'big trip' and so entered the cave the conventional way – at least it's conventional for most people – on two feet.

And so, after much scrambling, climbing, sliding and general cave frolicking, the Matchbox Squeeze was not encountered until half way through our trip and was therefore thankfully an 'optional extra', rather than essential to our being able to ever see daylight again.

After checking that Serena wasn't actually joking about where we had to go, we somehow squeezed and screamed our way through the tiny hole on the cave floor to behold the wonder of Midnight Hole. Our screaming and squeezing happened to coincide perfectly with the descent of more 'hardcore' caving clubbers into Midnight Hole – God only knows what

they must have thought was going on as the whole experience must have sounded – and for us indeed felt – not dissimilar to a ritual pagan sacrifice.

The trip was fun in the extreme, but in the words of a venerable party member:

"I have only experienced a journey like that once before in my life – I don't remember it, but my mother does!"

PS. We also went to Bradley Chesterman Cave a little further down the road first, but after the excitement/trauma of Matchbox Squeeze we can't really remember what it was like – nice and dark though we're sure!

## JF-14 Dwarrowdelf: 17 December 2005 Serena Benjamin

Party: Serena Benjamin, Nathan Duhig, Rolan Eberhard

Having each of us received family and friends as guests over the Christmas period the three of us inexplicably found ourselves preparing for a rigging trip for the intended cave diving to occur later that year. After calculating how much shiny new Forest Practices Board rope we had versus how much we actually needed we decided to pay a quick visit to the gear store. Luckily Gavin and Claire were having an early start preparing to head off down the Peninsula for a walk. All set we headed off via Mondo's bakery (about the only bakery in Hobart that I hadn't yet visited).

Getting to the cave at around noon both Nathan and I were keen to get some rigging practice in. I proceeded to rig the first pitch followed by Nathan rigging the

second and third. On both of these he used an interesting variation of a figure-8 which provided an extra point in which to clip in. Following this I rigged the fourth and fifth pitches. With the recent wet weather the cave proved to be very drippy, particularly on the fifth pitch. Unfortunately for me, and perhaps a trap for new players, the rope decided to do its best imitation of spaghetti, twice forming into clumps that took some time to untangle. My friend Murphy was firmly in attendance as this invariably occurred at the two wettest points. Getting down to the head of the sixth pitch Nathan rigged a beautiful y-hang and continued down. In the meantime, having been thoroughly soaked previously I didn't fancy the prospect of doing the big pitch in what could turn out to be much wetter circumstances. That said I started out with the others not far behind, exiting the cave at around 6 pm

## JF-14 Dwarrowdelf – Diving the KD Sump : 28 December 2005 Rolan Eberhard & Stefan Eberhard

**Party:** S. Benjamin, N. Duhig, R. Eberhard (rig trip) J. Clarke, S. Benjamin, A. Jackson, S. Eberhard, R. Eberhard (dive trip)

KD streamway was explored to Sump I in 1972, at a depth of 274 m (Butt 1999). In 1973 a party from VSA followed a draughting crawl near Sump I, without coming to an end (Goede 1975). Three years later Sydney cavers pushed this lead, finding Sumps II and III in an extension they called The Depths of Moria (King 1976). For the next 25 years cavers have sporadically visited this part of KD, pushing leads and surveying (Gleeson 1978, Martin & Worthington 1979, Bunton & Martin 1981, Butt 2000, 2001a, b). In 1987 Phil Hill dived Sump II under less than ideal conditions (the stream was turbid and rising rapidly). Hill (1987) provides the following description of his dive:

I swam around the walls of the sump pool, finding a continuation that appeared to double back on itself, heading in a roughly northerly direction (i.e. away from Junee Resurgence!). A three metre, shallow duck led me into a large aven with no apparent leads above water. The walls were coated in a peculaiar 'tree root' type growth. I continued to dive along a narrow rift, for a further 35 metres distance, reaching a depth of 10 metres. At this point the rift became too narrow to negotiate. The rock of the walls was very friable and it looked hopeless trying to penetrate further. A great disappointment!

