

parts of the caves but these are probably not from real cavers who would have documented such stuff. The caver's records seem to suggest that Frodshams Cave is "lost" (Eberhard 1996). The main issue in determining the identity of this cave is finding out the location of Frodshams Track. I contacted Tasmanian historian Nic Haygarth who suggested that I consult the original records in the Mineral Resources Tasmania library.

The main thrust of this further research would be to determine if Frodshams (original) Track was upgraded and renamed the Adamsfield Track when the mining started there later, in 1925. Thomas Frodsham, in his two efforts to find an overland route to Macquarie Harbour (1878 and 1890), did cross the Florentine before heading south, failing on his 1878 mission and eventually in 1890 exiting via the Weld. Frodshams Pass on the Strathgordon Rd is named in his honour. This tends to indicate that the cave we found was in the correct location despite the fact that it doesn't quite match the description.

In the meantime this low phreatic cave, with its roof-pendants extending into the floor sediment, could almost be considered a single chamber as it only has a few side passages. I named it JF644 Protestor Cave.

It was a pleasant 55-minute stroll back to the cars from this point.

I was pretty excited about the day's proceedings but the most significant part of the day for the online primary school lesson was that Stephen Bunton wears stripy thermals. I'm glad that this was the only deviant behaviour Andrew witnessed for the day because the sky's the limit for what could be published on the Internet!

References

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GOEDE, A. 1983. Cave Numbering - June Florentine. *Speleo Spiel*, 189:2.

JONES, R., COSGROVE, R., ALLEN, J., CANE, S., and KIERNAN, K. 1988. An archaeological reconnaissance of karst caves within the Southern Forests region of Tasmania, September 1987. *Australian Archaeology*, 26:1–23.

Settlement Area

Bones, Bubbles & Brevity

15 September 2014

Alan Jackson

Team Bones: Rolan Eberhard, Amy Koch (FPA) & Peter Macintosh (FPA).

Team Bubbles: Janine McKinnon & Ric Tunney.

Team Brevity: Alan Jackson & John Webb.

Team Bubbles arrived first to start their assault on the dive in JF631. Then John and I arrived to check inspect the last couple of possibly enterable caves in the area for forest harvesting planning purposes. The bone boffins arrived later again to collect samples from JF643.

John and I exchanged pleasantries with the bubblers then wandered into the pines to John's "features 216 and 217". The former is just a three metre deep narrow slot blocked at the bottom but the latter, a few metres north, is a more significant feature – a pit about 2 m deep, 4 m long and 1.5 m wide. At the lowest point was a narrow slot with a drop below it which John had apparently heard water plopping noises using his preferred pine cone sonic estimation technique. We were armed with a post-hole shovel so we removed a rotten man-fern and soil that was filling the hole in order to get through but a large block of limestone was hiding under the dirt and prevented access. I decided this hole might warrant a return one day with rock-persuading tools so we tagged it, JF645, on the western wall of the pit about 40 cm down from the surface.

Next was "feature 182". We overshot it, finding ourselves at "feature 155" (which almost looked like it was worth climbing down into (~3 m deep pit), turned back to another patch of flagging tape (there's lots of it about) but John convinced himself he must be lost so we about-faced again and charged off into nowhere until John unconvinced himself he had been lost (but admitted he now was) and we headed back to the previous patch of tape ... and there was the hole! All good exercise. It was a nice little horizontal entrance but a large rock blocked it and I couldn't quite get my hips through. Deciding it looked like it was worth the effort, John wandered the short distance back to the car to fetch my very big hammer while I tagged it JF646 on the right (northern) face at the entrance. A couple of good whacks with the hammer and top of the rock yielded. I scrambled in to find less than 10 m of

passage and some low and tight ways on. Done.

Back at the car we noticed the boners had arrived. They had a massive array of digging implements, the like of which I'd never seen before. They'd transformed the previously tight entrance into a gaping maw, but still weren't happy with two rocks in the tightest bit. I helped them pull out the smaller one and send the lower (larger) one down into the cave. They then eagerly set to investigating the deposit.

