

JF8 Junee Resurgence

22 December 2014

Janine McKinnon

Cave: Janine McKinnon & Ric Tunney.

It was my birthday. I wanted to do something fun. That meant not gardening, shopping or sitting at home. A dive from our boat was an option but the weather was bad at sea, as had turned out to be typical for this summer.

So I thought a trip through sump 1 of Junee would fit the bill nicely. I needed to check how the permanent line that Pax and I replaced last summer had survived the winter floods. A wander through For Your Eyes

Only (FYEO) with the Gopro and my new video light would be pleasant too.

We got an early start and I was ready to dive before 10 am. Ric did most of the heavy Sherpa-ing, as usual, whilst I got dressed in many layers of underclothes (well, two anyway). I had a good look at the line as I swam the sump and found it all still in situ and looking good. That was a relief. It would be a bit embarrassing if our job hadn't even survived its first winter.

I spent an hour or so in FYEO, then back to base. We were all sorted, with all gear back at the car, for a nice 1 pm lunch. A short video from my efforts in FYEO is available to view, for anyone interested enough, on Vimeo at <https://vimeo.com/116576788>.

Exit Cave

D'Entrecasteaux sump explorations

26-29 December 2014

Janine McKinnon

Cavers: Janine McKinnon, Michael Packer (Pax) & Ric Tunney.

This was a continuation of the explorations I began alone in this area of Exit Cave in 2013 (McKinnon 2014a; McKinnon 2014b; McKinnon 2014c; McKinnon 2014d). We had chosen this time of year as we were hoping to catch the water levels at the optimum height to continue explorations of the flow. Too early in Spring and the levels would be too high to access the site, too late in summer and no flow makes finding the way the main flow is going difficult (as my previous attempts proved).

Day 1 – Boxing Day

Boxing Day was simply a gear haul to the dive site. Water levels looked good. Some flow but relatively low water levels.

Day 2

I had discovered, after I had dropped a load of gear at the dive site two weeks before, that the line I had placed through the restriction at the end of my previous explorations there had been abraded free sometime in the intervening 18 months. I now carried some 7 mm Telstra line to replace it, and also run this permanent line all the way through Sump 1 (Sanguine Expectations – SE).

We assembled our kit, moved it to the sump and the dive started at 11:45 am. I led through the sump with Pax following several minutes behind to allow me time to lay the line. This was somewhat difficult as I was carrying 100 m in a small caving pack, and it was very buoyant and kept trying to fly [float? – Ed.] away from me.

I was just finishing tying it off to the boulder where the original line was tied-off, when he arrived in Never Say Die (NSD) chamber. We dropped tanks and waded off upstream to explore the system, as an initial trip. The water level was about half a metre higher than 2013, and the flow was visible. This was good. We were carrying a 3 L tank each for future use in the system. Pax had a set of (my) regulators on his. We had left a second 3 L tank each back at the base site for taking in the next day.

We passed the line heading into Sump 2, went over the line into Sump 3 (both still taught, so in situ) and swam through the roof sniff in between. We followed the swimming passage to the right to a rockpile. I thought this was the Sump 3 rockpile I found last year (I now have reasons to doubt that). I could see large passage through the rockpile at the far left-hand end and gaps up through it. There was a moderate volume of water flowing through the rockpile in many places and we

determined that it was probably sufficiently leaky to allow flood flow.

We took off our harnesses and fins. I moved some rocks and started squeezing up. I needed to remove my helmet. I just fitted through and then started gardening behind me for Pax. Meanwhile, he had found a squeeze way through further to the right, and was down at water level. I had a clear path down the 5 m to the water and dropped down. We reunited and swam out of the rockpile to find ourselves in Sign of the Times (SOTT) passage. We were through! We followed this to the IB232 sink just to be sure were in the right place. We spent some time exploring the maze of passages in this entrance area. The sink was open but obviously higher than 18 months ago.