Whereas Phil hoped to discover 'the elusive master cave' that he thought must exist beyond the upstream sumps in Junee Cave, of which KD is a confirmed tributary, we now know that the KD stream reappears in Cauldron Pot, where a major new streamway was

discovered by TCC in 1989. Survey data implies that the upstream end of the lower streamway in Cauldron Pot is about 103 m away horizontally, and somewhat lower, than KD Sump II (Butt 2001). Despite Phil's unfavourable report, the prospect of a connection between these two caves suggested that Sump II was worth another look. Our interest had been encouraged when one of us (RE) saw Sump II on a trip to The Depths of Moria in 2000. It looked spacious and clear compared to many other Tasmanian sumps. Although the name seems to suggest that Sump III rather than Sump II is the most downstream sump in KD, its relationship with the main stream is ambiguous and it is not an obvious first choice to dive.



Stefan about to embark on his first dive. Photo by Rolan Eberhard

The complexity involved in organising this trip was compounded by the fact that Stefan and most of the dive gear we needed was in WA. Stefan would be in Tassie for the Christmas week, when we planned the dive, but the necessary small dive tanks had to be sent over from WA beforehand, in order to be sure they could be filled prior to the closure of dive shops over the festive period. Also, we hoped to ferry some of the gear, including the tanks (the heaviest items), down the cave on the pre-dive rig trip. In the event, Australia Post delivered a very heavy parcel containing two dive tanks, de-pressurised for the trip, a few days too late for the rig trip, but still in time for the dive.

Dwarrowdelf provides a relatively direct access route to The Depths of Moria and was rigged on December 17. Serena and Nathan clipped bolts and tied fancy knots while I cruised along behind. Dwarrowdelf was unusually wet for this time of year and all of us were soaked and cold by the time we reached the head of the final pitch. Only Nathan descended this 67 m shaft, stashing a sack of dive gear at the bottom.

The dive was scheduled for December 28. To reduce the weight, bulk and misery of gear haulage, diving equipment was kept to a minimum, including two small pony tanks in side mounted configuration, small torches, no helmet and a one piece wet suit. Despite this, there was still enough dive gear plus lunches, spare clothing etc to fill four cave packs, in addition to the single pack we had left at the base of Dwarrowdelf

previously. The load included a set of lead dive weights, as we were unsure whether weights used by Phil Hill had been left at Sump II (it turned out they had). The tanks were carried unpacked, suspended while abseiling or prussiking by slings around their valves. The mass of gear didn't slow us down much in Dwarrowdelf, but became more onerous when we reached the confined spaces of The Depths of Moria. However, with enough people to form chains for passing bags through constricted sections, this part of the trip went more smoothly than expected. We reached Sump II after about 2.5 hours. Stefan set about gearing up for the dive while the rest of us fired up an MSR stove and settled in for the duration. The value of hot brews for both divers and sherpas on these sorts of trips shouldn't be underestimated.



Judy, Serena and Alan and the thrilling task of soup consumption. *Photo by Rolan Eberhard* 

Stefan's account of the dive follows:

Visibility looked deceptively reasonable from above the water surface, but once underwater it was typical Tasmanian sump conditions, less than 0.5 m visibility at best. This meant it was only ever possible to glimpse small sections of wall, floor or roof at a time. The submerged passage headed off to the left (down dip) and plunged straight down to 11 m depth then angled down a steep silt-covered slope to a narrow point at about 15 m depth. I anchored the line to a lead weight and a stake driven into the sediment. There were heaps of Anaspides shrimps in the sump. By this time the billowing cloud of silt which had followed me down the slope overtook me and completely obscured forward visibility as the current carried it further downstream. I felt my way blindly forwards a short distance, then backed out a few metres to reconsider the situation. I couldn't

see my hand in front of my face, or even read the gauges. After a while the visibility started to improve as the flow carried away the silt. I was near my 'thirds' air consumption limit and after 15 minutes underwater, starting to feel the cold. I returned to the surface for a hot brew and to allow time for the water to clear. I had sufficient air for another dive, so quickly went back to the previous limit, tied on the line reel and continued on through small horizontal passage at 17 m depth (about 0.5 m high, 1 to 1.5m wide) – definite side mount territory, as back mounted tanks would not fit easily through here. The passage curved to the right and appeared to be trending upwards slightly at my furthest point, another 15 m or so further on. i.e. it's still going!



