

Highland Caving Group

A Corporate Member of the Australian Speleological Federation 251 Great North Road, FIVE DOCK NSW 2046



HCG meets 8:00p.m. every second Tuesday of the month at Australian Air League Hall corner Penshurst Street and Loader Avenue, Beverley Hills

HCG website www.hcg.org.au

HCG eGroup for members hcg.groups.io

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Journal of the Highland Caving Group Issue 48 - June 2020

Editorial:

It has been some years since HCG produced an edition of Calcite.

This issue is devoted to the discovery of Y395.

Editor: Ian Binnie **Layout**: Pages 10.0

Contributions:

Please send to Editor:

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Cover photo: Josh Small and Hannah Small in the start of Snowy River, Y395

Photograph Credits

Jason Moule

Andrew in front of a thin mud wall Edd testing the gate

Wrays Room

The Ghost, in the Ghost Room

Helictites Red River

Side Passage in Snowy River

The Babbling Brook, Orange Barrier Reef Shawl in Snowy River, Josh in Snowy River

Andrew on Heavens Staircase

Lunch in HCG Borehole

Robert Wray with HCG Presidents

Josh Small

Jason installing gate

Small bat skeleton at the bottom of

Breakdown Mountain

Fossil, Horseshoe Chamber

Koala? skull, near Rockfall

Looking down the Snotty Slot

Hossein Shargh

Ups & Downs

Skeleton

Andrew Nosworthy

Jason climbing the Ups and Downs for the first time

Jason in Red River

Brett Moule

Robert in Tuglow

Jayne Wray collection

Robert with China tower karst

MOTHER OF A CAVE Yarrangobilly unveils a secret

by Jason Moule

Since the 1970s most cavers of the time knew there was more to the caves at Yarrangobilly. A system that should be there, but no one could find a way into, except a very wet, cold rock pile that has since choked up with gravel.

In 2018 a small group of HCG cavers made a spectacular discovery which has led to over 3.3km of new surveyed cave passage with outstanding decoration, skeletons, ancient mud banks and a raging underground stream.

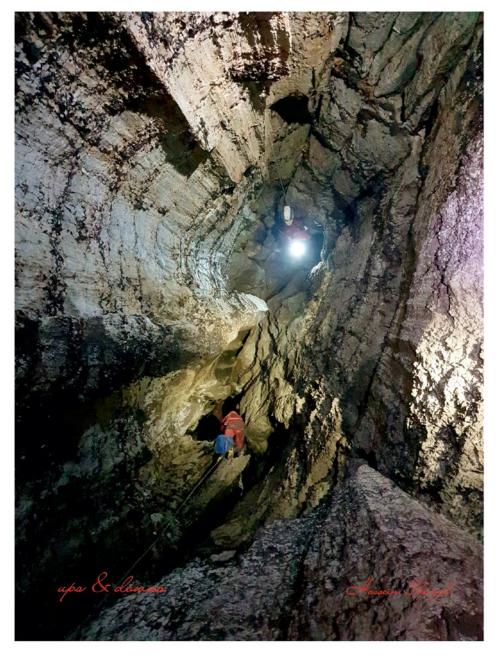
It all started with a phone call from Phil Fleming to Jason Moule at the start of March 2018. Phil rang to see if I wanted to go on a trip to Yagby on the 30th of March 2018. I hadn't been caving for quite a while, so I thought that would be fun. After a trip to North Deep Creek to replace the padlock for NP (NSW National Parks and Wildlife Service) Phil said, "Why don't we make a round trip and see if West Deep Creek entrance has opened again", and away we went. After bashing through blackberry bushes, we found the entrance still blocked. We had a look around the doline; Phil and Alan Green were looking at a hole in a rock pile when I noticed a breeze heading into an entrance and thought that there must be more cave in there.

We were all excited about the possibilities that this breeze could lead to, so we booked a permit for the cave for the 11th to 13th May 2018. Phil asked Edd Keudell (a cave surveyor from the USA) to come along. On Saturday morning Phil, Edd, Jason, Andrew Nosworthy and Charlotte Nosworthy headed to the cave all keen to see what we could find. After entering the cave, Jason found a tight squeeze with a breeze going into it, but had a large rock jammed in the middle so it was impassable. Andrew said "why don't we try this squeeze under here". Below was a squeeze that looked like it had gravel washed out of it in the last few years so he tried squeezing through feet first and could not quite get through. Jason had to go head-first and with a lot of grunting, just made it through. "I'm through", I exclaimed with excitement, and I could see more passage through the rock pile. Jason went back through the gravel squeeze and helped Andrew through. Edd, just the man we need, a cave surveyor who has done a lot of cave surveying in North America inclusive of Lechuquilla cave and Mexico, and the others came through and Edd pulled out his surveying equipment and started surveying! We found a large rock pile with no bedrock passage. We all headed back to Cotterill's cottage very happy and excited. We planned to go back and booked another permit for 1st to 3rd June 2018.

Phil, Edd, Jason, Kristin Moule, Andrew and Charlotte met at Cotterill's cottage on the 1st June, excited and keen to explore the rockpile. We all went to the cave on Sunday to continue surveying. Edd, Phil, Andrew, Charlotte went into the rockpile to find the way on. Jason noticed a breeze going into another tight squeeze. Kristin waited at the start of the squeeze while Jason squeezed through to see where it leads. Jason climbed and squeezed down a tight chimney, moving any loose rocks that could fall on him on the way down. After going vertically down about 10m the passage opened up into a walk-through bed rock passage! Ye Ha! Continuing down it opened up into a 15m pitch. I was very excited and went back to tell the others. Kristin was waiting patiently for me and I exclaimed, "I found the way on!". Edd and Andrew and I went back down with a 25mm tape. I climbed down the pitch using the tape as a handline, walked 5m then the passage narrowed down to be impassable. I took a picture looking up the aven at the end. Edd surveyed to the bottom of the pitch. We headed back out.

The next trip was booked for the 5th to 8th July 2018. I enhanced the photo and studied it, I noticed a dark passage at the top, the aven needed to be climbed! We entered the cave

on the 6th and Edd and Hossein went to find the way through the rockpile while Andrew and Jason went to do the climb. Jason climbed the 15m climb and found a passage that went 5m and led to the top of another aven - 15m back down! Jason rigged these two more pitches and Andrew followed. At the bottom of the pitch there was a squeeze going down, then into the T canyon. I turned around about 6m short of the Horseshoe Chamber and met up with Andrew at the top of the Ups & Downs, he was talking to someone. Edd had found a slot that connected from the rock pile to the top of the Ups & Downs - a voice connection. Edd said "we are getting wet, there is water coming through the rockpile and it is increasing in flow, we are heading out". Andrew replied "we are nice and dry and sitting at the top of a 15m pitch with a passage leading off the bottom!." We all headed back out. The next day we headed back into the cave with more rope and rigging gear. Jason rerigged the pitches while Hossein and Andrew abseiled down and went to the end of the T canyon. Jason caught up to them and Andrew said, "there's a black hole with an echo coming out of it", I thought he was kidding but he wasn't! Edd surveyed through the T canyon. Jason rigged the pitch and abseiled down, followed by Hossein who went through the mud passage to Wray's Room.



Jason had a look around Horseshoe Chamber. The cave opens up a lot into chambers and walk through passages. The survey is now 94m deep and 248m of passage!

We went back to Yagby on the 19th to 22nd July and kept exploring and surveying as we went. Josh Small joined the team. Jason bought 100m of new rope - Bluewater 2+, and 25m of tube tape for rigging and rigged the cave. Phil bought 30m of new rope and tape to rig the cave. We found a floor canyon that led to another 14m pitch through the roof of a chamber - Rockfall Chamber - the last pitch before the horizontal passages. Jason rigged the pitch and Josh was the first one to abseil down, closely followed by the rest of us. We found another way through the rock pile to Wray's Room and then found a small passage that went through to HCG Borehole - a nice scalloped passage that leads to the active streamway - a stream that flow rates are the same as where West Deep Creek sinks. The trips are getting longer now - up to 20hrs long from car back to the car.

On the 10th August 2018 Andrew and Jason surveyed the active streamway while Edd and Josh surveyed the HCG Borehole. Josh found the way on to the Orange Barrier Reef up a mud wall with one set of foot prints up it, we always walk in the same steps to minimise the impact on the cave. We surveyed this and the Junction Room. Andrew and I climbed up into a tube which led across into the Biggerest Room, we had to de-trog to get across some flowstone, then the smaller tube opened out into a large black hole with an echo! Later Edd found another way into the Biggerest Room without the need to de-trog.

On the 24th August we surveyed the Biggerest Room; Jason explored the beginning of Red River. We went through a small muddy passage that opened up with red crystals and flowstone on the floor! We completely de-trogged, putting on clean shoes and gloves and walked carefully up this amazing passage. The Red River has a red floor with pure white formations on the floor and sides, with multiple long straws. We were both amazed and excited about what we had seen.

