. I completed the survey (Fig. 4) and took a few more photos, this time including some from the upstream side (Photo 15). Although Slee (2011) describes the arch as 5 m long and 6 m tall, my survey showed more modest figures: the two boulders are only in contact for 2.1 m (the true

length of the arch) and the height of the arch (the lowest point at which the boulders touch) is 4.7 m.



Photo 10. *Some overhangs are quite impressive.*



Photo 11. *Tufa stalactite under small overhang.*

We then made our way along the other line of bluffs and, eventually, back to the car. Erik declared himself quite favourably impressed by this small sample of Tasmania’s sandstone caves.

Unattributed photos are by the author.



Photo 12. Erik examines “The Crystal Ball”.



Photo 13. In Yellow Lichen Cave.



Photo 14. Looking along “Arve Cave 3”.



Photo 15. Arve Valley Arch, looking downstream.

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NOTE ON AREA CODE. The area code appearing on the maps in this report, “TM”, is intended to be a temporary “Tasmania Miscellaneous” code which I have created for use until the whole question of non-limestone cave (entrance) numbering in Tasmania can be reviewed. The caves reported here have not been tagged –GJM.

Figure 1.

Plan of Crystal Ball Cave, Arve River catchment, Southern Tasmania.

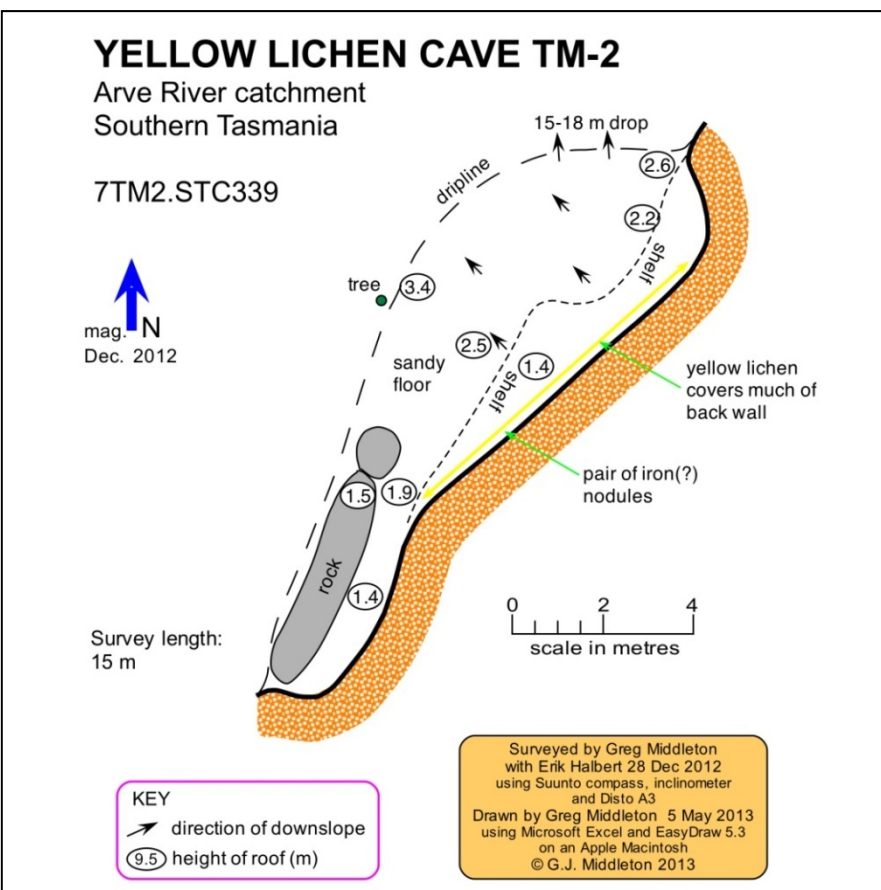
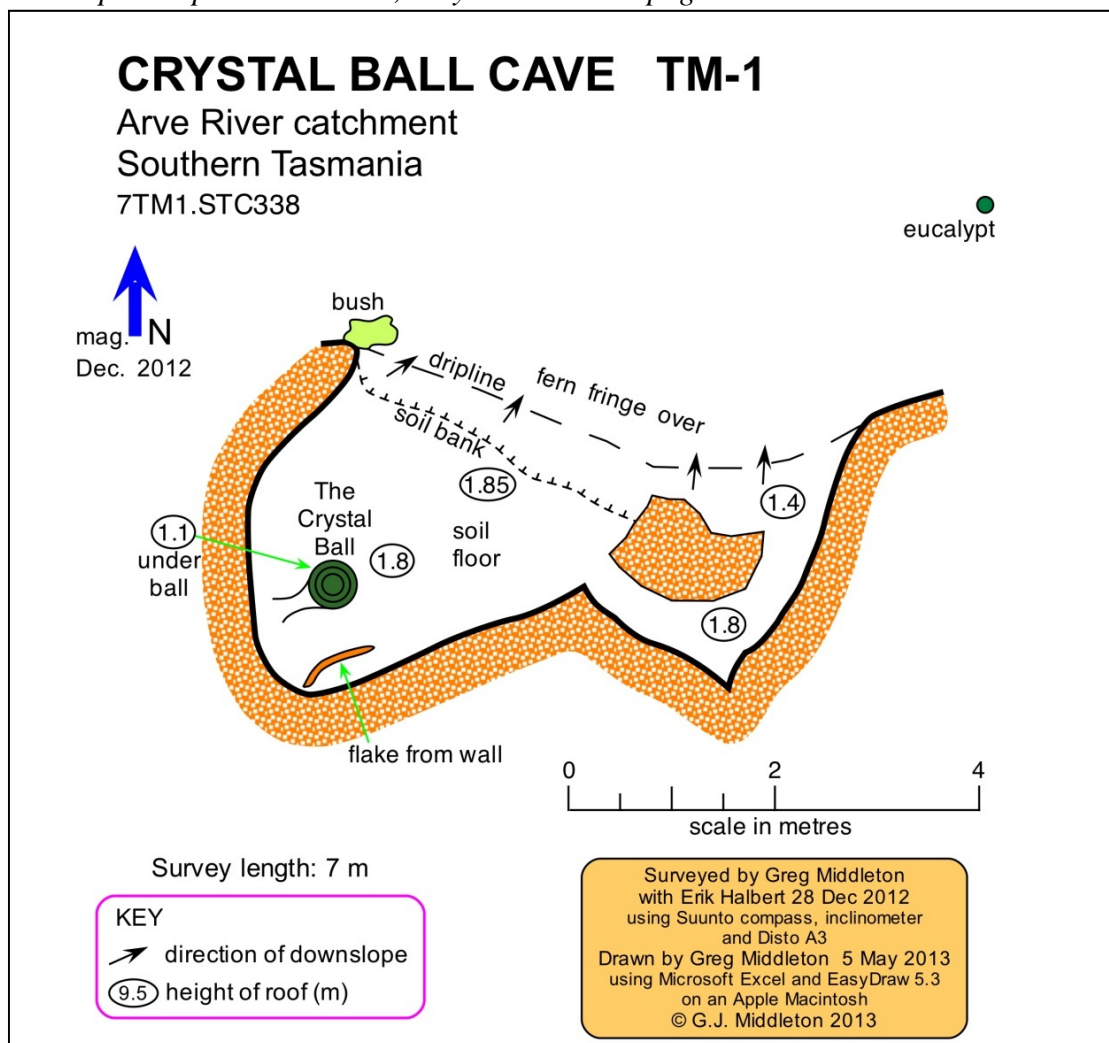


