

Mole Creek System Diving Projects

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This report summarises a number of sump recce and diving trips to various caves in the Mole Creek system between December 2018 and March 2019. The caves with sumps that were scoped out for their diving prospects included Roaring Hole, Swiss Cheese, Honeycomb complex (1, 1.5 and 2), Cow Cave, Blackshawl-Spider-Pyramid complex, Westmorland, Herberts Pot and various other un-named holes in the lower Mole Creek system. Trip participants on various occasions included Bronwen Prazak, Peter Bell, Dave Bardi, Sandy Varin, David Rueda Roca, Jason Goldstein, Stephen Jacobs, David Butler, David Wools-Cobb, Janice March, Deb Hunter. Apologies if I've missed anyone else who was also on these trips.

Scotts Rising was probably first dived in May 1995. On this occasion I reached a depth of 24 m in a silty shaft jammed with logs. The poor visibility, cold water and loose logs deterred any follow up exploration until December 2018 when I returned with better equipment and more experience. The shaft continued steeply down before levelling out and after passing a narrowing in the passage I tied the line off at a depth of 39 m. These two recent dives were done in wetsuit with air-filled side-mounted tanks, which made passing the narrow point easy but narcosis and cold were factors at depth and during decompression. So on the next trip in March 2019 I used a drysuit and rebreather with trimix. Unfortunately, I was unable to pass the narrow point at the bottom wearing the back-mounted rebreather. Everything silted out very quickly so I retreated to -33 m and laid some line up an ascending side passage.

Roaring Hole was dived in March 2019. This was a great dive. A penetration of around 140 m was made upstream in a wide shallow passage. The first sump was passed after 70 m followed by a long deep lake with tree roots and a second

sump was explored for around 40 m before turn point was reached on air supplies. I surveyed back out. The plotted survey (see map) suggests that Roaring Hole might connect with the Blackshawl-Spider-Pyramid complex, which is mostly dry but has a couple of deep slots intersecting the water table. Roaring Hole might also run parallel with Blackshawl-Spider-Pyramid and connect with Honeycomb 2, which is one of the next diving targets. Many thanks to those who helped carry gear: David Rueda Roca, Dave Bardi, Sandy Varin, Jason Goldstein, Bronwen Prazak.

Westmorland Cave was first dived by Nick Hume and I in 1982, when a penetration of around 30 m was made in a shallow silty tube. A return trip was made with Bronwen and Pete last year, firstly for the purpose of getting a good GPS fix on the entrance for our mapping project, and also to scope out the route to the sump in preparation for an upcoming dive.

Herberts Pot has a number of sumps, all of them are a long way from the entrance and would involve quite an effort getting dive gear in. The access to some of the sumps and the potential impacts of undertaking dive trips in this cave were examined and documented as part of the CAPS assessment trips undertaken during 2019. With wetsuit and mask, Dave and Sandy did some preliminary scoping in the downstream sump and the Westmorland Passage sumps.

In March this year we were on our way to Mole Creek to continue dive exploration and mapping in Scotts, Roaring, Westmorland and Honeycomb just as the pandemic travel restrictions came in. Diving and mapping will commence again once travel restrictions are lifted.

Preliminary map of Roaring Hole (green) showing 2019 dive extensions in relation to Spider-Pyramid-Blackshawl system (pink). Spider-Pyramid-Blackshawl survey data courtesy of Bob Kershaw (ISS). Roaring Hole data courtesy of STC. Map by Peter Bell.