We retraced our (swimming) steps to the rockpile. Significant water was flowing through a hole on the right-hand side (looking downstream) and I crawled through it for several metres. The water then sumped. We looked for the permanent marker Alan had left at the furthest end of his survey in 2013 but couldn't find it. We then went back through the rockpile and headed down stream past the junction back to NSD and along the smaller passages in that direction.

A few metres past the turn to NSD I found the end of my line through Sump 2. So this short sump cut through the wall from NSD into the passage leading to the main IB232 flow. This meant that the rockpile I had found on the day I dived through Sump 2 last year, and didn't look closely at because I thought it was not the correct direction and I was doing an initial reconnaissance, was the rockpile to IB232. We continued on, along the muddy crawl-ways I explored last year. The higher water levels made it swimming and sliding rather than sticky, deep mud crawling so we moved much more easily and quickly than my progress last year. A few places were short roof sniffs, with a very short duck but we got through. We went further than I got last year and Pax reached a climb up from the stream where the water suddenly went through slots too small to fit. We decided to return the next day to survey and do the climb.

Pax dived out SE first and I followed doing some line adjustment, and looking for the pack with remaining line, that had gone missing. No sign of it. Visibility was reduced to about half metre by our movements upstream. We left the gear high on boulders near the sump for the night with plans to return the next day. Ric was waiting back at the base at the start of the passage. We left caving suits and lights at the cave entrance and walked out to the car in a little over an hour with light packs. We reached the car at 5:30 pm.

Day 3

Pax and I arrived at the "base camp" near D'Entrecasteaux passage at 10:15 am. Ric stayed outside the cave to do stuff and planned to meet us at the base camp at 2:30 pm. Pax and I organised survey

gear and were ready to dive at 11 am. Pax went through SE first. I tied loose line as I went through sump. The line was looking good by the end of the swim.

We left all dive kit at the end of the sump except fins for swimming. We moved to the start of survey Sump 2 position as a known survey station and the start of swimming. Pax went ahead and found survey points and did book. I did instruments too using our old disto (could afford to drown it) and Pax's OSTC wrist mounted dive computer with compass facility. This was the best we could do trying to survey whilst swimming, reading a caving compass was impossible. Clino not used as we used points at water level.

We surveyed down to the rockpile then up through the rockpile (with clino once we left water level) and joined in to Alan's permanent station on the rockpile at the end of SOTT left in March 2013. We then swam back to the junction with NSD passage and started the survey in the other direction. The disto was quite damp and the beam very fuzzy. After 10 minutes attempting sights we abandoned it. It would not give a reading beyond 2 m. We did not have a tape measure with us. We had deemed it excess gear to carry and unlikely to be used. So we used knotted dive line for distance for this part of the survey. Knots at 2 m intervals. We surveyed through low passages, in water and with a couple of roof sniffs and a duck, until we couldn't follow the water any further as it disappeared into cracks. There was a climb up here (turn around point yesterday), which we surveyed up and found ourselves in a dry chamber with access to the surface. We surveyed to the entrance and found a tag, IB191, which we surveyed to.

This was the end of the day's work. We returned to base camp at 2:30 pm and found Ric waiting. This was the end of our plans for this exercise and so we started packing gear for the removal. We carried all gear back to the cave entrance, in two loads each. We then secured some to pick up the next day and some to carry out then. It was raining as we walked back and the river had risen a little. We were back at the car at 5:30 pm.

Day 4

There were some problems with the survey of Exit near station ExTh1020, just past the rockpile on the river. We had offered to resurvey the area. This encompassed from survey station ExTh1020, up towards Camp 2 and The Western Arthurs, and across to the higher entrances to Dribble Passage and back to the river. Today was the day to do this. It took the three of us about three hours to complete the task. The forward and back bearings, with only three personnel, was what chewed up the time. There was a lot of running backwards and forwards to stations, many involving scrambling up boulders to reach. We were also going to link in the lower entrance of Dribble Passage to station ExTh1020, however, we were unable to find any survey stations for the first 50 m or so up the passage. We presumed these had been washed away in floods.