Figure 2.

Plan of Yellow Lichen Cave,
Arve River catchment
Southern Tasmania.

ARVE CAVE 3 TM-3

Arve River catchment
Southern Tasmania
7TM3.STC340

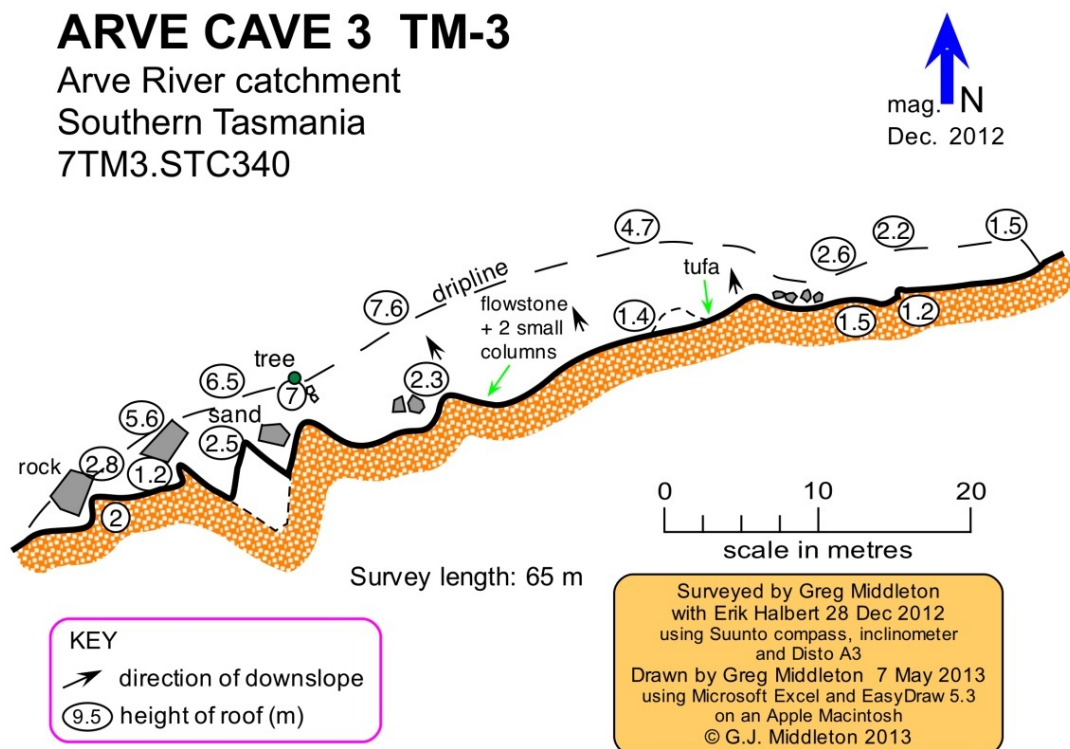


Figure 3.
Plan of Arve Cave 3,
Arve River catchment,
Southern Tasmania.