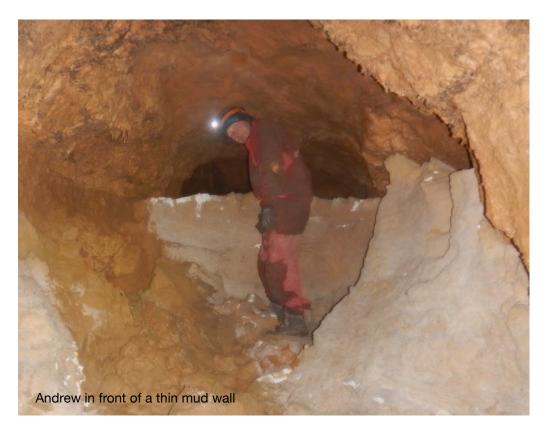
After these latest trips we decided the cave needs protection i.e. a gate, because this cave is fragile and lots of things - like thin mud walls that are well layered, formations, skeletons, cave bugs could be easily damaged by a misplaced foot or hand, and these can be studied in the future by scientists. On the 24th August we found an appropriate site for the gate and took photos of it for reports for NP and the KSRG (Kosciuszko Speleological Reference Group). Josh Small prepared a comprehensive environmental consideration paper for the gate on the 3rd September 2018. Josh designed the gate. The application to install a gate was forwarded to NP and KSRG. On the 16th October 2018 Jason and Bruce from HCG had a teleconference with KSRG and NP and the gate installation was agreed on to help protect this fragile cave. We sorted out some finer details about the gate installation with NP, KSRG, and the Karst and Geodiversity unit of the Office of Environment and Heritage (OEH). On the 25th October we received written approval to install the gate, so on the next trip on the 3rd of November Jason and Josh carried and squeezed the gate, rotary hammer drill, bolts, PPE, etc. through the squeezes, down, up, down the pitches and installed the gate. We also surveyed the Snowy River Passage and explored Breakdown Mountain on this trip.

The next trip was on the 17th November 2018, Jason, Andrew and Hossein surveyed the Red River while Edd and Josh surveyed the Orange Barrier Reef, both groups heard a faint rumble like a large rock falling in a distant passage. The Red River went for a while and ended up in a Muddy Ghost Room - named because of the white formation that looks like a ghost. At the end of red river we found some excellent helictites. After this trip the cave was up to 2472m of surveyed passage and 144m deep! On this trip, Josh surveyed using a compass and clinometer and found out it is much harder than using Edd's DistoX2. So Josh decided to design and make his own Disto-thingy. Over the next few trips we

tried, tested in the cave, and Josh modified and refined his Disto-thingy. Soon we will have a perfect laser survey tool, capable of taking 100m shots and storing hundreds of stations. This will make it a lot easier to survey caves in the future!

On the 2nd December we found a high aven with a small hole in the bedrock below resembling an inkwell in an old wooden classroom desk with a flat rock next to it - just right for Edd the surveyor to sit on while drawing up the map. We found another skeleton here.

Jason climbed up into the aven and found an upper level passage with some formation. We went down to survey Jennings Tributary on the 15th December and to our surprise about 70m of the sump passage was under water! Yagby had about 60mm of rain in the 4 days before we went caving, there were at least 3 sumps that are normally dry that were completely underwater - we know now not to go into this passage if it is raining! Hannah Small came along and pushed a small muddy passage that linked back to Schitt Creek.



The trip on the 11th January 2019 we surveyed the passage up the Ink Well Aven, we tried to climb it, but the rock was too crumbly, the holds were all falling out. It was another 16hrs underground trip!

On a previous trip we found a thin mud wall - about 150mm thick between 2 chambers, but we did not break it to explore the chamber beyond, we left it intact for future study. On the 25th January we found a small passage that by-passed this mud wall and went into the chamber beyond. Josh and Jason explored and surveyed this passage. Edd, Hossein and Andrew explored and surveyed some more passages off the Ink Well area. On Sunday we went down Restoration for an easy trip and realised how much damage has been done in there - considering that it is supposed to be a 1 trip per year cave. This reinforces how we need to protect Y395, so the same thing does not happen. We had done a lot of caving trips, so we gave ourselves a break for a while.

On the 5th April I invited Andrew Baker and Al Warild from Cave Rescue into the cave to have a look at the cave if we had to do a rescue from it, and they had a look at how we

were rigging it. They both said not to have an accident because rescue would be very difficult. On the same trip we surveyed Jennings Tributary until it sumped. Both sumps were about 300mm lower than previous trips.

We went back into Red River and surveyed the side passages and checked all leads on the 18th April 2019. We do not need to go into this passage again - to minimise any impact we have on this nice passage. We made it past the 3000m length mark on this trip!

The last trip on the 23rd August we surveyed the side passages to Snowy River and checked out all leads - except where formation would have to be broken to get through. We do not need to go into this passage again. The cave now has 3250m of surveyed passage!

This is a unique and fragile cave that needs the highest protection, and for the safety of cavers. We will finish the survey, draw the maps up then determine a management plan - no go areas, track marking etc. This cave should be for scientific studies only and a reference cave. There is good formation in the cave but there is just as good formation in other caves at Yarrangobilly.

Stay in the Dark and Keep Caving!



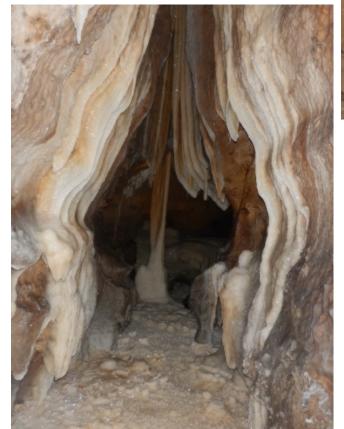
Jason installing gate

Edd testing the gate





Wrays Room



side passage in Snowy River



Fossil, Horseshoe Chamber



The Ghost, in the Ghost Room



Skeleton



Small bat skeleton at the bottom of Breakdown Mountain



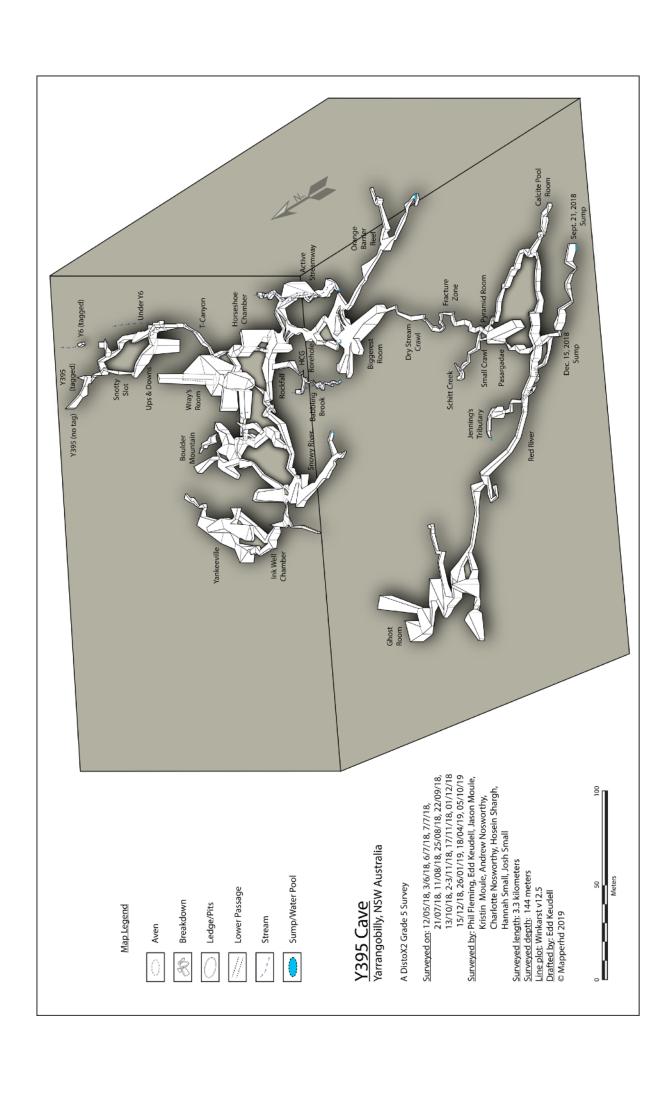
Helictites Red River



Koala? skull, near Rockfall



Jason in Red River



Obituary - Robert Wray, 1966-2017

by Phil Fleming

Read at the UIS Conference, Penrith, Australia (2017) Session on Pseudokarst which was dedicated to the memory of Robert

Robert joined HCG in early 1988 and quickly established himself as a leading member of the club. His nickname "Rabbit" was awarded very early on as a result of his boundless energy and enthusiasm to explore any type of lead, entrance, pseudo entrance, opening etc. Robert was a very competent caver with a high level of strength, fitness and endurance and was happy to talk caving day and night. He was a prolific reader with a photographic memory and an eye for detail and was quite capable of leading a trip into a totally new, previously unvisited area or cave having committed the trip description to memory.

