NZSS events 2
Exploration news 2
NZSS Council 3
Queen’s Birthday Meet 4
Obituary – Kerry-Jayne Wilson 4
Cave ecology 5
Cave conservation 7
Cave Search & Rescue 8

TRIP REPORTS
Te Ana Kea, Mount Owen 9
Bulmer Cavern, Mount Owen 12
Mangawhitikau, Waitomo 13

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Photo: Eugene Yeo.

New Zealand Speleological Society, Inc
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caving body of New Zealand, established to further the exploration
and documentation of caves in New Zealand, and to promote their
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NZSS – New Zealand’s national caving body
NZSS events calendar

North Island SAREX, Waitomo 6th August
This one-day rescue exercise will be held at Waitomo. The exercise will operate entirely underground and aim to test a wide range of skills.

South Island SAREX, Tākaka Hill, 1st October
This is a one-day exercise in Corkscrew Cave on Tākaka Hill, with a focus on vertical rescue skills.

NZSS Annual General Meeting, 21-24 October
The NZSS AGM will be held at Waitomo over Labour weekend, 21-24 October, jointly hosted by ASG and HTG.

Sump exercise, Tākaka Valley 13-15 January 23
A sump rescue exercise will be held in the East Tākaka area to further develop sump rescue capability in New Zealand.

Deep Cave SAREX, Bulmer Cavern 10-12 March 23
The postponed Deep Cave SAREX has been rescheduled for next year, and will be held at Bulmer Cavern on Mount Owen.

ACKMA conference, Tasman, 21-26th May 2023
The annual conference of the Australasian Cave and Karst Management Association will be held in Golden Bay in the Tasman Region in May next year. NZSS is a member of ACKMA, and the conference usually comes to New Zealand every third year.

Exploration news

TE ANA KEA, MOUNT OWEN
This new cave on Mt Owen is above Bulmer Lake on the western side of the cirque, near the Rhapsody entrance to Bohemia Cave. The cave was discovered by Bruce Clulow, Gavin Holden, Kieran McKay, and Marcus Thomas, and pushed at the end of the summer Mount Owen expedition.

After several days exploring along a series of pitches, rifts, and climbs the cave is 180 metres deep and 800 metres long. It is now close to the upstream end of Bohemia Cave, and seems very likely to connect.

See the trip report later in this issue.

MIDDLE CAVE, TĀKAKA HILL
This cave was connected to Hawkes Cave by Michael Brewer and Peter McNab, digging from Hawkes Cave. In Middle Cave itself there have been numerous attempts to connect with Middle Earth Cave, which is thought to be only about 40 metres away after recent exploration.

ZEPHYRUS CAVE, MOUNT ARTHUR
This resurgence cave on the west side of Mt Arthur was found by Chris Whiting and Neil Green earlier in the year. They initially explored with minimal equipment about 50 metres into the cave, before progress stopped at a waterfall.

Rigging Zephyrus pitch-head

Chris returned for a long one-day push a week later with Kieran McKay to climb the waterfall, and a later trip with Gregory Young also, which led to a substantial upper level after 30 metres of climbing. Currently the cave is about 500 metres long, and has reached a height of 88 metres above the entrance.

MIDDLE EARTH CAVE, TĀKAKA HILL
Exploration continues in various dark corners of the cave. One recent initiative has been a climbing project in a small side-passage off the Inception Series.

Much further down the cave Kieran McKay, supported by porters Gregory Young and Chris Whiting, made a three-day trip to dive a sump at the bottom of the cave, carrying heavy loads right through the cave. Kieran descended a six-metre pitch at the end of the Silent Streamway, directly into the “sump” pool; however it proved to be a blind pool with no exit passage.

WAITUNANUI CAVE, CHARLESTON
In February Kieran McKay explored this cave below the Nile River, to a length of 350 metres and depth of 30 metres. Strong currents impeded the diving, and the cave continues in open passage.

CAIRNS CATACOMBS, PUNAKAIKI
In March Kieran McKay, supported by Chris Whiting, dived the downstream sump and explored 150m of shallow passage in good visibility.

FREEDOM ROAD, PUNAKAIKI
Kieran McKay dived this resurgence cave in Dilemma Creek, penetrating about 200 metres of new passage on the first trip. Bruce Clulow later dived through three more sumps, adding a further 300 metres. Then Kieran returned and pushed further on again. The cave is currently about 600 metres long, and continuing.
CAVE CREEK SOUTH
In December Kieran McKay dived the sump linking Cave Creek South and Myopia Cave to look for a hypothesised passage that could lead into the Bullock Creek aquifer. The dive was very successful with a large passage found just as predicted. Subsequent dives by Kieran, Bruce Clulow, and later Peter Taw, explored a number of leads in the new passage, to a depth of -35m.