ARVE VALLEY ARCH TM-4 & CAVE

Arve River catchment
Southern Tasmania
7TM4.STC341

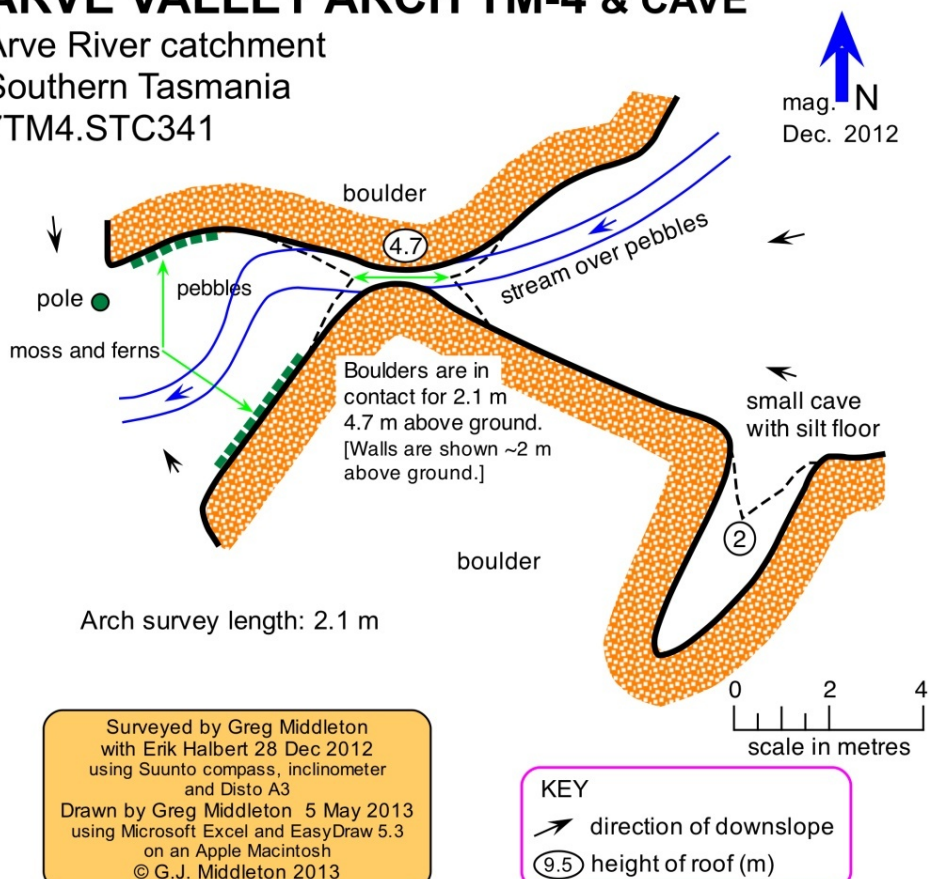


Figure 4.
Plan of Arve
Valley Arch,
Arve catchment,
Southern
Tasmania.

Magazine Article Review

“What lies beneath” New Zealand Geographic #120, March–April 2013 pp. 34–63.

Photographed by Neil Silverwood written by James Frankham *Veins of the Earth*, 12th March 2013

Stephen Bunton

This was a wonderfully-illustrated update of what is happening in New Zealand’s cave mecca, the marble mountains west of Nelson, at the top of the South Island. For me it was personally intriguing to get an update.

Allow me the indulgence of putting this into a personal perspective. [Why not? We let him indulge similarly in CA 182:30 – Ed.]

On my first trip to NZ, in January 1978, I was a part of a mini-expedition to Mt Owen’s eastern karstfield. This was a bit of a mop-up from an Australian mini-expedition the year before. Predictably we found very little and tied up the loose ends that were considered too unworthy by those who had gone before us. Unfortunately I couldn’t convince the trip’s organiser to follow some good advice that we should visit the south Owen karstfield. Had we done this, we would have walked into an unexplored Bulmer Cavern, which is now 755 m deep and 67 km long.

The spectacular karst, which featured as Dimrill Dale, in Peter Jackson’s *Lord of the Rings* was filmed on Mt Owen.

Just to the north is another spectacular marble mountain, Mt Arthur. My first trip there was in 1981 and Janine McKinnon was a member of our mini-expedition to the Ellis Basin. Access to this mountain was from Flora Saddle on the north of the mountain. An hour’s walk takes you to the Arthur Hut at the tree-line. Another hour or so gets you to a saddle between Mt Arthur and Winters Peak before an epic descent to the east leads to a hut at the tree-line in a fantastic cirque, the Ellis Basin. Again we were pushing other people’s “hot leads” but with little success. We did find our own new cave and I wrote this up in *Caves Australia* (Bunton 2010a).

Since then other new caves have been discovered in the Ellis Basin and eventually Tomo Thyme was connected to EK3010 to make it New Zealand’s deepest cave at 1,026 m (Bunton, 2010b).

On that same expedition, we Australians were a part of an NZSS expedition to Nettlebed Cave, which was about 500 m deep, or high. It was explored from the bottom up [from?] its lowest entrance near the Pearce Resurgence. We camped underground and mucked around climbing phreatic avens and not finding very much, although the route we pioneered has become part of the main traverse through the cave because it avoids a lot of the cold, wet streamway. The main way on, that year, was where the kiwis discovered Hammer Heights, with a little bit of “digging”. I wished I’d known then what I now know about drafts and could have seen a bit beyond the small puddle of light emitted from my trusty Premier carbide cap lamp. Hammer Heights was an extension of the main megapassage of Salvation Hall.

The following year I was involved in trying to find a top entrance to the Nettlebed Cave system. We “camped” in the “dogbox” (Mt Arthur Hut) and commuted almost two hours each way, each day, to drop shafts, on the eastern flanks of Mt Arthur, without success. One spectacular find, unusual for me but not unusual in NZ, was a shaft full of moa bones. It was interesting to descend into a pile of giant chicken drumsticks!

In 1986, Blizzard Pot was discovered and it was pushed to connect into Nettlebed Cave at a depth of about 420 m. This made the Nettlebed Cave 889 m deep and the world’s second deepest through-trip. The following year I was lucky enough to go on only the second through-trip.

After that NZ caving fell off my radar a bit. There were still lots of dolines beside the Mt Arthur summit track that I had walked past. Some of the biggest were in Horseshoe Basin, on the west of the mountain across the drainage divide. There was a high likelihood that one of these would one day drop into Nettlebed Cave and increase its depth.

This is where the New Zealand Geographic article comes in.

Over the last decade one kiwi caver more than any other has fanatically pushed these three major systems, with wonderful results. Kieran Mackay has been involved in the exploration of Bulmer Cavern, the Ellis Basin system and Nettlebed Cave. Modern deep caving in NZ is pretty much his story.

There is now a cave on the west side of Mt Arthur, Stormy Pot, that has been pushed to 700 m depth, 14 km length and to within “a stone’s throw” of Nettlebed Cave. The article tells this story in a style pretty typical of these magazine features. The photos are great even though they look a bit like they were taken on the run as “happy snaps”. They are extravagantly reproduced as double page spreads. The article is well written and gives a sense of the drama, hardship and a good profile of the cavers involved. The whole reason why we go caving is dealt with competently and without a lot of hairy-chested hyperbole that often spoils such a story.

The graphics are good – showing the relationship between the caves. Realistically the Nettlebed Cave system is not that far from the Ellis Basin system to which it is hydrologically linked. A connection between those two caves would make for a truly record-breaking system.

A colour photocopy of the article is in the STC club library.

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- BUNTON, S. 2010b. Going Deep in NZ. *Wild*, 117: 15.