Robert had graduated in accountancy from Wollongong University just before he joined HCG but was quick to announce that his ambition was to be a geographer not a bean counter.

His first trip with HCG was to Buchan at Easter 1988 and he quickly distinguished himself by his enthusiasm to climb, grovel or abseil anything on offer.

Robert's view was that it's always dark in caves so caving doesn't have to be conducted during daylight hours. A caving trip with Robert could involve caving at any time of the day or night. He was keen to pack in as much caving as possible.

Robert attracted a small group of fellow hard caving disciples in HCG, most notably Jason and Brett Moule. Robert led a number of trips to Tuglow in 1992 with the Moules and other HCG members. On the 8/9 February trip Murray Dawes and Robert along with Jason Moule followed a breeze to locate an otherwise unremarkable aven above the main streamway upstream of Knights Chamber. After a nasty, loose climb they emerged into a previously unknown area of abandoned river passage several hundred metres long which they named *Horrendous Holocaust Heights* (Wray 1992 a). This passage is shown in the SUSS Tuglow book as *Tertiary Tunnel* (Cooper, et al 1998). More trips to Tuglow followed in quick succession and on the 12th April trip, along with SUSS, Robert and Jason pushed the entrance rockpile in T10 *Pushii* cave in the Horse Gully Sinks area, to discover and survey about two thirds of this cave (Wray 1992 b). On subsequent trips to Tuglow they joined in with SUSS to help complete exploration and survey for the Tuglow Caves book. There is a photo of Robert on p17 of the book.

The early 1990s saw HCG get into "expedition caving" and long distance trips. Robert visited Tasmania for the first time in January 1990 and was treated to the delights of Mole Creek by ex HCG member Peter Dohnt and the Northern Caverneers. Whilst, exploring in the far upper reaches of Croesus Cave, Robert squeezed a muddy slot that is normally sumped, swam a distance through streamway and entered a small rockfall chamber with no signs of previous visitation, but with prospects of further leads through the rockpile. His main light then failed and so on back up light he built a small cairn and swam back to join the rest of the party for the trek out. Only a few people believed Robert's account initially as there was no indication of the passage on the survey. The area was subsequently rediscovered and a voice connection made to the upper entrance pitches. The passage to the rockpile chamber was named *The Rabbit Run* by Northern Caverneers (Wray 1992 c).

Robert was active in further trips to Tasmania. HCG spent over 3 weeks in December 1992- January 1993 caving either side of the TasTrog 1993 ASF Conference. On 2nd January 1993 Ian Houshold who was then Karst Officer for Tasmania Parks Wildlife and Heritage Service took HCG into Exit Cave at Ida Bay. We went to visit a little known/visited

side passage off Eastern Passage, a major tributary of Exit Cave. After a 10m climb down through rockpile assisted by tying tapes together Robert and Jason Moule found their way blocked by a rockpile. But Robert found the right spot to dig and soon they were through the rockpile, down a 7m climb and into brand new stream passage which continued for several hundred metres (Moule 1993). On the same trip, Robert and HCG along with SSS discovered, explored and surveyed a number of caves at Mole Creek: *Midas Cave* MC212 and *Thirteen Second Pot*, MC183. HCG members led by Robert along with SSS discovered and surveyed extensions to MC27 *Rubbish Heap* cave.

Robert's caving continued unabated with trips to the Nullarbor, Tasmania and NZ. In 1993 Robert became interested in Yarrangobilly and a succession of HCG trips were arranged to that area. Y7 *North Deep Creek* cave was surveyed from the *Roo Holes* down to the *Duckunders* and presented by Robert as a 3D isometric (Wray 1994). Robert was by now well into his PhD and still maintained his enthusiasm and interest for caving, but he was becoming more interested in canyoning as befitted his professional interest in sandstone landscapes. At the TasTrog conference in 1993 we got the first hint of Robert's future career specialisation. when he delivered a paper titled *Solutional Landscapes on Silicates: largely ignored or largely unrecognised*. The reaction to Robert's presentation was surprise – the explanation that was commonly given for sandstone weathering in those days was that it was due to wind erosion not solution. I don't think that he made a lot of converts that day but he did sow the seed of an idea that nowadays is widely accepted.

From the mid 1990s Robert's research and teaching interests meant that he had less and less time for caving, but he still continued his association with Highland Caving Group and contributed two chapters to Julie and Peter Bauer's book *Under Bungonia*. Robert was president of HCG from 1992 to 1994 and *Calcite* editor from 1992 to the end of 1995. Robert and HCG last met at Bungonia in November 2015 when along with his wonderful wife, Jayne he joined us for lunch. Robert was well known across the caving community and had friends across many caving clubs. Everyone who caved with Robert will remember his stamina, intelligence, enthusiasm and dry wit.



Robert with China tower karst

References:

Cooper, I., Scott, M. and Vaughan Taylor, K., 1998, <u>Tuglow Caves.</u> Sydney University Speleological Society, Sydney. Pp 18-19;

Moule, J., 1993 TasTrog '93, Calcite 37: 8-15;

Wray, R., 1992a Tuglow 8th and 9th February 1992, Calcite 35: 9-11;

Wray, R., 1992b Another Cave at Tuglow 12/4/92, Calcite 35: 14-16;

Wray, R., 1992c Tasmania 1990, Calcite 36: 3-6;

Wray, R., 1994 Yarrangobilly, Easter 1994, Calcite 38: 15-19.

A Tribute to Robert Wray

by Brett and Jason Moule

We spent a lot of time with Rob in the 1990s doing many adventurous outdoor activities like caving, canyoning, cross country skiing, bushwalking and bike riding.

Rob had an impeccable memory for everything. Right to the end he could remember more details about trips away than us. So Rob, if we get some details wrong, please forgive us.

In 1990, we joined the *Highland Caving Group*. This is where we <u>first</u> met a really fit young guy, 24 years old, who was really cool to hang out with. Others introduced him as "Rabbit", but he always preferred "Robert". He had it together. Everything was always organised, he was always so generous and kind, and always a gentleman.

When we started caving, we needed to learn how to abseil and climb, and it was Rob who really did "show us the ropes". He liked to share his knowledge about everything, which was great; we learnt so much from Rob. We also learnt so much about the geology of Australia driving to the caving areas and while exploring the caves.

Rob took us on many caving trips around NSW and each of these trips were great adventures, we would see new caves and explore "new worlds". There were so many great trips and memorable times.

A common theme and fond memories of these trips include sitting around a campfire at night, after a hard day of adventures, maybe with a drink or two, somewhere near a cave or canyon. Our "swags" laying on the ground not too far from the fire. Rob would always be involved with some interesting discussion on life, the universe and everything with everyone in the group. Even in my photos of these nights by the campfire Robert would stand out like a shining star ... well at least the reflections from his glasses would anyway!

In the early to mid 1990s, Rob was elected President of Highland Caving Group, and remained president for several years. He was also the editor and publisher of *Calcite Magazine* for many years.

In July 1991, thirteen of us headed out into the middle of the Nullarbor plains for a 2 week caving expedition that was very enjoyable and most memorable. So much so that whenever we meet up, even today, we still reminisce about that Nullarbor trip. Robert was a great cave photographer, and I got some great photos simply by setting up my camera beside Robert's while he masterminded camera positions, flash positions, and subject positions.

In Easter 1992, we had another very memorable trip to Waitomo Caves in New Zealand, where we did some of the classic caves of Lost World, Black water rafting, and a bunch of caves with Maori names which are really hard to pronounce, but I'm sure Rob would have had no problems with the names!

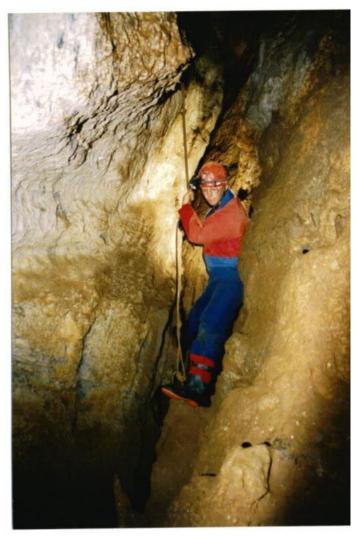
In January 1993, Rob went to the biennial ASF conference held in Tasmania: TasTrog. This was another very memorable conference as cavers from all over met up to discuss caving; and also go out and do some caving. On this trip, Rob discovered some new caves, "13 Second Pot", "Rubbish Heap", and he got to travel around with "Vic" the Gnome! This was one of Rob's favourite trips.

