
CAVE DIVING IN MCCAIVITY AT WELLINGTON CAVES

BY DEBORAH JOHNSTON

April 20-21, 2013

Participants: Deborah Johnston, Greg Ryan and Rod Obrien

“With a bit of luck, we should be there before 11 tonight”.

Wait, what? That was 5.5hours away! Rod Obrien and I had hit the road bound for Wellington Caves nice and early, but with that sentence I immediately realized that I had totally forgotten how far away Wellington was from Sydney having only visited once before years earlier to help Keir Vaughan-Taylor and Ian Cooper with their excellent Anticline Cave project.

The trip was uneventful, although I raised an eyebrow at Rod’s choice for dinner in the dingiest looking pub in Bathurst. This turned out to be a fantastic choice as the nights entertainment (for a crowd of about 8) was a scruffy teen with an acoustic guitar and a simply amazing singing voice. Most entertainingly, he sung notoriously crude hiphop lyrics, but in a soulful romantic style. I think I was the only person who noticed the lyrics though as the little old laddies and gentlemen tucked into their \$10 schnitzels without a sideways glance. We were later told by a few proud locals that he was on a singing talent show, ‘the voice’, where he was being coached by famous singer Seal. Leaving Bathurst, we plodded on for our destination located between Orange and Dubbo, arriving right on cue at 11pm to check into our surprisingly spacious cabin in the onsite caravan park.



Greg runs a safety guideline. Photo by Rod Obrien

Wellington Caves is internationally recognised for its mammal fossils. The first Australian marsupial fossils were discovered at Wellington in 1830, four years after the first recorded visit to Cathedral Cave (then referred to as Mosman’s Cave). Bones originally collected from Breccia Cave were first thought to be from elephants, but then recognised as the extinct relatives of modern day marsupials. The specimens gathered onsite guided scientific research in the field across the world throughout the 19th Century, including most likely Charles Darwin’s 1859 ‘Origin of the Species’. Visitors are reminded of this history today with a giant Diprotodon sculpture greeting them at the entrance that seems to beg being climbed upon which is unfairly not allowed.

SUSS has dominated exploration and discovery at Wellington Caves with the SUSS cave divers getting together in the late 1980s and visiting Limekiln Cave (then referred to as Peppercorn Cave) which had been discovered in 1858 but not fully explored. The divers quickly discovered the hundreds of meters of submerged passage which made it the largest cave in the area. During this time, SUSS cavers also learned of a ‘Water Cave’ listed in an old council survey map which had since been covered over. SUSS was able to convince the powers-that-be to let them use a backhoe to dig up the center of the caravan park in 1988, unearthing the anticlinal roof of the cave which was dug out and stabilized by dedicated SUSS cavers over the next couple of decades. Anticline cave is now a tourist attraction for the park with public access via a fence, and future plans to build a pathway for visitors to reach a platform inside the cave overlooking the lake beneath.

Early on Saturday morning we were joined by Greg Ryan and all underwent the tradition gear pffing, also known as the ‘what did I leave at home this time?’ game. I had left Rod’s favourite regulator behind which earned me maximum shit-list points in the game! I had also most embarrassingly left my shoes and overalls in Sydney. I briefly considered wearing my dive booties but they seem to disintegrate a bit more beyond my eyes on cue, leading me to grab some Target fashion gumboots and a \$7 jumper in town after our leisurely cafe breakfast.

Greg then dropped in on the friendly Wellington staff who grabbed a stack of keys from the casual guide not working that day, and handed them over so we could park near the entrance to the old Phosphate Mine only a very short distance from the Limekiln entrance. This prime parking had the added benefit of being able to change into our wetsuits and dive booties on a tourist path, thus avoiding most of the evil burrs that cover nearly every inch of the campground.

Rod and Greg had mentioned a couple of times that we would have all our gear, a total of around 11 full packs, down to the water in 10 minutes of so. I was skeptical, but then quickly realised that Greg



SUSS - in it for the fashion. Photo by Deborah Johnston

definitely knew what he was doing when it came to this cave! The guys grabbed two aluminum work ladders, both the perfect heights, and some truck ratchet straps, and about 10 minutes later we had moved the gear and ourselves down to the water as promised.