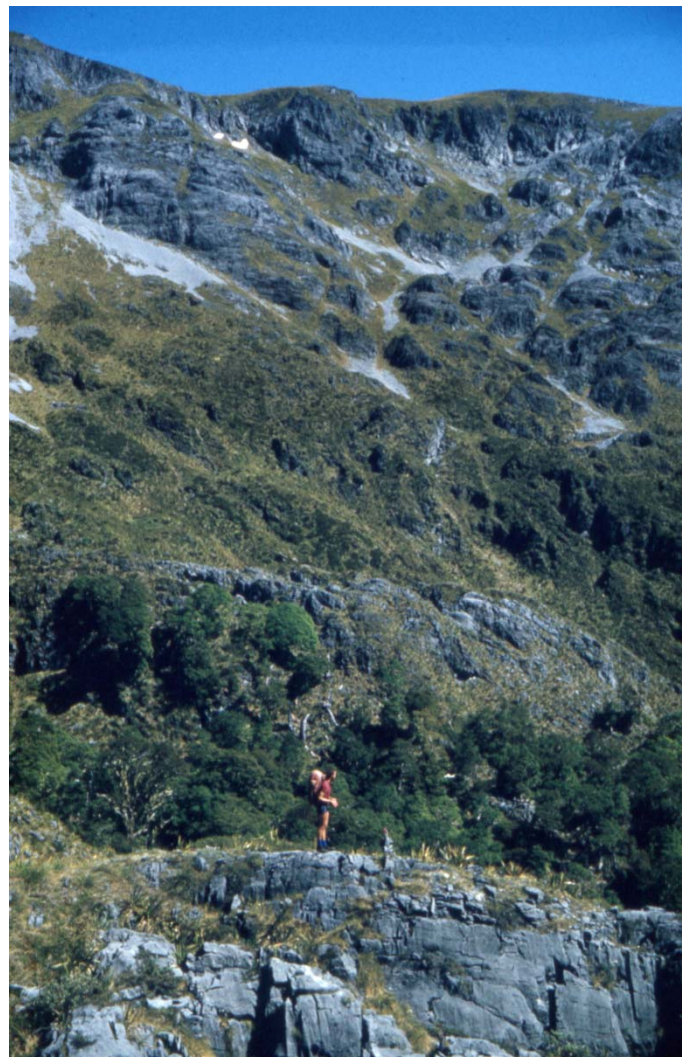
Stephen Bunton and John Minchin exploring the East Owen karstfield 1978. Note the treeline on the mountain opposite. This is what Australia would look like if there were no gumtrees. (Bunton Collection – possibly Dale MacKenzie)



John Minchin descending into a cave prospect East Owen karstfield. This is what Alpine caving in NZ is really like. (Photo: Stephen Bunton)



Janine McKinnon in the Ellis Basin. December 1980. (Photo: Stephen Bunton)



Karst on the eastern slopes of Mt Arthur December 1981. (Photo: Stephen Bunton)



Stephen Bunton in the entrance to Pineapple Pot. Note the similarity in the vegetation [to Tasmania] – Dracophyllum sp. (Bunton Collection – probably Alan Warild)



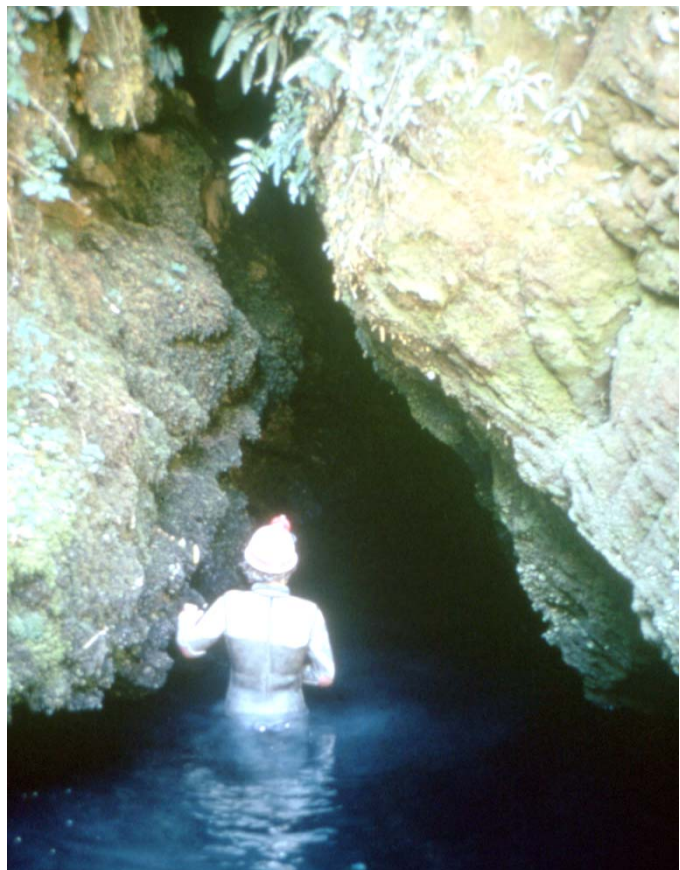
A balsa wood model of Nettlebed Cave, made by Fred Kahl, showing the extent of passage in 1980. The top point in the cave was Salvation Hall. (Photo: Stephen Bunton)



Stephen Bunton at the head of pitch 2 in Golondreamer. Note he used to be thin! (Bunton Collection – probably Alan Warild)



Stephen Bunton and Janine McKinnon at the entrance to Nettlebed Cave January 1981. (Bunton Collection)



The Pearce Resurgence. Despite the fact that it is hydrologically linked to Nettlebed Cave this connection has not been traversed. The resurgence has been dived to -221 m and it was the scene of a cave diving fatality, details of which are also described in the NZ Geographic article. (Photo: Dirk Stoffels)

Three Cave Surveys: Bradley Chesterman Cave, Loons Cave, Folly Cave

Rolan Eberhard

This issue of *Speleo Spiel* presents three cave surveys completed by Alan Jackson on behalf of Resource Management & Conservation Division, DPIPWE. The caves are located at Lune Sugarloaf, within the karst area anachronistically referred to as ‘Ida Bay’ (a feature on the coast several kilometres away). Earlier versions of the Bradley Chesterman Cave and Loons Cave maps were published in *Speleo Spiel* 387 (2011). Revised versions presented here incorporate a number of mostly minor changes, including the provision of additional information on survey methodology and acknowledgement of DPIPWE’s role in commissioning the surveys. An older less detailed map of Bradley Chesterman Cave, dating to a 1981 TCC survey, was published in *Speleo Spiel* 263 (1990). Folly Cave has never been previously published as a map, although both it and Loons Cave have been at least partially surveyed in the past. The new maps are based entirely on new survey data.