Back in NSW, Rob also helped discover and survey the "Tertiary Tunnels" area of Tuglow Cave, and also "Pushii" cave near

Tuglow, which is documented in the Tuglow Caves book.

In March 1993, while caving with Robert at Colong Cave, Jason had a bad accident, falling at the far end of the cave, breaking one wrist, spraining the other wrist, spraining both ankles, smashing his helmet, and suffering all over bruising and abrasions. Robert was first to Jason, and seeing Jason's injuries knew that organising a rescue would take many days to extract Jason. So, Robert basically ordered Jason, "get up, we are walking out together", knowing that the adrenaline would keep Jason moving for a few hours. Without Roberts quick decisive action, this would have been a long difficult rescue operation. After Driving Jason home, and in an effort not to panic Jason's mother, Robert casually said "Jason's just had a bit of slip, but he's fine". When mum saw Jason, she rushed him straight to hospital!

It the early 1990's, Rob also introduced us to the world of Canyoning. This is essentially walking and swimming down creeks which descend through narrow canyons, and usually involves abseiling, jumping or



Robert in Tuglow

falling down waterfalls. These are great fun and we had some great trips with Rob.

Rob came up with the idea of double and triple canyons. Most canyons would have long walks to them, so Rob would study the maps, and devise new routes so that we could do 2, 3 or 4 canyons in one day. Normally you can only do 1 canyon in 1 day, but Rob found ways to fit the more canyons into 1 day. If you were fit, it was a brilliant idea.

Rob had another Canyoning idea, but... to be honest, it wasn't quite so brilliant. He tried to convince us many, many times. His idea was to do Claustral Canyon, in mid winter, at

Midnight, during a full moon ... and naked! He would always try to sell this trip idea to us with a sly grin, big laugh and a spark in his eye.

We did eventually do this trip together... But without the naked part.

Another favourite little trip we had, was doing Minamurra Canyon on Jason's Bucks party. Everyone was in a top mood, lots of laughing and just good old fashion fun. We enjoyed champagne, wine and cheese and crackers down in the canyon to celebrate. Very fond memories from that day.

Robert also had lots of other adventures and unfortunately I don't know them all. On numerous occasions, he did intrigue me with his stories of trekking in the Annapurna region of Nepal, which inspired me to later go climbing in Nepal.

Another fantastic trip we had was Easter 1995 with the Bonwicks to the South Island of New Zealand, which was quite an adventure in itself. But one particular memory I have is trekking to the top of Avalanche Peak at Arthurs Pass. At the time we were all really fit, but Rob was even fitter, and no-one could keep up. I remember looking up, and seeing Rob standing on top of the mountain, looking at the scenery with a very happy look his face. And it is this point in time, this memory of Robert that I would like to remember him as. Standing on top of the mountain, supremely fit, his caving pack on his back, his eyes scanning the geology of the area, and a smile on his face. That memory is the perfect image of Robert. Right then, he was, and still is, the king of the mountain.



Robert Wray with HCG Presidents at 40th party at Bungonia in 1997

Michael Finger, Ian Lutherborrow, Brett Moule, Chris Dunne, Robert Wray, Peter Dykes

Evalt Crabb in front

Discovery of the breezing passage in Y395

by Jason Moule

29 March - 2 April 2018

Present: Phil Fleming, Alan Green, Jason Moule, Kristin Moule

Around the start of March 2018 Phil rang and asked if I would like to go to Yagby in April. I hadn't been there for 15 years or so that would be fun. I told Phil that Kristin and I would probably go.

We arrived on the 29th at Cotterill's Cottage. On the 30th we went through East Deep Creek and Restoration Cave which both are still quite nicely decorated.

On the 31st Phil, Alan, Kristin and Jason went through Coppermine Cave to the gate and Tricketts Arch. Alan had a drone with a camera which gave great arial views of the area. We had a nice sunny walk down the river to the arch where we had a picnic overlooking the river - a beautiful spot.

On the 1st Phil, Alan and I surfaced trogged to North Deep Creek and replaced the padlock for National Parks. Phil said "lets have a look at West Deep Creek entrance to see if it is unblocked on the way back to the car". Jason said "lets go, sounds good".

When we got there we were met with a wall of blackberries. We had a look around the doline after bashing a path through them. Alan got his drone out and had a look around - lots of blackberries! We managed to knock enough blackberries down to find the Y6 Tag - it was blocked, full of gravel. We had a bit more of a look around the doline.

Phil and Alan were having a look around the rock pile area of Y396 while I had a look at the entrance to Y395 and noticed a good breeze going into the entrance! I thought there must be a substantial cave with that much air going into it. I said "hey Phil, there is a breeze going into this cave, there must be something substantial in there". Phil agreed. Maybe the main West Deep Creek Cave system - just hoping! We had a look around and found the Y395 tag.

We walked back to the track excited about the possibilities that the airflow could lead to. I said "We need to book another trip to have a look as soon as possible" What could be beneath the ground? Could it be the mythical master system?

We all headed home exited about what could be there in Y395.

Discovery of Y395 - the Main Cave

by Jason Moule

11-13 May 2018

Present: Phil Fleming, Edd Keudell, Jason Moule, Andrew Nosworthy, Charlotte Nosworthy

On the previous Easter trip, Jason found a breeze coming out of a tight squeeze in the entrance of Y395, but we did not have time to go into the cave.

I met Andrew and Charlotte at Tumut and travelled together to Cotterill's Cottage. As soon as we got to the top of the hill, after the dam, there was a good covering of snow on the ground. Charlotte was really exited, she had not seen snow like that before!. We found a nice parking area on the side of the road and Jason, Andrew and Charlotte ran around having snow fights like we were 15 again! We built snowmen and snowwomen, complete with an old tire for a waist belt.

We picked up the keys from the NP office and where the caves road joined the Snowy Mts Highway, there was about 60-70mm of snow, so we had more snow fights. It was a very

cold night. When the others arrived we chatted about what we might find. Could this be the main West Deep Creek Cave that everyone has been looking for the past 50 years?

We hopped up early Saturday morning all keen to go. We navigated through the thick scrub and blackberries from the East Deep Creek parking area. We were back at the entrance where we were on our last trip, but we had a permit so we could go in.

After Jason had found the squeeze again that was still breezing into the cave, tried as hard as he could, but did not fit! Andrew said "why don't we try the squeeze under here" and there was a squeeze directly below that looked like the gravel had been washed out in recent years. When we poked our head into the squeezes they joined up to the same passage on the other side. Andrew went in feet first and tried to get through but did not quite fit. Jason then had a really hard push, going in head first and with a lot of wriggling and grunting, just managed to get through. "Yee Haa!" Jason exclaimed with a lot of excitement "I'm through, I will have a quick look to see if the cave keeps going".

With adrenaline pumping, Jason had a quick look and the rock pile opened up and more passages were seen going through the rock pile. Jason and Andrew had a quick look at the rock pile beyond, climbed down the 7m drop and down some holes in the gravel floor at the end, then went back to the squeeze. We found no large bed rock passage, only rock pile with one bedrock wall.

The others then came through the squeeze and Edd just so happened to bring his surveying gear with him. His first trip with our club - just what we needed, a cave surveyor. We surveyed as much as we could, then headed out.

We navigated back to the cars, which took a little longer than it should because we didn't realise that Phil's compass was broken, so we had a side trip on the way.

We got back to the cottage in the dark. There was lots of talk about what we had found, and how big was it going to be. We all thought we better get another permit as soon as possible and keep exploring and mapping.

Discovery of the Snotty Slot and first pitch in Y395

by Jason Moule

1-3 June 2018

Present: Phil, Andrew, Edd, Jason, Kristin, Charlotte.

Andrew and Charlotte, Kristin and Jason drove up to Yagby on Friday morning and met at Cotterill's Cottage. After lunch we went through Coppermine cave to the gate - nice streamway!

When Jason woke up in the morning on Saturday he was not really healthy and stayed in bed sick for the day. The rest of the cavers went for a walk up the river to the stream sink. Late afternoon we all had a quick trip through *Old Inn* cave to straw haven and back out.



Looking down the Snotty Slot

On Sunday Jason was feeling a lot better so off we went to Y395, exited about what we could find. We all entered the cave and did some more surveying.

We then had to search for a way through the rock pile. Edd, Andrew, Charlotte and Phil went looking down further into the rockpile. Jason found a squeeze with an air flow going into it. Kristin waited at the start of the squeeze sitting on a rock, while Jason had a look through the squeeze. It went down a series of vertical chimneys, tight in places. I moved any rocks that could be easily

dislodged, so they didn't fall on me; there was quite a few of them. The passage kept going down. The sides were quite sharp, a lot of small sharp bits of rock sticking out everywhere to tear overalls and hands.

Suddenly the passage opened up to a horizontal bed-rock passage. It looked like an old streamway that you could walk through. I made it through the rock pile -Ye Haa! I was very exited and had the adrenaline pumping. I climbed down a couple of small drops until I came across a 14m pitch that opened up but I could not see a way on at the bottom. I was nearly jumping out of my skin, I was so exited.