Stefan after a dive – is that the time!?. Photo by Rolan Eberhard

The above details differ significantly from the description of Sump II by Phil Hill, suggesting that he may have followed a different lead. Whereas Stefan went steeply down to 11 m depth and then followed a silt-covered slope leading to a constriction at about 15 m depth, Phil went through a short duck into an airspace then dived along a narrow rift to 10 m depth, at which point he decided the rift became too narrow to negotiate. Phil's turn-around point potentially corresponds with the narrow section where Stefan terminated his initial dive, although the depths don't tally. It is not known whether Phil was wearing sidemounted tanks, which Stefan considered essential in passing the constriction on his second dive. On the other hand, Stefan didn't encounter the initial airspace reported by Phil, which may be associated with Sump III as surveying by Jeff Butt and others indicates that this sump is only a few meters away from Sump II (Butt 2001b). Nor did Stefan find the rock friable, as

reported by Phil, commenting instead that the walls were good solid stuff. Both divers experienced poor visibility – Phil described the sump as 'muddy brown' even before he entered the water. In Stefan's case, although the water was initially clear, clouds of silt greatly reduced visibility as the dive progressed.

By the time Stefan had swapped wet suit for trog suit and downed another hot drink, the rest of us were glad to get moving again, having sat around at Sump II for the best part of two hours. Now came the hard bit – getting all that gear back to the surface. Again, this part of the trip went more smoothly than expected. Alan and Rolan brought up the rear, de-rigging Dwarrowdelf and making for mountainous packs on the walk back to the car. Even so, we managed it back in time for beer and corn chips on Junee Quarry Road before dark.



The party indulges in beer and chips back at the carpark (beer and chips after a trip is now an STC tradition). *Photo by Stefan Eberhard* 

In summary, although we failed to achieve a connection between KD and Cauldron Pot, the dive demonstrated that KD Sump II is still a going lead. Given the poor visibility and constricted nature of the underwater passage, further exploration is probably best approached as a project to progressively extend a fixed line along the underwater passage, until an airspace or physical barrier is encountered. Stefan's polypropylene dive line was left in situ (about 30 m or so of it), although the potential for the line to be abraded against sharp edges means that it cannot be relied upon to stay intact indefinitely. The four weights taken in by Phil Hill remain where he left them – on a rock ledge beside Sump II.

The dive modestly increases the depth of KD to 292 m, based on a surveyed depth of 275 m from the JF5 entrance to water level at Sump II (Butt 1999), plus Phil Hill's dive to 10 m, plus the additional 7 m depth achieved on the recent trip. Considerable effort has gone into exploring and mapping The Depths of Moria. While further work in this part of KD may eventually yield a breakthrough, a look upstream in the lower streamway in Cauldron Pot (i.e. beyond Au Cheval pitch) is probably a higher priority.

We would like to thank Serena, Judy, Nathan and Alan for their assistance as highly competent and fit sherpas and riggers. They did a fantastic job.

## REFERENCES

- BUNTON, S.W. & MARTIN, D.J. 1981 No more metres in the mire of Moria. *Journal of the Sydney Speleological Society*, 25(5): 87-91.
- BUTT, J. 1999 Khazad-Dum: Setting the depth records straight, twenty-seven years on. *Speleo Spiel*, 314: 9.
- BUTT, J. 2000 The Depths of Moria a surveying campaign completed. *Speleo Spiel*, 323: 16-18
- BUTT, J. 2001a Surface work between Troll Hole and Cauldron Pot: 12/2/2001. Speleo Spiel, 324: 4.