CAPRICORN CAVE, CHARLESTON
This obscure stream/rift cave near Golf Course Cave was rediscovered by a group from CCG and surveyed to its terminus. The length is about 300 metres.

CREVICE GULLY CAVE, CHARLESTON
This little known cave on the north side of the Nile River is being explored by a group of young cavers from Christchurch led by Johnny Willis. About 1700 metres has been surveyed so far, with considerably more to do.

NZSS Council

Conservation & Access Trust
The NZSS Conservation and Access Trust is operating, with founding trustees Deirdre Nagle (chair), John Patterson, Alice Shanks, and Martin Grinsted.

The trust intends to look at possible land purchases of land containing caves, especially where a cave is of national importance, or access has been problematic.

Membership
Membership is lower than last year at 353, which is similar to 2020. Last year’s membership was higher than usual because, with membership fees waived for the year, there was no loss of members.

Search & Rescue
One-day North Island and South Island SAREXs will be held in the second half of the year. There will be a Deep Cave Sarex on Mt Owen at Bulmer Cavern next year. These are national exercises which are held every three years, to test the capability for a major rescue in a deep cave.

Publications
NZS Bulletin 221 is ready to send to the printer, and should be with members in a few weeks.

Bulletin 220, issued in January, marks the completion of Volume 11 of the Bulletin. This volume has already been indexed by Mike Rodgers.

Research
Anna Stewart organised a cave biodiversity at Waitomo over the Matariki long weekend. This resulted in lots of bugs being found (see Anna’s report later this issue).

Conservation
Cleaning and conservation work has been completed in Kuratahi Cave, and a protocol agreed with the owners. Anna has made contact with the Tākaka Hill biodiversity group, and has proposed a biodiversity survey for some of the accessible caves there.

Queen’s Birthday meet
CHARLESTON, 3-6 JUNE 2022
The annual Queen’s Birthday weekend meet at Charleston has been running for over 30 years, having started in the early 1990s. Since 1993 CCG’s long-time event organiser, Alice Shanks, has organised a succession of highly successful events which have been attended by 60 to 120 people.

This year’s event was based as usual at the Charleston Cave Base, 1.2 km from Charleston on the road up the Nile Valley.

Hanna Rice and Sarah Worthington, Hole in the Floor Cave

There was a wide range of caves visited. The Metro / Te Ananui and Golf Course Cave were the stand-outs for popularity, with four parties totalling over 30 people vying for space in the narrow rifts of Golf Course on the Saturday. Multiple parties visited The Metro over the three days, with both “tourist” and “off-track” trips occurring.
Other caves visited were Mah-jong, Hole in the Floor, Babylon, Name Later, Te Tahi, Hollywood, Wall Street, Black Widow, Te Ana Puta, and probably others. Name Later was rerigged and a track to the entrances cut and marked.

There was a total of 76 people present during the meet, including about 10 children. This year most were from Christchurch, with a few from Dunedin, Motueka, Greymouth, and Westport, although one person made the journey from Brisbane.

The weather was uniformly warm and pleasant, with what rain there was falling only at night, so there was no excuse not to go caving.

Obituary

KERRY-JAYNE WILSON, 1949-2022

From Stuff, Wikipedia, and Mary Trayes

Kerry-Jayne Wilson died on 29th March 2022 at the age of 73 in Buller Hospital, after being unwell for some time.

Kerry-Jayne, then known as Graham, was the first president of CCG, following its formation in 1968. She was prominent in early exploration in the Punakaiki area, particularly the discovery and exploration of Xanadu Cave in 1969. She gender transitioned in the late 1980s, when this was a less common and often misunderstood process.
Cave ecology

MATARIKI BIOSPELEOLOGICAL WORKSHOP

Anna Stewart, Research & Conservation Co-ordinator

Firstly a big thanks to everyone who could join me for the Matariki long weekend at ASG hut. It was lots of fun to catch up and chat about cave critters.

Driving up with Gavin Holden from Wellington on Thursday, we planned on collecting some groceries from Te Kūiti. This was all going well, until as I was pushing the trolley around the supermarket the power cut out! It’s the first time I have ever had to walk out of a supermarket and leave the trolley full of groceries behind. ASG was also in the dark when we arrived, but Dee and Jonathan had lit the fire, so it was warm and cosy to sit and have a beer and a chat.

The harvestman F. photophagia Photo: Erin Powell

Friday morning the power was back on and everything was back to normal. In the afternoon Jonathan, Gavin and I headed over to Max’s Cave for a quick look.

This is a lovely little cave on the bushline, and it had a few of the little harvestman Forsteropsalis photophagia on the walls, along with the normal wētā and glowworms. F. photophagia even has eyes adapted to pick up the light from a glowworm.