I climbed and squeezed back up the sharp tight chimney to the patiently waiting Kristin. "I found the way on into a bedrock passage" I

exclaimed excitingly.

Edd and Andrew came back down with me and I took a 25mm tape. When we got to the pitch, I studied the sides for handholds and then tied the tape off to a good anchor and slowly climbed down using the handline. When I reached the bottom I walked carefully to the other side - about 6m but the passage closed up to a crack that you could not fit through. I thought there has to be a way on - the breeze is going into this shaft - it has to be going somewhere!



Jason climbing the Ups & Downs for the first time

I took a photo of looking up the wall - when I got home I enhanced the photo and lightened it - after that I could see a

passage heading off near the top of the shaft. I then slowly, carefully climbed back up using the handline - we need more climbing equipment.

We all exited the cave, climbing up the Snotty Slot. I destroyed my new overalls on the trip - shredded them through the Snotty Slot.

The Aven Climb Y395

by Jason Moule

5-8 July 2018

Present: Phil Fleming, Edd Keudell, Jason Moule, Kristin Moule, Andrew Nosworthy, Hossein Shargh

After the last trip, I enhanced and lightened the photo looking up the aven. I took the photo to work and studied it a lot, at smoko and nearly every lunch time. I studied the photo that much that the others at work said "If you look at the photo any harder you would actually be in it"

I was really exited to go back and see what was at the top of the climb. We talked about how we could climb up safely. In the photo there were several blades of rock, so we thought if we could put loops of tape around the blades of rock with a carabiner connected to the rope, I could do the climb being belayed from the top!.

Some light snow fell during the night and we headed to the cave on Friday morning. We took in the HCG scaling pole - a 20mm plastic electrical conduit in 1m lengths that fit together to lift the tape loops over the rock blades to belay from.

We entered the cave and squeezed into the rock pile. Andrew and Jason squeezed down through the Snotty Slot to the first pitch while Edd and Hossein looked for a way through the rock pile. Jason rigged the pitch then abseiled down, followed by Andrew. After reaching the bottom we walked about 5m to the base of the climb - it looked quite easy this time. We used the HCG scaling pole to place the loop of tape around the first bed rock blade and tested it - it was solid and then I proceeded to climb up to the the blade. I reused the HCG scaling pole and placed a loop of tape around another blade of rock further above, and tested it. I chimneyed up to the next blade getting closer to the top.

It got easier after that, just a scramble with a safety rope. I finally made it to the top and there was a passage that continued - enhancing the photo and studying it paid off! More unexplored passage! I was super exited, with butterflies in my stomach. I disconnected from the rope and walked about 6m then the passage broke out into the top of another nice aven, about 15m pitch back down. I went back and rigged the rope on the previous pitch so Andrew could come up. Andrew prusiked up. I then rigged the next pitch, a nice free hang, and abseiled down. There was a tight squeeze in the floor that I just fitted through which led to a tight, long and awkward T canyon. We called it T-Canyon because it has a horizontal slot with a stream canyon going down from the middle so it typically looks like a T shape. I squeezed down the T-Canyon for a while until I saw the first bit of formation. I stopped here and took a photo then headed back to tell the others the good news stopping about 6m before the Horseshoe Chamber.

When I got back to the pitch I heard Andrew talking to someone. Did the others decide to follow us down? I prusiked up to Andrew, who found a narrow slot that links to the rock pile. Edd and Hossein were on the other side of the slot and Edd said "We are getting soaked in here, water has started to come through the rock pile and the flow is increasing, we are heading back out before it gets too slippery". Andrew replied "well, it's nice and dry in here, I'm sitting at the top of a 15m pitch with a passage continuing at the bottom".

We then all headed out and talked about our new discoveries back at the caravan which was warm and cosy, and Kristin had a nice hot meal ready for us. We were all keen to go back down the next day and keep exploring.

Discovery of the Active Streamway and HCG Borehole

by Jason Moule

21 July 2018

Present: Jason Moule(TL), Edd Keudell, Andrew Nosworthy, Josh Small

We were all keen to head down Y395 again to continue exploring even in the middle of winter.

Josh Small joined our exploration and survey team for the first time. We rose early Saturday morning to a covering of snow, had breakfast then walked through the snow to enter the cave at about 9.00am.

Jason bought 100m of brand new 10.5mm Bluewater2+ and 25m of 25mm tube tape, various carabiners etc for rigging. Phil bought 30m of new rope, tape and various carabiners as well. It was a lot of gear to haul in with 2 packs for most. Jason re-rigged all the pitches with the new rope and new tape.

We abseiled into the Horseshoe Chamber and while Edd was surveying the chamber we found a clean-washed stream canyon directly below the abseil that led to the top of another 14m pitch. There is a larger passage that goes down at the end of Horseshoe Chamber, but it had pristine flowstone and went around a corner as it went down, so if we rigged it there would be a lot of rub points and would wreck the flowstone.

Jason rigged the pitch and Josh was the first one to abseil down. As Josh was abseiling down the nice shaft, I said "what does it do?" Josh replied "the walls of the shaft turns into a ceiling of a large chamber and it keeps going, it's big!" I had visions of a harbour tunnel size passage heading into the distance. I said to Josh "when you get down have a look around and see where it goes" Josh replied "I'm staying here and not moving until you get here, I'm not sure what's stable".

I abseiled down and all the boulders were covered with a thin layer of dark coloured mud. After landing on the boulders everywhere I stepped my boots took the dark coloured mud off the boulders to reveal a lighter coloured mud underneath, no footprints anywhere except ours. We had to be careful that the boulders were solid when we walked on them. We called this chamber Rockfall, because of the number of rocks and boulders that had fallen from the ceiling. The others came down and we started surveying, before we explored the chamber and all the passages. Edd said "survey as we go, no scooping!" which he ended up saying many times on the trips, so we waited until he surveyed one section before exploring the next, so then Edd got to do some exploring as well.



The Babbling Brook

At the end of the chamber we found an aven, and nearby we went down a muddy passage that continued down to the Babbling Brook. The muddy passage turned into a small squeeze and Edd did not want to get muddy, so Andrew slid down into it head first and I followed. The muddy squeeze got a little bigger then turned into a clean washed bedrock tube about 1.5m diameter with scalloping on the walls and floor with a little creek running through. It went for about 50m then sumped! We went back out and met the others. Edd started rabbiting around in the rock pile at the aven end of the chamber and found a way

through to a chamber, he said "it opens out into a larger chamber". After looking around the chamber we realised it was Wray's Room that we found on the previous trip!

While waiting for the others to prusik back up, I had a look around the chamber and saw half an old stream tube with scalloping on it up the wall of the chamber a little. I followed the remains of the tube then it turned and went through the wall of the chamber down low - the way on! I clambered down to the start and stuck my head in and could hear running water. I yelled to Edd and told him about the passage.

The passage was nearly full of sediment. I crawled through, then down the sediment bank at the other end into a large walk through old streamway, with a louder sound of water coming from one end. I yelled back to Edd "get the others this goes, I can hear a streamway!" The others were all ready at the top of the last pitch, and did not want to come back down. I said to Edd "you have to come through I think I found the main streamway". So we explored towards the noise. We turned a corner and there was some really good formation; the best in the cave so far. We found a way around it to avoid walking on it then found a round pure white 'flower', it looked like a 50mm round splash formation with petals on it. We continued on until we came to a climb down of about 4m and we could see water splashing. We found the active streamway with waterfalls, running down a clean washed streamway, but the passage had flood debris on the roof need to be

careful with weather. The streamway has at least the amount of water flowing down West Deep Creek on the surface. We then explored downstream. I like streamways, the sound of the water, and the splashing, brings the cave to life, and lots of action, gets the adrenaline going. We eventually got to a sump, after climbing down a little waterfall.

After going back to the crawl through to the rockfall chamber, I said to Edd "I wonder if theres a higher level passage that bypasses the sump", Edd said, "turn around and have a look at that borehole behind you" I turned around and sure enough there was a borehole! The passage is an old streamway about 2-3m high, 3-4m wide with great scalloping on the walls and ceiling! We were both very exited and walked down the passage for a couple of hundred metres, saying "Borehole" to each other like kids, this is what caving is about. We came to a junction; a passage to the right, one to the left, both had nice formation. The left hand alcove had long straws and a flowstone plate. The right hand passage had flowstone and a good shawl on the side. We explored the passage straight ahead and saw a room up ahead and thought about the others, so we headed back, so the others could come and experience walking into the next room for the first time with us. The unexplored room will have to wait for the next trip!

We headed out, the others had kept going up the ropes to the surface. We exited the cave at about 3.00am Sunday morning, in the cold, after a 18hr trip underground!