Each of the caves is a significant landform and habitat for cave biota. Two of the caves, Bradley Chesterman Cave and Loons Cave, are especially popular amongst groups which undertake caving amongst a spectrum of other outdoor activities e.g. schools, scouts, Wilderness Program. Logbooks installed at the respective cave entrances give an indication of current visitation patterns. In the case of Loons Cave, logbook entries imply entry by about 99 parties (854 individuals) between late 2005 and early 2012. In the case of Bradley Chesterman Cave, 131 parties (1112 individuals) registered over the same period. Only a small proportion (2-3%) of circa 20 trips visiting these caves annually are ASF club trips. The maps will assist in assessing the condition of the caves and managing them in accordance with the requirements of the *Tasmanian Wilderness World Heritage Area Management Plan*.

Folly Cave differs from the other caves in that it is rarely visited, being virtually unknown outside ASF circles and generally regarded as something of a grot hole by those who do. A logbook at the entrance contained no entries over the six years to 2011. It is not envisaged that publication of the cave map will encourage increased visitation. Indeed, it may have the opposite effect, as lack of a map can stimulate cavers’ interest by raising expectations concerning exploratory

potential. This factor may have contributed to various unfruitful attempts to ‘push’ the demoralising wet flattener at the upstream end of the known cave. More casual visitors are likely to turn back within sight of daylight, due to the aqueous constriction just inside the entrance and the low crawls and squeezes beyond (these evidently convinced an early TCC party that the cave ‘didn’t go’). Thus, Folly Cave enjoys a degree of natural protection from all but the most dedicated cavers. If evidence emerges that Folly Cave is being degraded by cave-based activities, then it can be readily secured by gating and access restrictions imposed. Such a response is not under consideration at present.

Folly Cave is also known by the name Arthurs Folly and other variations on this. The name is shortened here to Folly Cave for consistency with the ASF Guidelines for Cave Names and Naming Features, which state:

Caves should not be named after living persons unless in very exceptional circumstances. On no account should a cave be named after a caver or speleologist during his or her lifetime.

It has been pointed out to me that there are other caves and cave features named after living people (tactfully, my own contribution of Warrens Warren in the Florentine Valley was not mentioned!). Quite a few of these are minor features, whereas IB110 is a substantial cave that arguably warrants a more considered approach. While it has also been suggested that changing names causes confusion, I am unconvinced that this will be a problem in the present case as there is clear continuity with the earlier name and the critical identifier, the ASF cave number (IB110), remains unchanged. In any event, I expect most cavers will continue to use whatever name they prefer or have used in the past. I am comfortable with this possibility, which has no bearing on the cave as a natural entity and object of conservation endeavour.

Although produced for management and research purposes in the first instance, publishing the completed maps recognises the long standing interest of cavers in these sites and their contribution in exploring and documenting them. As basic tools for exploratory endeavour, scientific research, management planning and a range of potential other applications, I regard cave maps as a priority complementary to that of ensuring that sensitive sites are identified and protected from damage.

*** Some notes on the latest IB-110 survey data (in the interests of assisting the next poor prick who decides to get the survey instruments out in this cave, assuming it isn’t me).*

The first trip was described in SS390:8-9. Rolan and I returned 30-01-2013 to survey out to the entrance tag. On the way we discovered a cairn which appeared to have featured in the original 1986 survey (some of this data is available in the archive) – I’ve referred to this as “6/11/86” in my 2012-13 survey notes and on the final survey, but it’s called “OLD2” in the OnStation cdi file. When I got home the new survey data matched the old data from the entrance to the “6/11/86” vicinity but it then went totally wild. There was also a clear error in the compass bearing for our new side leg tying “6/11/86” into our survey. Concerned we might have had a dud compass, Serena and I returned (29-03-2013) to resurvey the entrance section again with my DistoX. With the exception of the dud side leg to “6/11/86”, which I now assume was caused by Rolan reading the wrong number or me mis-hearing/transcribing it, the March data matched the January data very closely (though we took an alternative route under Root Chamber, rather through it). So, we’ve concluded that the error must be in the 1986 data in this section of the cave. The back end remains to be surveyed (and should be left until levitating trogsuits are invented).

Alan Jackson

IB-2 / IB-3 Loons Cave

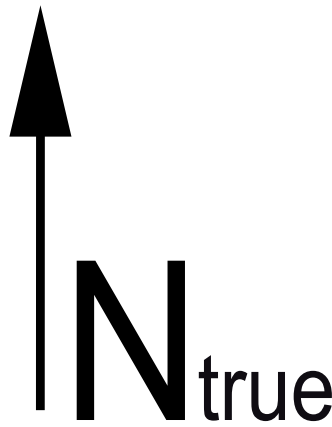
Marble Hill karst area (Ida Bay)

Tasmania

Map prepared by Alan Jackson (Southern Tasmanian Caverneers) for the Resources Management & Conservation Division, Department of Primary Industries, Parks, Water & Environment, Tasmania. Not to be copied or distributed without permission from DPIPW.

Surveyed by Rolan Eberhard, Alan Jackson, Luke Vanzino
(11-04-2011 & 27-07-2011)
Drawn by Alan Jackson (2011)
Surveyed Depth - 30 m
Surveyed Length - 1078 m

- Notes on survey methods:
- (1) Passage alignment based on survey traverse of all passages shown.
 - (2) Survey instruments:
 - Suunto manual compass & handheld laser rangefinder (Leica 'disto')
 - with digital clinometer; estimated precision of readings ± 0.05 m, $\pm 0.5^\circ$ (comp) $\pm 0.1^\circ$ (clino).
 - (3) Passage dimensions estimated and/or measured during survey traverses.
 - (4) Passage detail sketched approximately to scale during survey traverses.
 - (5) Survey standard approximately equivalent to ASF Grade S4 or better.