**Greg and Rod inspect skeletons.
Photo by Deborah Johnston**

Our entrance into Limekiln cave was via a short vertical drop, a deceptively slippery slope, then another short drop to a medium sized chamber where we got our gear organised. This was made luxurious by the large ground sheet Greg had brought to keep ourselves and the gear mostly clean. After getting into our wetsuits and drysuits fully, we then chained the tanks down a short crawl and awkward drop to a cosy chamber (fitting a maximum of two people) which revealed the dramatically small entrance to the water dubbed ‘the birth canal’. This is the typical entrance to the underwater sections of the cave, although there are at least two other chambers that can be reached by both divers and dry cavers. The submerged section of Limekiln cave was called McCavity to help distinguish it from the dry upper sections. Greg

informed us that the name ‘McCavity, the Mystery Cave’ was given by Simon McCartney who had been inspired by T.S. Elliot’s character ‘Macavity the Mystery Cat’ (popularized in the musical ‘Cats’).

Because of the lack of airflow through this section of cave, and the vegetation that washes in, the lower sections were noticeably stale with elevated CO₂. Being the club canary with my lack of tolerance to CO₂, I quickly felt very hot and clammy which my heart and respiration rate increased noticeably. I wanted to get in the water and breath from my tanks as fast as possible, but being flustered only slowed things down as usual. Rod Obrien has an air consumption rate that seems impossibly low (indeed some suggest he only breaths from his tanks when people are looking!) so he was sent in the cave first to wait while we each spent around 10 or so minutes entering one at a time. He clipped on one tank and went to slip through the restriction, appearing far too large to ever actually fit. As a commercial diver by trade, and our country’s top cave diver to boot, Rod has made a habit of proving the seemingly impossible as possible, and with a few strategic wiggles he was through. We passed down his freaking lazer beam (or was it a dive torch?) and his other tank and he disappeared down into the submerged section of cave to wait.

I was next, and got ready to go with my fins down the hole then swiveled to reach for the last item required, my trusty dive mask. I found the mask immediately, unfortunately I found it with my palm promptly shattering the tempered glass into about 100 pieces like some sort of evil kungfu master. Wait, is that even a thing? Who does that! Yes, it is a thing, and I did it.



**Dive Mask remnants.
Photo by Deborah Johnston**

Mindful that Rod was under the water depleting his air supply, Greg and I hurriedly collected the bits of glass with our surprised expressions remaining constant. As Rod and I later reflected, we had all but guaranteed that one of us would lose or smash a mask according to ‘Murphy’s law’ because on this trip - for whatever reason - each of us did not take a spare mask for the first time that either of us could remember. Luckily Greg does not tempt fate with foolish shortcuts and promptly produced the spare mask that he had brought right into the cave. After some quick adjustments to Greg’s non-stretchable neoprene mask strap and I had it on my face and wiggled down the hole. Although smaller in size than Rod, I made fitting down the restriction with a tank take 10 times longer and look 100 times harder than he had.

During our visit the water began around 15cms below the bottom of the restriction which is considered a very low level for the cave. At times the whole squeeze section is totally submerged and most groups carrying in an extra air tank with a long hookah hose that divers can breath from before being passed their own tanks to clip onto their harnesses. Because of this I found it very comforting to know that I could negotiate the squeeze into the water with one tank clipped on, however I recognised that climbing back up the squeeze with a tank on would be absolutely impossible for anyone.

Once in the welcoming 19 degree water, I struggled to seal the mask unsuccessfully with the top half completely fogged, and the bottom half persistently flooding with water. I realised that if I was going to call the dive, I’d need to do it in the next few minutes before Greg entered the water. I persisted with the loose mask a minute longer then popped my head back up the hole just in time to block Greg’s feet from coming down! I later reflected on how much pressure I had felt to ‘soldier on’ despite the mischievous mask, however it is important to note that this pressure was entirely internal as all the SUSS divers maintains as a ‘golden rule’ that anyone can call a dive, at any time, for any reason. As the wise divers will always say, you never get just one thing that goes wrong and that one thing invariably leads to another, and another. I had learned this lesson the hard way once before as an even more novice diver and always try to remember how seemingly little problems can launch you headfirst into trouble when ignored.