Finding Orange Barrier Reef and Biggest Room

by Jason Moule

11 August 2018

Present: Jason Moule(TL), Edd Keudell, Josh Small, Andrew Nosworthy

We surveyed Wray's Room, which we named in honour of Robert Wray, who was instrumental in pursuit of this cave's discovery.

I checked for leads down the large passage from Horseshoe Chamber to Rockfall Chamber, but there was nothing obvious.

We then went to Rockfall Chamber and the HCG Borehole, and found another 2 ways through, near the abseil into Rockfall Chamber. Andrew and I surveyed the active streamway while Josh and Edd surveyed the HCG Borehole up until the next unexplored room.

Josh found a muddy lead that required a handline that went down to a sump off HCG Borehole. We entered the room expecting to find a huge passage heading off it but there wasn't. We saw an obvious passage heading off about 3m above the floor. I climbed up and Andrew followed. After about 10m of passage there was formation on the floor, so we took our muddy boots off and walked across.

The passage opened up to a large room, my torch could hardly reach the other end and it looked like it would keep going! It had a good echo. We ended up calling this room the Biggerest Room for obvious reasons. Edd said they had found the way on, Josh had climbed a mud slope at the far end of the previous room, that we called Junction Room and the passage kept going, so Andrew and I climbed down and went with them to survey and explore. At the top of the mud slope, the floor is covered with mud water drip formation with a thin fragile calcite layer in places, so we were careful to tread in the same footprints so they would not be destroyed. There was a passage heading off back towards the HCG Borehole, but this was covered with thin calcite formation over mud drip holes and splash formation so we did not go up. Later I found it joins up with HCG Borehole.

We continued to survey the passage until we arrived at a room covered with fragile orange crystals that we called Orange Barrier Reef.



Orange Barrier Reef

At the Junction Room, we found two more passages that connected to Biggerest Room. We had a look around Biggerest Room and found a high level passage that appeared to head South.

We found a lower dry streamway and came to a small room and the passage continued through a small squeeze down a muddy slope. When we headed out I had a look around the Biggerest Room and found an alcove at the other end with some nice formation, we called Lion Tail Alcove as it has a nice column that looks like a lions tail, with crystals on the floor.

The cave is now 773m long and 105m deep.

Finding Red River Passage

by Jason Moule

25 August 2018

Present: Edd Keudell, Jason Moule(TL), Josh Small, Hossein Shargh, Andrew Nosworthy

After finding the Lion Tail Aven and HCG Borehole we started to think National parks would need a gate on this cave to stop pirate cavers accidentally damaging the cave formations, mud walls, false floors, mud splash formations etc. so we had a look for gate locations on the way in to the cave.

We surveyed the Biggerest Room then crawled down the dry streamway to find out what was ahead, into the unknown where no human has gone before! Edd and Jason surveyed the dry streamway while Andrew and Hossein went ahead to see what was there. When they returned Andrew said with lots of excitement "the passage keeps going and there are

more dry stream ways heading off left, right and straight ahead!" Then we were all full of excitement and headed on as a group, with Edd saying "survey as you go". This produced



Andrew on Heavens Staircase

a good 3d map, so we could see what the cave was doing and our progress after each trip.

We arrived at the Pyramid Room. On the other side of the room there was a nice dry streamway canyon. After a pleasant walk through the canyon the passage ended at the Calcite Raft Pool Room.

On the way out Andrew noticed a low passage and crawled into a mud floored passage with straws on the ceiling. This passage opened up with red crystals on the floor and flowstone on the walls and some pure white flowstone in the middle. Borehole! We completely de-trogged, put on clean shoes and gloves and carefully walked up this amazing passage. I climbed up a white flowstone wall on the right that we called Heavens Staircase and found the Angels Wing at the top.

The trips were about 17 - 20hrs underground now and we all slept very well after each trip.

Schitt Creek, without a paddle!

by Jason Moule

22 September 2018

Present: Edd Keudell, Jason Moule(TL), Josh Small, Andrew Nosworthy, Hossein Shargh

We went to Biggerest Room to check for leads and found a high level passage heading off the Southern end at ceiling height. There was a slippery mud wall to climb up to get to it. I tried to climb up but it was too risky, Hossein tried to climb as well. We came up with an idea, a human ladder! So Edd was at the bottom, Andrew climbed up Edd, laying on the mud wall, with his feet on Edd's shoulders. I climbed up Edd and Andrew and laid against the wall with my feet on Andrews shoulders, then Josh climbed up all of us and just reached the passage. We threw a tape up to him and he tied it off, then we followed. We explored these passages and found out they join up with the dry stream crawl.

We then headed to Schitt Creek to explore and survey. Josh climbed and crawled up a muddy passage heading up at the end of Schitt Creek, no one followed him; it did not look inviting. This was a very muddy old stream passage, with a rock pile, no way on, and no paddle! We took some photos, then headed out.

The cave is now 1.47km surveyed passage and 144m deep!

Exploring the Aven

by Josh Small

13 October 2018

Attendance: Jason Moule (TL), Philip Fleming, Edd Keudell, Andrew Nosworthy, Hossein Shargh, Josh Small

Jason and Edd were the first to arrive at the cottage Friday afternoon. Josh and Phil had planned to be there by early evening, but late running meetings and peak hour traffic mayhem had conspired against Phil so it was a little after 11pm by the time they turned up. Hossein as usual snuck in some time before dawn in his flash new HiLux.

Saturday morning was a bit slow going compared to the last few trips, no "underground by 9AM" this time. We took two cars to the head of the track due to the large party size and the amount of gear we were taking with us. One of the aims for this trip was to attempt to free climb the aven lead off Rockfall, so Josh was lugging a climbing rope and trad rack down too.

On reaching the Y395 entrance around 10:15, Jason and Phil headed in first to re-rig the first pitch - the rope having been removed for washing on the way out last time. With Phil not having been down the Snotty Slot or beyond previously, Jason was busy giving Phil plenty of advice and warnings - i.e. totally psyching Phil out!

While the rest of us were waiting at the entrance, there was a rustling in the bushes and who should emerge but Andrew.

Andrew hadn't initially planned on joining us for this trip, but closer to the date was considering a day trip, seeing as this was just going to be a short trip (by Y395 standards at least). He'd indicated that if he was coming, he'd meet us at the carpark but when he wasn't there even though we were running later than usual, we'd assumed he wasn't coming.

Hossein, Edd, Josh and Andrew caught up with Jason and Phil before the first pitch. Hossein took some great photos of the Ups & Downs while Andrew was going down one side and Phil up the other. A few squeezes at the bottom of the Ups & Downs were investigated, before continuing through to Rockfall for a bite to eat.

Phil - having entered the cave just before Andrew wandered down the hill, wasn't aware that he'd joined the party (even though they'd posed for photos together on opposite walls of the Ups & Downs) so was minding his own business, eating his lunch in Rockfall, watching the last of the party descend the last pitch into the chamber when suddenly a 'stranger' dropped down through the roof and said g'day. Of course Phil's first thought was "cave pirates! - we've been followed!"

Not quite the greeting Andrew had been expecting...

At this point the party split into two - Josh, Hossein and Andrew went off to assault the aven lead, while Jason, Edd and Phil went through the rockpile up into Wray's Room to look for a link to the top of the aven.

The aven climb didn't quite go to plan. What we remembered as a 6m aven with a decent crack running up one side and a promising lead at the top to the left looked a fair bit taller now - and although there was a crack, it was decidedly off width, and on the right hand wall. After some discussion we settled on the left hand wall as having the best potential, even though the rock didn't start until 2m off the floor.

After a crash course in belaying with a Sticht plate, Andrew belayed Josh while Hossein spotted. Gear placement was pretty awful, the rock was incredibly sharp and brittle.

As Josh was about to place his second cam, he started to slip so lunged to get a hand hold - twisting his shoulder as he fell.

The cam held fast - as did Andrew, even when much to his surprise he was pulled into the air. We probably should have warned him about that!

So with Josh's climbing over for the day, Hossein took over.

After progressing a few metres further up the wall, while feeling around for the next gear placement, Hossein nudged an outcrop of rock and immediately a chunk the size of a football toppled off. With cat-like reflexes he somehow managed to catch it mid-air with his left hand, much to the appreciation of Josh and Andrew below.

After an hour of not making much progress and degrading rock quality, Hossein had had enough so came down off the wall when a familiar voice was heard from high above -"g'day down there fellas!" followed by Jason's head poking out through a hole in the roof of Rockfall. While searching for a connection to the top of the aven lead from Wray's Room, they'd found a passage that connected back into the roof of Rockfall, just a couple of metres away from the top of the aven. After being told how close they were, Jason and Edd went back and searched for another passage that might lead in the right direction but nothing was found. Andrew, Hossein and Josh headed up to Wray's Room to re-join the others. Phil was there, but Jason and Edd had gone off exploring further into the rockpile so the group waited for their return, while Andrew and Hossein filled in time by exploring some of the leads off Wray's Room. Jason and Edd eventually returned with news of their find - a tall rockpile blowing a gale, and a very well decorated 'white river'.