After completing our job we took 40 minutes to get back to the entrance of the cave. It was raining, and looked like it had been for quite some time. We picked up another load of dive gear each and had a fairly miserable walk back to the cars with heavy loads on a muddy, slippery track in the rain.

2 January 2015

It had rained heavily the night of Day 4 and was still pouring the next day so we deferred the final gear retrieval until Friday. We had Cherry (Pax's girlfriend) and Amy Roberston along to help with the gear. We planned to look at the D'Entrecasteaux sinks and IB232 entrances, and survey downstream IB191 from the entrance chamber as well today. Water levels were significantly higher by about 1 m.

We went around to IB232 and found it sumped. We then went to IB191 and found the upstream passage

(that we had surveyed on Monday) sumped. Pax and I then followed the downstream cave to its terminus in a rockpile with the stream sumping into small but not impossibly small passage. This is probably worth a look at low flow times to see if it is crawlable or diveable. There was a survey tape on a small rockpile in this final chamber but as we had no record of a map in the archive we decided to do another survey, assuming the first had been lost to the club. We surveyed back to the tag. The tag was only loosely attached to the rock wall at the entrance. Having seen this the previous day, we had bought the tagging kit with us today and Ric bolted the tag permanently a metre away from its position in good rock. We did a survey shot from the old to new tag position. We then went for a wander to look at the sinks along the valley floor before returning to the cave entrance to pick up the remaining dive gear and walk out.

When we got home Ric discovered that this part of the cave had been surveyed in recent years as part of the Exit Project and that a map was coming. We have therefore abandoned our version.

Dive Summary

We connected and surveyed Exit Cave and IB232 sink via SE and rockpile. Sump 2 leads into passage to rockpile connecting SOTT. Sump 3 line was intact in NSD but was not found at rockpile. The passage leading away from the Sump 2 intersection was almost sumped and most of it would be sumped most of the time. Survey from NSD to IB191 tag complete. In low water levels NSD can be reached without diving from IB232. The standard of surveys varies with instruments used in different sections. Labyrinth of side passages in SOTT still not surveyed. The water connection from downstream end of IB191 to Exit Cave suspected but not confirmed.

We did not follow the dive line from NSD through Sump 3 to a rockpile because at the time I thought it was just undercutting the wall and arriving at the rockpile that leads through to SOTT. This was a big mistake as I now have serious doubts that it arrives at the same place as the rockpile we climbed through to SOTT because:

1. The survey from last year implies a different passage.
2. The rockpile doesn't look the same (from viewing video taken last year).
3. We didn't find the dive line near the rockpile we surveyed through this year.
4. There were more holes in this year's rockpile (including the two we climbed through on Day 2).

I suspect that Sump 3 leads to another part of a bigger rockpile than we think is here, with other passage accessed from there. Another visit in the future to check this Sump 3 terminus should be planned. Given the very poor visibility in this water, we would not have seen any potential side passages running off underwater along where we swam and surveyed. Possible dive exploration along these walls may find additional passages.

If you are interested in viewing a very short video of our activities, it is on Vimeo at <https://vimeo.com/118454518>.

References

- McKINNON, J. 2013a IB-14 Exit Cave – D'Entrecasteaux River Sump: Dive 1. *Speleo Spiel*, 395: 8-9.
- McKINNON, J. 2013b IB-14 Exit Cave – D'Entrecasteaux River Sump: Dive 2. *Speleo Spiel*, 395: 12-13.
- McKINNON, J. 2013c IB-14 Exit Cave – D'Entrecasteaux River Sump: Dive 3. *Speleo Spiel*, 395: 14-16.
- McKINNON, J. 2013d IB-14 Exit Cave – D'Entrecasteaux River Sump: Dive 4. *Speleo Spiel*, 395: 17.