Concerned I might learn something I ran away to see if Ric and Janine needed help. They were in the process of abandoning their first attempt, so I helped them with their second. Janine's record of the trip below covers most of the details. All I'd add is that during her dive her bubbles moved from the northern side of the pool (where she initially submerged) to coming up against the eastern side of the pool, then they started coming up into the small (0.7 metre diameter) side pool off the south of the main pool before ceasing to come up at all. So she went far enough to have her bubbles collecting into some other place, and probably in a southerly direction. After watching Janine get tangled in pine roots for half an hour I've christened the cave Tangled.

After derigging JF631 we chatted with the bone team, who'd just finished also. They'd found plenty of jaws, some with interesting dentition, and were keen to get on their way. We left also, going via the JF619 Twenty Pinecones area to inspect a tight entrance John thought might be worth looking at with a crowbar in hand. While the cave beyond the tight entrance was certainly interesting the crowbar wasn't going to help. Probably the best thing to do is tell Rolan there are bones in there and he'll have it open for us in no time.

Dive report JF631

Janine McKinnon

We rigged a ladder down the entrance squeeze, and another from a tape around a natural on the wall at the top of the drop to the water. Ric then put a bolt in the wall at the top of the pitch, to use with a pulley to get dive gear up and down the pitch.

I headed in wearing my wetsuit and Ric passed the three packs to me, which I hung from the ladder. I moved to the bottom and found a very precarious spot to get off out of the water. It was a steeply sloping mud bank above the pool of water. Ric passed one pack down but I realised I was never going to be able to assemble, and don, my dive gear balanced so poorly. So

up it went again, all gear out of the cave, plus me, to rethink.

I decided to go with minimal gear, assemble the regulators on the tanks before lowering them, and probably kit up in the water. Luckily Alan had arrived at this stage, having finished working with John nearby, and he was coming down with me. That was going to make things easier.

I went in again, we lowered packs with Ric outside, Alan at the pulley, and me at the bottom. I hung the packs off the ladder above the water, moved to the other side of the pond and up another mud bank, and Alan passed the packs across to me. I had a flat spot at the top of the mud bank to gear up here, which was much more convenient.

Alan helped me rig up and then I slid into the pond fully kitted. The 3 l tanks I was using made life a lot easier.

My exploratory line I had tied off up on the bank and I couldn't find a secure secondary tie-off so I used the ladder as a temporary measure. The pool was now totally silted out, not the crystal clear water that had looked so inviting at the start. It was going to be diving in zero visibility. Again.

I headed under, feeling my way, and couldn't move forward. Roots had tangled my fins. Up, sorted, try again. Then the ladder was in the way (there wasn't a lot of room down there). Up, pass the end of the ladder to Alan, try again. A couple of more false starts and I finally got away.

The floor was soft mud and silt and the passage dropped steeply and swung to the right (I think). It stayed about 1.5 m wide and was about 1 m high. I followed it some distance and thought I was on a winner here, but suddenly it started narrowing down. It closed down to a small depression only big enough to fit my foot into. I felt around for an alternative route but couldn't feel one. All this is being done in zero visibility so I can't be 100% certain that I have covered all options. As the pool is static, and the water a bit warmer than usual (9°C), I am happy that I have determined that there is not a divable passage there. The water is percolating through smaller fissures and conduits.

I tried to tie-off the line but there was nothing solid down there, so I turned around (with difficulty) and reeled back to the pool.

Dive time: 10 minutes. Max depth: 5 m. Distance penetrated: 35 m roughly (counting knots in line).

Kit: 7 mm semi-dry suit. Razor harness with UTD 9 kg wing. 3 l tanks. Short hoses on XTX 50 Apeks second stage regulators. Apeks cold water first stages. Mares light-weight fins. Light Monkey reel. Ric's helmet with his Rude Nora light.