- BUTT, J. 2001b Dwarrowdelf the secrets of K.D. Sump 3 and a derig: 11/2/2001. *Speleo Spiel*, 324: 3.
- GLEESON, L. 1978 Further exploration in Khazad-Dum. Southern Caver, 10(1): 14-16.
- GOEDE, A. 1975 Is K.D. really finished? *ASF Newsletter*, 70: 9.
- HILL, P. 1987 Khazad-Dum (JF4/5/14) diving the sump. Speleo Spiel, 228: 7-9.
- KING, R. 1976 A new Australian depth record Down the Big Three. *ASF Newsletter*, 73: 3-5.
- MARTIN, D. & WORTHINGTON, S. 1979 Depths of Moria survey. *Journal of the Sydney Speleological Society*, 23(7): 167-168.

## JF-337/JF-36 Slaughterhouse Pot/Growling Swallet: 31 December 2005 Amy Ware

Party: Serena Benjamin, Peter Freeman (VSA), Amy Ware

It was New Year's Eve and time for a warm-up to the next day's planned attempt to bottom KD. Peter was visiting from Victoria and keen for a taste of Tassie's caving, and I was keen to share some of our 'delights' with this Buchan expert, who I had caved with in a number of long, wet or vertical Victorian caves.

We headed from Hobart into a drizzly Florentine valley, coming across two Banana-Men in the carpark, looking forward to their planned surface-based adventure. We were looking forward to getting out of the rain in Slaughterhouse, though a little concerned about Growling water levels and prepared for a bounce trip if the streamway looked uninviting. Walking past the Growling entrance the water didn't look too bad, but the drizzle was continuing.

Underground we soon wriggled and squirmed our way to the head of the first pitch, where we put on our SRT gear. Serena led from here to the Slaughterhouse Chamber at the base of the second pitch, where we stowed some of our dangly bits in preparation for the climb down through the rockfall. Peter had been somewhat slow on the pitches and uncertain about the treatment of the deviation on the second pitch, but we discussed our progress and were keen to continue down to the link into the Growling system.

The rockfall turned out much more spacious and straightforward than I had remembered it, and we were soon at the head of the third pitch for a descent into Growling. We ate lunch at its base and both Serena and I added layers to compensate for a slower pace and for the breeze we had now met. Climbing into Windy Rift we could hear flowing water where I'm sure I've only heard silence before, and recent flood debris on the walls helped my pulse rate rise in anticipation. The base of the lower ladder was hooked up in the slot at the end of the rift and needed a jiggle to free it and get a straight climb to the bottom. After passing packs across the chock-stones, we arrived at the streamway to

find a reasonable water level and an easy decision to head towards the main entrance.

Our route was straightforward through to the Glowworm Chamber and I identified Stal Corner soon afterwards. But then we hit trouble and proceeding up the streamway Serena and I soon found that the features around us were unfamiliar. We suspected that we had missed the Dry Route and ended up in the Yorkshire Drains, the wet way up to the entrance but not a route either of us had traversed before. A cairn gave us a false sense of security for a while but each promising way on just seemed to fizzle out. It wasn't appealing to be doing the wet way in conditions that we knew were far from ideal, however Peter was enthusiastic and we spent some time working our way forward and upward in pursuit of either the entrance or a link back onto the Dry Route. Neither appeared and eventually we made a sensible decision to turn around and head back towards Stal Corner and familiar territory. If we couldn't find the way on soon, we would turn around and return through Slaughterhouse and a route where we wouldn't get lost and where we could be easily located should water rise or anyone get fatigued. But a turn to our right caught Serena's eye and she located a climb by a waterfall that was familiar to us both.

From here the path was straightforward and familiar, though Peter was phased by some of the climbs and glad that he was going up and not down them! Now soaked from spray from the higher stream level, we soon made the entrance and returned to the carpark for a quick change in the drizzle again.

I am now slightly more oriented in the entrance series but would like to find an opportunity to explore it again in more friendly conditions... perhaps this has the makings of a beginners' trip in late summer or autumn? Serena has remembered the third pitch in Slaughterhouse and Peter called it the best Australian caving trip he's done yet, not dissimilar from the Yorkshire Dales where he learnt to cave. Mission successful!