With this on my mind, Greg pulled my tanks back up for me and then hopped in the water while I went for a cup of tea and a bit of a sulk. Because I had missed that dive, I was pretty sure it was the best dive anyone has ever done, ever! During my interval, some kids spotted my helmet and gumboots and asked me if we were looking for dinosaurs in the caves. I told them “well kids, I won’t tell you that we are NOT looking for dinosaurs!!” which was badly received by their parents who probably had to become dinosaur experts answering questions for the rest of the weekend.

As the guys finished up their hour long dive, Rod retrieved a weightbelt from immediately below this section which contained more than twice the weights you would expect for this dive tucked away in it’s pockets. He was delighted because he had just broken the zip on his pouch-weightbelt and this would be a perfect replacement. Unfortunately though, Greg knew the group that had dropped the belt back down into the water after having packed up everything else for the day, so we took it out to return to them (hint hint: Rod drinks Tooheys Old!).

After some more cups of tea and a tank refill for the guys, Rod and I head back into the cave for my attempt two that afternoon, with Greg helping us move the gear and putting his tanks in position for the next morning. I had adjusted Greg’s spare mask to achieve a seal from the water, but unfortunately the cave was still playing hard to get and I saw next to nothing as it fogged up within seconds of being cleared. I did however get to hear a lot of the dive, with periodic expressions of frustration from Rod who was trying to film sections of the cave with the most unhelpful dive model of all time! Greg was waiting at the hole to capture the traditionally unflattering photos of us struggling back out (complete with a leg cramp) and we pulled our used tanks out to finish off the day. All negatives were forgotten that night as Greg cooked up a storm for everyone that evening.

The next morning we treated the mask for fogging and attached my old flexible strap, then we all headed back in again for round three on Sunday morning after playing the “whose wetsuit smells most toxic” game. Rod again wiggled down with one tank on while I opted to have both of mine passed to me once in the water, and to my delight the mask was perfectly sealed and crystal clear! First we looked at the syncarids, small crustaceans that live near the air chambers of the cave and are regarded as “living fossils” and get scientists all hot under the collar. After admiring these ugly little white crawly things, Greg then led the way for a grand tour of the cave.



Greg and Deborah admire the beautiful decoration. Photo by Rod O'Brien

build up of some black residue which I assume is bacterial. While this cave is only shallow, with a maximum depth of around 8 metres (in current water levels), the passages are up to around 20m wide in places.

You could tell when approaching ‘Bondi Beach’ (an area many dry cavers would have visited which can be reached from the surface via an alternative route) by the mountain of bat guano built up on the floor below. Despite our careful maneuvering, the shallow depth meant it was difficult to avoid stirring up swirls of the poo which swooshed around us along with plumes of yellow snotty bacteria. We popped up into the air chamber and were startled by many more bent-wing bats than expected. There were numerous other opportunities to poke our heads out of the water into heavily decorated air spaces throughout the cave, but most of these had toxic concentrations of CO₂ which meant keeping the regulators in our mouths to continue breathing from the tank was essential. Near ‘Bondi Beach’ we also saw many curvy tree roots which had made their way down from the surface, with the larger clumps accumulating sparkling layers of fallen calcite raft.

Perhaps the most exciting feature of the cave is the tiny skeletons that can be stumbled across when looking around carefully. Some appear to be tiny quolls which are probably thousands of years old, while near the entrance you have more recent skeletons which have washed in, including two little frogs. I don’t believe anyone has systematically documented and dated these skeletons but it would make for some interesting research.

McCavity was once a dry cave, and a beautifully decorated one at that. Most of the walls contain large sheets of flowstone, cave coral and what looks like moonmilk. Everywhere you look you can also see rimstone pools, columns, shawls and stalactites, with amazing helictites hiding in clusters on the roof as well. For reasons not yet known, this cave then flooded and is now completely submerged with water that is still, and mostly crystal clear. This has created a new feature of the cave as where water surfaces meeting air chambers a build up of calcite rafts occurs, eventually becoming too heavy and sinking which results in giant mounds of calcite piled up on the cave floor below. Interestingly it is noticed that none of the formation seemed effected by being submerged, besides some features sporting a



Undated skeleton deep in the cave. Photo by Rod O'Brien