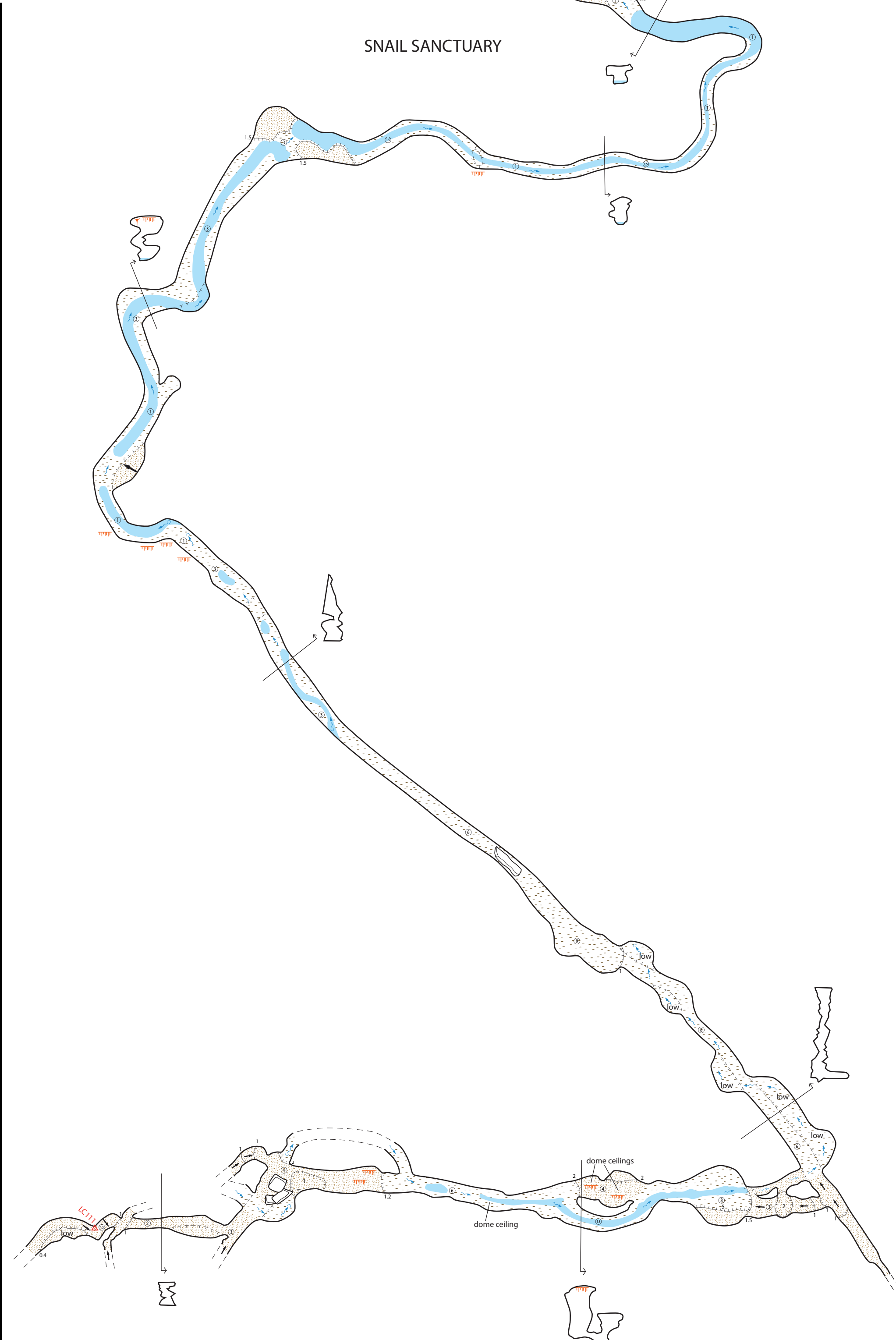
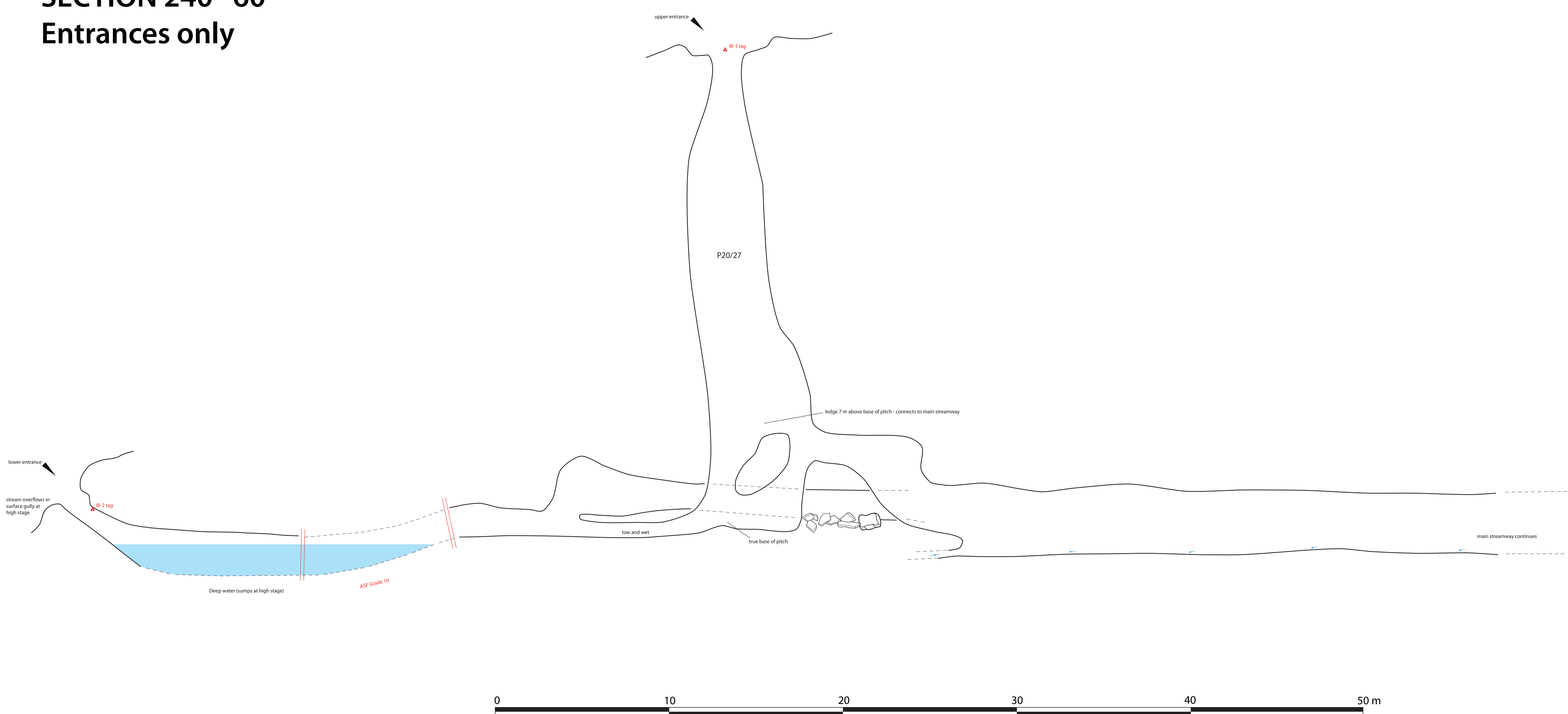