As it was already 1730 and Andrew had to get away early, he started heading out along with Phil and a slightly damaged Josh, while Edd, Jason and Hossein had a bit more of a look at the new leads before heading out themselves.

The trip out was very slow going for the 'advance party', taking almost 6 hours to reach the surface. Andrew had gone ahead, then after waiting almost an hour came back in to see what the hold up was, and gave a hand with hauling the packs. Hossein caught up at the bottom of the Snotty Slot, with Edd and Jason not too far behind.

Andrew was already running very late, so took off up the hill to the cars as soon as the last of the group had exited the cave.

On returning to the cottage around 0100 Sunday morning (which was a little earlier than usual, but not by much) meals were prepared and consumed along with a glass or two of red, before turning in for the night.

Finding Snowy River

by Edd Keudell and Josh Small

2-3 November 2018

Present: Edd Keudell, Jason Moule(TL), Josh Small, Andrew Nosworthy

Our goals for this weekend were to finish the survey of the entrance and area above the Snotty Slot, explore and survey the Snowy River, follow the breeze up through the Breakdown Mountain, and install the gate in the T canyon.



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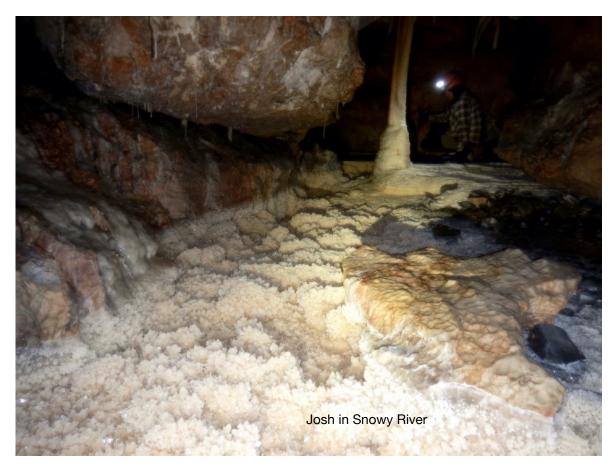
A few other leads were investigated including an impressive looking aven that choked up after 1.5m, and a tight squeeze leading to the top of a small pitch that Jason suspected lead to a tight crawl off the bottom of the Ups and Downs - bypassing the Snotty Slot and the first pitch.

Unfortunately this path turned out to be even less inviting than the Snotty Slot and would be almost impassable whenever water was flowing in.

Edd and Andrew made their way down to the rockpile off Wray's Room to start surveying, while Jason and Josh transported the gate and associated tools, equipment and PPE down into the T canyon and got to work on the installation.

On the way through the Ups and Downs, Jason made a quick detour to retrieve the stick he'd dropped down a pitch the day before, confirming that the Snotty Slot bypass route does in fact bypass the Snotty Slot.

We also continued exploration and survey of the breakdown area west of Wray's Room and the newly discovered Borehole. The connection to the new area is now named Yankee Extension, Breakdown Mountain, Echo Aven and Snowy River.



Elsewhere in the cave the room between the Pyramid Room and the passage going to the sump is named Pasargadae, and White Buddha is noted along the Sump passage.

Interesting to note is the blowing air lead in Breakdown Mountain is at the same height as the high point Jason climbed to the West, and the highest point in Wray's Room.

Finally, the stats, we are just shy of 2km at 1967 meters surveyed length and with the survey of the entrance area the depth has increased to 144 meters!

Red River

by Jason Moule

18 November 2018

Present: Edd Keudell, Jason Moule(TL), Josh Small, Andrew Nosworthy, Hossein Shargh

Josh and Edd surveyed some passages from Rockfall Chamber to HCG Borehole, the third passage between Biggerest Room and Orange Barrier Reef, the upstream area of the active streamway, a muddy passage that led to a sump off the HCG Borehole and continued to explore and survey the passages beyond the Orange Barrier Reef, by completely de-trogging and putting on clean shoes and gloves.

Meanwhile, Andrew, Hossein and I went to explore and survey the Red River Passage. We de-trogged and put on clean shoes, gloves and a clean pack so we don't dirty pristine formation. We worked our way along the passage, sometimes bridging the red crystal floor with our feet, sometimes with our hands on one side and feet on the other to span across the crystals and dodging straws with our heads, and surveying as well, with some quite long shots up the straight sections. We had some lunch in Red River, then explored the second passage on the left heading into Red River. This passage has a red crystal floor as well. We walked for 20m then came to a flowstone waterfall about 5m high, we climbed up to the top, through a narrower section, then it opened out into an amazing room! The room is about 7m high, 4m wide, 10m long with red rimstone floor and red flowstone on some walls. The passage ended in a flowstone choke. The passage heading straight up above ended in flowstone as well.

We continued up Red River, the floor changed to clean washed gravel, then back to white lace calcite on the floor. We approached a dark room with mud on the walls and far floor, turned the corner and there was a pure white formation gleaming back at us! it looked like a ghost floating in the dark so we called it Ghost Room. We surveyed it then headed out and 20m from Ghost Room found some helictites on the left wall.

Jennings Tributary

by Jason Moule

15 December 2018

Present: Edd Keudell, Jason Moule(TL), Josh Small, Hannah Small

We went to explore and survey Jennings Tributary, but when we got to the junction of the sump passage and Jennings Tributary, it was full of water. Yagby had about 60mm of rain in the 4 days beforehand, so don't go up here if there is rain forecast! We went up Jennings Tributary and it sumped before we got to the unexplored section, so we pushed and surveyed some side passages.

Hannah crawled up a very muddy side passage at the start of Pasargadae and ended up at Schitt Creek!

We finished the survey to Calcite Pool Room, then headed out, the trip was about 14hrs, a little shorter then normal.

Above Ink Well

by Jason Moule

12 January 2019

Present: Jason Moule(TL), Josh Small, Hannah Small, Hossein Shargh

We found some skeletons near the start of Snowy River then went to Inkwell Chamber. We climbed up to survey the passage above Inkwell Chamber. Hossein hurt his leg and had a painful trip out, a large bruise. I tried to climb the aven high above the Inkwell but the rock was very crumbly and loose, so we surveyed the high room, then headed out. The trip was about 16hrs.

Passage Behind Mud Wall

by Jason Moule

26 January 2019

Present: Edd Keudell, Jason Moule(TL), Josh Small, Hossein Shargh, Andrew Nosworthy

Edd pointed out a passage heading up near the start of Snowy River. I climbed and squeezed up it and found a room with a thin mud wall at one end. We were on the other side of the well layered old thin mud wall that we found on a previous trip! We did not break it to explore the room beyond when we discovered it, because we thought it would be good for people to study in the future, and we found a way around it. Josh and I explored and surveyed this passage that ended in a formation choke, and probably joins the first passage to the left in Snowy River.

Edd, Hossein and Andrew explored and surveyed some new passage in Yankeeville.

This was a quick trip at 12hrs. This was the last trip for Edd before he headed back to the USA, so we headed out and had some refreshments around the campfire.

Red River side passages

by Jason Moule

19 April 2019

Present: Jason Moule(TL), Hossein Shargh, Josh Small, Hannah Small

We surveyed the first and second side passages on the left of Red River going in. As we surveyed the second side passage we passed the 3km of surveyed passage mark. There is a nice, decorated room at the junction of a dry streamway and Red River with a nice shawl on the ceiling, above a flowstone floor and wall the Shawl Room. We fully explored and surveyed past Ghost Room. We found a muddy squeeze that went into a small room. On the way out Hannah and I explored and surveyed a dry streamway on the left heading out, this narrowed down until it was impassable, directly on the other side of Red River from this passage I went up another lead that went about 10m, then narrowed down to impassable passage, there were lots of helictites at the end. There are no more leads to look at in this passage, so there is no need for us to enter again.

Snowy River side passages

by Jason Moule

24 August 2019

Present: Jason Moule(TL), Josh Small, Hannah Small, Hossein Shargh, Andrew Nosworthy

I took a video on the way in on this trip, showing how "interesting" it is getting in.

We went to Ink Well via Boulder Mountain and the Echo Aven passage, this avoids trogging through pristine formation. About 8m past the squeeze to Ink Well, I squeezed down a tight vertical 5.5m deep crack to a clean washed cobble stone floored dry streamway 0.6m wide x 0.5m high. This went for 13m then got too tight. We surveyed it then went to Snowy River, de-trogged then went to the first hole in the floor.

I rigged a handline down and Andrew climbed down and I said "what's down there?" Andrew said "I can't get to the bottom but it keeps going". So I climbed down a tricky climb to the bottom and found a passage with a mud floor, looks like a silt filled old tube, blocked at either end. We surveyed it and went to the next hole in the floor, which was down a slot with flowstone around it, going down. This was a dead end as well, blocked by flowstone. We went to the third hole in the floor and I rigged a tape about 8m down a mud lined wall, Hannah came down as well.

