## MT FAIRY MF-1 MAIN CAVE

## **Rod OBrien SUSS, Nov 2020**

On the 28th November 2020 I dived sump 1 and sump 2 in MF-1 Main Cave at Mt Fairy. The dives were organised and supported by the National University Caving Club (NUCC) who were doing cave research in the area. The trip leader and organiser was Lachlan Bailey from NUCC and Keir Vaughan-Taylor SUSS was my support diver. Other cavers from SUSS and MSS joined the trip to lend a hand. Film maker extraordinaire Alan Green (from MSS) was there to film it all.



L-R Keir Vaughan-Taylor, Lachlan Bailey, Rod OBrien at pre-dive meeting and Alan Green in his natural environment. Photo by Cathi Humphrey-Hood

There were three sumps in MF-1 for me to explore: "sump 1", "sump 2" and the "unnamed sump".



In an attempt to keep the water visibility as clear as possible we looked at sump 1 first as it was the furthest downstream and therefore, any silt I

Trekking dive gear through fields of thistles. Photo by Cathi Humphrey-Hood

stirred up would not affect the other two sumps. It was also the best lead for the continuation of the cave.

On reaching sump 1, I found the water very muddy probably due to the recent rain. So much for seeing where I was going. It was going to be one of those dives where I crawl along the bottom feeling

my way around the walls with my hands and feet so I didn't worry about wearing any dive fins or BCD, just a harness.

Discovering a submerged passage in the right-hand wall of the sump I dived through and surfaced in a reasonable sized chamber with a 300mm air space. A 500mm wide passage ran off this heading back towards known cave passage that had a sump marked at its end. Diving back through to the main sump I organised some cavers to go to this sump and light it up. Returning to the chamber I first made a voice connection with the cavers then sighted their lights. This connected the passage leading off the new chamber to a sump marked on the old HILLS cave map.

Continuing my exploration of this new chamber I discovered the main streamway passage which I followed until it surfaced in a second new medium-sized chamber.

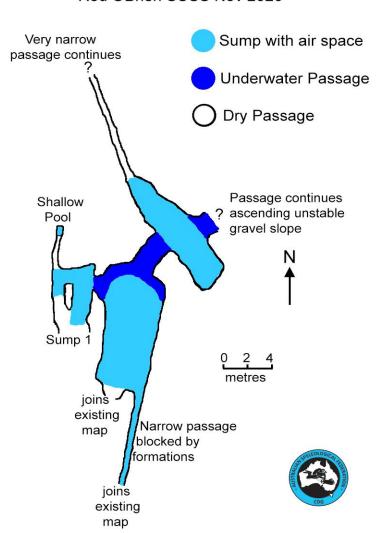
This had a passage leading off at water level but it was too small for me to enter. Believing this was the way on I began



Rod OBrien in MF-1 sump 1. Photo by Cathi Humphrey-Hood

surveying my dive line back to the main sump and took some measurements of several small side passages to add to the existing cave map.

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After looking at my survey notes I noticed an area in the second chamber that I had not explored. Returning, I felt my way around the walls and discovered what appears to be the main passage heading downstream in the end chamber at a depth of 2.4m.

The passage was wide but low, making for a very tight fit. I was stopped by an ascending loose, unstable gravel slope that threatened to collapse and block my way back. At this point the distance to the resurgence on the other side of the hill is approximately 200m.

I believe that the gravel could be naturally carried away by the next rain event so it is definitely worth another dive after such an occurrence. I was very cold by the time I exited sump 1 but everyone was keen to carry my gear, so we made our way upstream to sump 2 to find the water clarity there was just as bad as sump 1.



Rod OBrien in MF-1 sump 2. Photo by Cathi Humphrey-Hood

The cave passage leading into sump 2 is basically low and wide. This low passage continued underwater with the floor made up of loose cobblestones. Again, I decided not to wear any dive fins or BCD as I would be crawling around the bottom.

I backed into the small low sump feet first. By feeling around with my feet, I discovered what felt like numerous passageways. Each time I entered one they became too small for me to enter.

Continuing my way around the walls I found and entered a small solution tube, just larger than body size, that after a short distance surfaced in a small dry passage about 4m long. After 4m the passage took a 90 degree turn to the left for 2m. At the end of this passage is a small vertical shaft that appears from the survey data to join onto a passage in the Kokoda Extension. This dry passage contained several flying insects that seemed to be fixated with my dive light. The discovery of these insects could be proof of a surface connection somewhere.

After taking some brief survey notes I followed my dive line back to sump 2.

By the end of this dive my hands were so cold I was having trouble using them, so we decided to exit the cave for some sunlight. I needed to warm up and the cavers needed to have lunch. We left the exploration of the 'unnamed sump' for another day.

The following day we looked at an undercut section of karst in a bend of the creek near MF-10 and discovered two underwater passages leading off that will needed diving on the next trip.

Dive support team consisted of Lachlan Bailey, Adrianna Stoddart, Andy Waddell, Bradley Hearn, Claudia Tomkins (NUCC), Cathi Humphrey-Hood, Alan Green and Diana da Silva Paiva (MSS) and Keir Vaughan-Taylor (SUSS).