Alan videoed the whole thing on my Lumix, including sitting in the dark with me out of sight. So total blackness. Listening to his comments and self-amusement was certainly amusing for me to view afterwards.

JF4 Khazad-Dûm

Beginners and Bolts

20 September 2014

Alan Jackson

Cavers: Milos Dvorak, Alan Jackson, Janine McKinnon, Michael Packer, Chris Sharples, Ric Tunney & John Webb.

A beginner trip with rigging lessons was requested by Rob Krachler, so I organised a trip I could achieve that as well as get some other jobs done. Interest was high (up to ten people at one point) but the usual strategic retreats were made, including a dose of man flu for Rob.

We toyed doing a main/serpentine exchange to spread the group out a bit but eventually went for a slow and steady 'all together' approach with a staged exit strategy to avoid traffic jams.

Pax and Janine went first, with Pax rigging. Chris, John and Milos tagged along behind them in tourist mode. Ric and I did bolting and testing duties. I could find no record that Jeff Butt ever actually load tested the old Loxin eyebolts from the late 1960s so I set Ric the task of applying the new 7.5 kN test to any Loxins in the cave that we still rig from. The Scaling Pole pitch bolt passed, which was reassuring, but since it is a single bolt and placed for ladders, not SRT, I placed two new glue-in eyebolts up high and further out over the pitch for future use. A free hang wasn't achievable but it's very close and with 11 mm rope and a half-smart caver then any rub will be avoidable or at the worst tolerable.

Ric then tested the Loxin at the next short pitch (~4 m) – it passed. Jeff only installed one p-hanger up high on this pitch, arguing it was complimented by the Loxin. But the Loxin is low and off to the side (again, for ladders) and just makes the rig stupid. I placed a new glue-in above the existing p-hanger.

Ric and Janine wanted to place a permanent bolted traverse line at the next pitch/climb/obstacle but I stuck to my guns from ten years ago when it was first considered. Instead, I'd brought a rope to rig this one

as a pitch to prove that if you're too crap to do the traverse then you can rig it satisfactorily as a pitch instead – just bring 10.5 mm rope as it has some minor rubs.

At the 21 m pitch Ric tested the Loxin (it passed) and I installed two new glue-ins a couple of metres above the old Loxin on the left wall (facing into the cave). These will provide an approach line to the two p-hangers several metres out over the rift which might actually save you from serious injury if you slip, rather than condemn you to death or worse as per the existing arrangement. Note – the Loxin on the ~9 m pitch between the Dry 90 and the 21 m pitches was not tested.

At the first streamway pitch Ric and John turned back. The rest of us continued on, Janine first testing the new approach bolt (placed in December 2013) – it passed.

The second streamway pitch needed some work. Jeff's 'mini-bolt-traverse' arrangement here has proven very user-unfriendly. Pax rigged it the old fashioned way (up onto the platform then down the other side (using the last of Jeff's p-hangers for a rebelay). Pax, Milos and Chris then headed on to continue rigging to the fourth streamway pitch, with instructions for Chris and Milos to turn back from there and start out. Once Janine turned up we discussed my thoughts on how to make this rig better. The options were numerous and, once the old Loxin passed the load test (only the one for the main drop), I got stuck deciding if they should be ignored totally or remain in use (same dilemma with the p-hangers below too). The easy decision was to place a new bolt higher on the wall for the initial 'up' manoeuvre and ultimately we will leave a short piece of old 11 mm rope on this bolt so the climb up is protected for the first caver. The hard bit was down the other side. From the Loxin the rope runs over a couple of nasty edges to the rebelay and I wanted to eliminate these. There is a large projection of rock from the left wall which overlaps the hang from the Loxin and I was hopeful I could place a bolt or two into that in a high spot to start a new main hang, but the rock proved to have a layer of loose crap in all the good spots. In the