LEGEND	
	boulders/rocks
	calcification/flowstone
	ceiling height (metres)
	ceiling ledge
	column (plan)
	cross section (with view direction)
	drop off/ledge - minor (with height in metres)
	drop off/ledge - major (with height in metres)
	entrance
	fault
	passage wall underlying or continues too tight
	sand/silt
	slope direction arrow
	stalactite (section)
	stalagmite (plan)
	stalagmite (section)
	stream
	survey grade change
	survey station - permanent (tag)
	survey station - relocatable (chain or survey tape)
	water - pools and high flow areas
	water - surge
	water - small flow
	water - stream/sink
	water - stream outlet/sink
	water - theorised or underlying

PLAN

SECTION 240°-60°

Entrances only



IB-4 / IB-5 / IB-6

Bradley Chesterman Cave

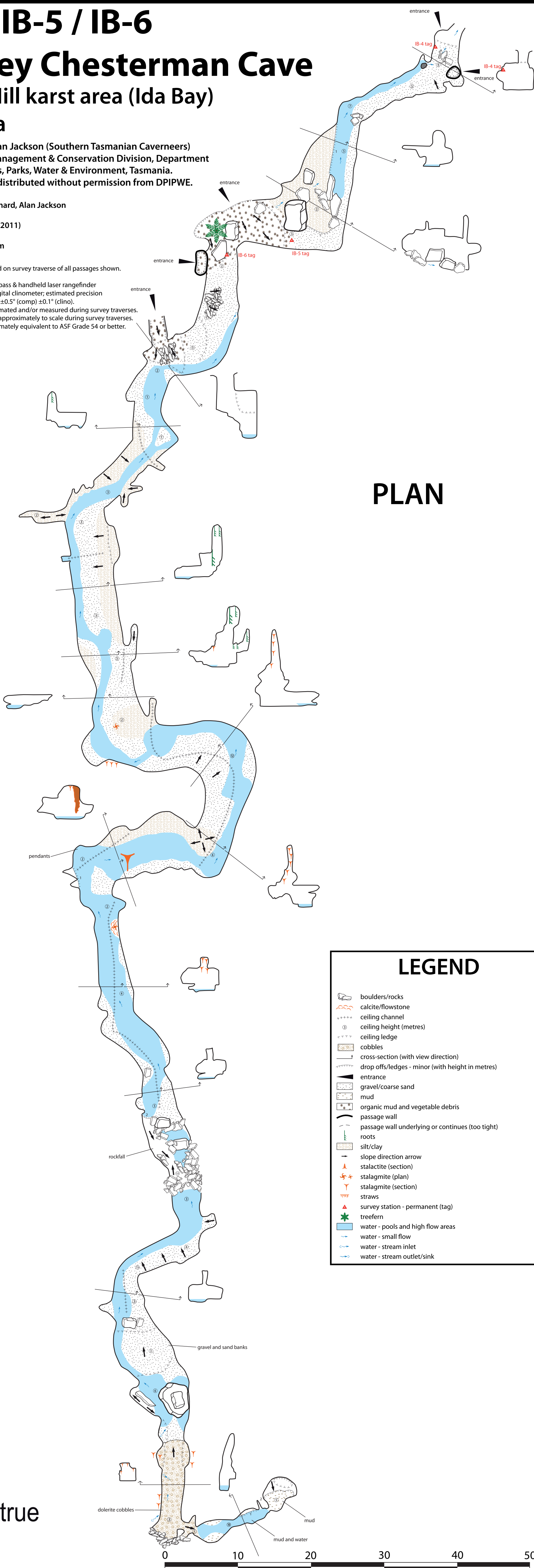
Marble Hill karst area (Ida Bay)

Tasmania

Map prepared by Alan Jackson (Southern Tasmanian Caverneers)
for the Resources Management & Conservation Division, Department
of Primary Industries, Parks, Water & Environment, Tasmania.
Not to be copied or distributed without permission from DPIPW.

Surveyed by Rolan Eberhard, Alan Jackson
(1-11-2011)
Drawn by Alan Jackson (2011)
Surveyed Depth - 15 m
Surveyed Length - 322 m

- Notes on survey methods:
- (1) Passage alignment based on survey traverse of all passages shown.
 - (2) Survey instruments:
 - Suunto manual compass & handheld laser rangefinder (Leica 'disto') with digital clinometer; estimated precision of readings ± 0.05 m, $\pm 0.5^\circ$ (comp) $\pm 0.1^\circ$ (clino).
 - (3) Passage dimensions estimated and/or measured during survey traverses.
 - (4) Passage detail sketched approximately to scale during survey traverses.
 - (5) Survey standard approximately equivalent to ASF Grade 54 or better.