When we got to the bottom we found a white crystal stream in the middle of mudbanks either side. Upstream went for 15m and ended in a sump with water coming out, Hannah explored downstream and it went into a narrow stream canyon that after 7m got too tight to proceed.

Hossein and Andrew checked out a climb in the ceiling. It is hard to explore these type of passages while keeping them clean, we de-trogged at the start of Snowy River, taking two sets of shoes and gloves with us, then we put dirty boots and gloves on to go down the tape, changed again to clean shoes and gloves to walk up the white flowstone stream and survey, time consuming but necessary. We did this in Red River and other parts of the cave as well, taking multiple sets of clothes to protect the cave. We tried our best not to damage or dirty any of the pristine formation. There are no more leads in Snowy River. We surveyed the passage and headed out.

Diarrhoea Room

by Jason Moule

5 October 2019

Present: Edd Keudell, Jason Moule(TL), Phil Fleming, Josh Small, Andrew Nosworthy Edd came all the way from the USA to come caving with us!

Phil had a look around the entrance rock pile for a couple of hours then headed back. Josh and Edd surveyed down the active streamway while Jason and Andrew hauled the packs down to the room just before the first water crawl. We had lunch in the room, then climbed up a very muddy rock pile to a low muddy horizontal passage about 12m above the streamway. We found a small green coloured formation about 20mm dia and 10mm high.

Josh and Jason rigged a rope to cross a 7m pit. I climbed across the pit to the passage on the other side and found it went about 5m then choked up with mud. I abseiled down the pit to an unstable boulder choke, with the sound of the stream coming through. Andrew and Edd surveyed.

We headed back to HCG Borehole. Edd was starting to feel jet lag, so Edd and Josh headed out.

Andrew and I surveyed the Babbling Brook - about 70m, then headed out, arriving back at Cotterill's Cottage at 1.00am Sunday.

On Monday and Tuesday Edd and I did some "armchair caving". We enhanced and lightened the photos to see what is up the passages. We found that Snowy River definitely ends, the formation aven off the side passage of Snowy River, where the column is in the middle definitely ends, the mud passage at Heavens Staircase in Red River where there are 3m long straws ends, the helictite passage off the Shawl Room in Red River ends, the passage above the final sump looks too tight. Good fun looking at photos and no damage done exploring the passages.

We all went to the presentation on Y395 to other clubs on Tuesday night then Edd went to Phil's and flew back home on Wednesday.

Summary

This is a unique and fragile cave that needs the highest protection, and for the safety of cavers. We will finish the cave survey, finish the map, then determine a management plan - no go areas, track marking etc with KSRG and NP. This cave should be used for scientific studies only and as a reference cave. There is good formation in the cave but there is just as good formation in other caves at Yarrangobilly.



Lunch in HCG borehole Left to Right Josh Small, Hossein Shargh, Edd Keudell, Jason Moule, Andrew Nosworthy

Naming of Places in the Cave

by Edd Keudell

Snotty Slot named by Jason because he ripped his overalls getting through it and they were only good for blowing noses on afterwards (pre COVID-19 of course).

Ups & Downs named by Edd because of the series of rope pitches (depending on which direction in the cave you are going) being of relatively consistent distance. 15 meters for pitches and 7 meters for horizontal traverses. The series was also referred to as the Up & Overs.

Under Y6 named by Edd because the NPWS told us even though the water was most likely and almost certainly coming through the old Y6 entrance it couldn't be named West Deep Creek Cave. We had to use the name given by Geoff McDonnell who agreed he didn't care for the name either. Phil also provided a copy of the old Y6 map that I over layered on our line plot and could show we had broken through to known cave and then into unexplored passage.

Vocal Tube named by Edd because of the conversation Andrew and Edd had through a small arm-sized fissure between Y6 and the last pitch of the Ups & Downs. It is not labelled on the map.

T-Canyon named by Edd and Jason, but we all agreed the cross section shape represented a lower-case "T" shape.

Horseshoe Chamber named by Jason because of the shape of the room as it curved around to connect with Rockfall.

Wray's Room named by Jason and Edd. It was originally called the Big Room, but I thought there were many people who had tried finding this elusive cave and some credit should be given to them. I remembered Jason talking about Robert and suggested we name the room after him.

Rockfall named by Edd. I was having a James Bond influence that day and suggested we call it the given name because whatever we referred to it as seemed to cause confusion.

Echo Aven named by Andrew Nosworthy.

Boulder Mountain named by Edd because of the vast amount of breakdown in the room. This is the tallest room in the cave as at some points you can look down approximately 50 meters towards Snowy River.

Snowy River named by Edd and Jason because of its very white colour of the calcite formations and flowstone and also given it an Australian theme as with the Orange Barrier Reef.

Ink Well Chamber named by Jason, Andrew, and Edd because of a small scoured hole in a boulder near a survey station that resembled an ink well pot for desk tops. The named was shortened from Surveyor's Ink Well.

Yankeeville named by Edd. This is the last named room in the cave and until then I had been following an Australian naming theme and decided I should, at least name something to show an

American had been involved in the great exploration. It is at the far western reach of the cave and an effort to access.

Babbling Brook named by Edd because of how Jason described the small stream that flowed in it. It was also referred to as the Bubbling Brook.

HCG Borehole named by Jason and Edd because we had just found the way on to more of the cave and we wanted to name something to show it was the club that had found and mapped the cave. Borehole is a relative term and typically means a larger size of passage, much like Railroad Tunnel is used in other Australian caves. After the Snotty Slot and the T-Canyon any passage we could stand upright in was considered borehole.

Active Streamway named by Jason and Edd because of its obvious nature versus an old dry stream passage.

Junction Room It is not labelled on the map, but was named by Jason, Andrew, Hossein, Edd and Josh. Who exactly came up with the name is unclear but we all referred to the room by this name because of the junction between the Biggerest Room, the passage to Orange Barrier Reef and the HCG Borehole.

Biggerest Room named by Josh and Edd because of our joking around about Wray's Room having first been called the Big Room and each subsequent room found being bigger than the last. Thus, this room was the Biggerest Room for being bigger and the biggest.

Orange Barrier Reef named by Andrew and Jason. Originally it was called Orange Brick Road by Andrew and Jason in August 2018. Charlotte came up with the name Orange Barrier Reef because after seeing the photos she said it looked like the coral on the Great Barrier Reef. It represented the obstacle to continuing exploration of the passage and for its orange crystal floors along with the start of the Australian landmark theme used later for Snowy River.

Dry Stream Crawl named by Edd because of it being old stream bed with melon sized cobbles, and to discern it from the Active Streamway during discussions.

Fracture Zone named by Jason because of the dramatic change of characteristics of the passage from a stream bed to a what seemed like a fracture or fissure dissecting the passage before returning to its previous dry stream bedding.

Pyramid Room named by Edd because of its rough resemblance to a rectangular pyramid. It is the junction to the passage leading to Red River, Calcite Pool Room, Schitt Creek and Pasargadae.

Schitt Creek named by Jason, Edd, and Josh because of Josh pursuing an upper lead that was very muddy and slippery. He had exclaimed about the quality of the mud and not having any good method of coming back down the slope. Edd adapted the spelling so the name would not be of a vulgar nature, but the meaning remained.

Pasargadae named by Hossein because he had found the room and hadn't really named anything in the cave yet. It was a good sized room and lead to Jennings Tributary and the lower sumps.

Small Crawl named by Edd because of the constricted nature of the passage. It was Hannah's first real virgin passage to explore. By sheer coincidence it also happened to be her last name.

Jennings Tributary named by Edd because Joe Jennings had written many articles along with Andy Spate regarding the hydrology of the Yarrangobilly karst. It seemed fitting to dedicate a passage that seemed to play a prominent part in the cave's hydrology.

September 21, 2018 Sump named by Edd because is was the lowest point in the cave at the time and pretty much the end of the cave in terms of linear distance.

December 15, 2018 Sump named by Edd because after significant rainfall over the previous few days, the lower sump had moved nearly to Jennings Tributary. Hannah and Josh were the first to find the "new" sump.

Calcite Pool Room named by Jason because of the calcite rafts on the water pools in the room. **Red River** named by Andrew and Jason because of its red crystal floors and pools of water.

Ghost Room named by Jason, Andrew and Hossein because of a lone white calcite formation shaped like a ghost in a very muddy room.

Heavens Staircase and **Angels Wing** named by Jason, because it is a pure white flowstone going up, over the top of mud which is out to the sides as well, with a small well decorated room at the top with a shawl that looks like half an angels wing.

Lions Tail Alcove named by Jason because the main column in the decorated Alcove resembles a lions tail.