PLAN

LEGEND

- boulders/rocks
- calcite/flowstone
- ceiling channel
- ceiling height (metres)
- ceiling ledge
- cobbles
- cross-section (with view direction)
- drop offs/ledges - minor (with height in metres)
- entrance
- gravel/coarse sand
- mud
- organic mud and vegetable debris
- passage wall
- passage wall underlying or continues (too tight)
- roots
- silt/clay
- slope direction arrow
- stalactite (section)
- stalagmite (plan)
- stalagmite (section)
- straws
- survey station - permanent (tag)
- treefern
- water - pools and high flow areas
- water - small flow
- water - stream inlet
- water - stream outlet/sink

IB-110 Folly Cave

Marble Hill karst area (Ida Bay)

Tasmania

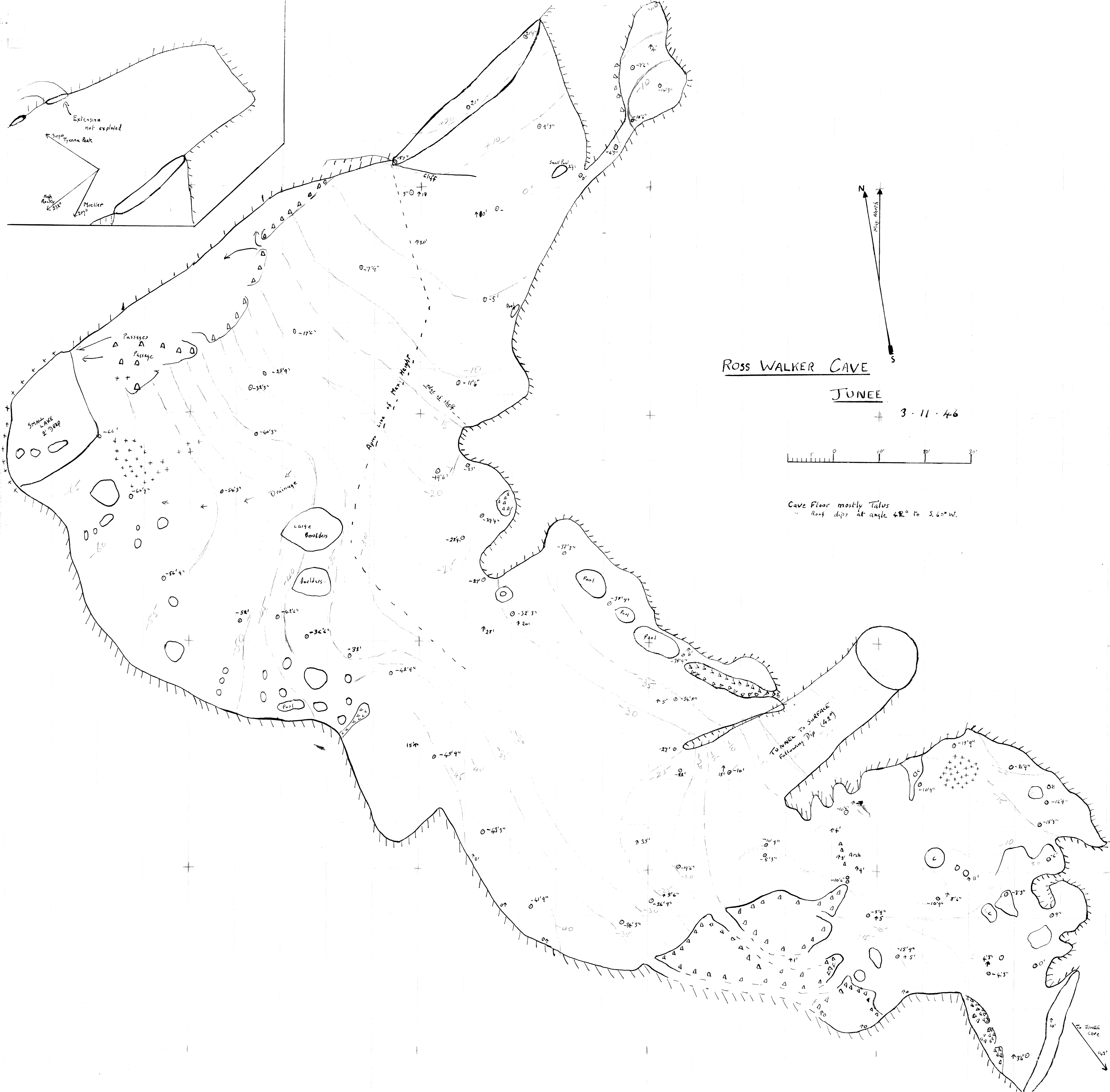
PLAN

Map prepared by Alan Jackson (Southern Tasmanian Caverneers) for the Resources Management & Conservation Division, Department of Primary Industries, Parks, Water & Environment, Tasmania. Not to be copied or distributed without permission from DPIPWE.

Surveyed by Serena Benjamin, Rolan Eberhard, Alan Jackson
(9-05-2012, 30-01-2013 & 29-03-2013)
Drawn by Alan Jackson (2013)
Surveyed Length - 762 m

- Notes on survey methods:
- (1) Passage alignment based on survey traverse of all passages shown.
 - (2) Survey instruments:
Entrance to Root Chamber: handheld laser rangefinder ('DistoX') with integral compass and clinometer; estimated precision of readings ± 0.05 m & $\pm 0.1^\circ$
Root Chamber upstream: Suunto manual compass & handheld laser rangefinder (Leica 'disto') with digital clinometer; estimated precision of readings ± 0.05 m, $\pm 0.5^\circ$ (comp) $\pm 0.1^\circ$ (clino).
Passage dimensions estimated and/or measured during survey traverses.
 - (3) Passage detail sketched approximately to scale during survey traverses.
 - (4) Passage detail sketched approximately to scale during survey traverses.
 - (5) Survey standard approximately equivalent to ASF Grade 54 or better.





ROSS WALKER CAVE

JUNE 11

3-11-46



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