Miriam Noble looking for freshwater snails Photo: Sue Cade.

Springtails in a cave pool. Photo: Pete Baxter

The evening was spent going over the plan for the weekend and background information on cave animals and where we might see them in the caves.

It was great to have Pete and Libby Chandler join us, as Waipuna Cave was going to be our first cave “bio-blitz” on Saturday. I was really excited to have a look in this cave, as many early cave animal discoveries were made in this karst, especially by Brenda May in the 1950s and 1960s.

Jonathan Davies, Pete Baxter, and Cathy Haddock with springtails in a small pool. Photo: Thaddeus Finch
Pete kindly took us to the walk-in tomo entrance and we split into two groups, although we were really only in the first 100 metres or so of the cave for the three hours we were there. It was a great chance to ‘get an eye in’ and practising visual searching along the cave walls, under rocks and branches washed in, and in cave pools.

Along with recording cave animals, we also recorded their behaviour, as a really useful tool in understanding cave ecology and food webs. For example, a tiny spider was feeding on a juvenile harvestman. There’s not a lot of food in caves, mainly what’s just washed in, so it’s a very competitive world.

It was great to even see a variety of species within a group, such as several different types of millipede using the cave. Then it was time to head back to the hut and enjoy an evening of photo sharing and relaxing.

I wasn’t holding out too much hope, as over winter, as most cave critters spend most of their time in the mesocaverns, the large people-size areas being too dry for them. Over summer when the humidity is high again, they come back out. I was to be proved wrong! There was a surprising amount of life just in the entrance, twilight zone, and even dark zone of the small area of the cave we investigated.

Some amazing finds were made, such as a cave beetle and perhaps even cave beetle larvae. The only picture I had of one previously was recorded by Brenda May. Also, tiny springtails were found in the cave - they remind me a little of Teletubbies. The family is commonly known as plump springtails, and very small, just a few millimetres long.

Sunday morning included a quick visit to another cave, this one with fast flowing water, and some really great little short legged harvestmen.

I am looking forward to finding out more about what we saw and photographed. A big thanks to Kevin Jose for helping us over the weekend and Pete Chandler and Ben Stubbs for giving us access to their caves.

Also, thanks to Miriam Noble for creating awesome designs we can use at the NZSS AGM in October.

If interested in NZ cave biodiversity, feel free to contact me: Anna Stewart, NZSS Conservation & Research Co-ordinator, nzss-conservaton@caves.org.nz
Cave conservation

WEST COAST STEWARDSHIP LAND REVIEW

The Government has announced a review of the conservation land classified as “stewardship land” and under the administration of the Department of Conservation. This is over two million hectares of land that was allocated to DOC on its formation in 1987 without any formal conservation classification.

All the stewardship land in New Zealand will be reviewed, starting with the West Coast, Nelson, and Marlborough. There are 504 lots of stewardship land on the West Coast. North of Greymouth there are a number of areas of karst, most of which contain caves.

A DOC group has been working on reclassifying this land since November 2021, and has prepared a draft recommendation. DOC is now seeking submissions on the draft.

NZSS is preparing a submission on the karst areas that are included in the draft. Most of these are in the area around Paparoa National Park, and could be added to the park to improve the protection of the karst and caves. In particular the Charleston Conservation Area is an obvious addition to Paparoa National Park.

CRAZY PAVING CAVE TO CLOSE FOR ONE YEAR

Crazy Paving Cave in the Ōpārara Basin, north of Karamea on the West Coast, is a short tourist cave accessible by a two-minute walk along a formed track. The cave is part of the habitat for the rare endemic Nelson cave spider, Spelungula cavernicola.

As well as the cave spiders, reportedly the largest in New Zealand with a leg span up to 130 mm, the cave is known for the mud crack features which give the cave its name.

These spiders are found only in the Karamea area and in Golden Bay.

ŌPĀRARA TRACK WORK CONTINUES

Also in the Ōpārara Basin, work is continuing on the upgrade of the tourist track to the Ōpārara Arch – one of the three huge arches in the area. The Ōpārara River passes through the 200 metre-long arch.
NZSS has a role on the advisory group and has questioned the environmental consequences of the redevelopment, and the suitability of the winding gravel access road for increased numbers of vehicles.

INTERNATIONAL CAVE PROTECTION INITIATIVE

As part of the International Year of Caves and Karst the UIS Cave and Karst Protection Commission has set up a worldwide census on the protection status of caves and karst. The census will be a basic assessment of government regulations protecting caves and karst at various levels of government.

A survey is available at:
https://forms.gle/cgvCb2kNKejpFF2x7

In New Zealand karst is not recognised as having any special status, and the level of protection depends on the status of the land, ranging from the highest protection in a Special Scientific Area (as at Honeycomb Hill) to limited protection on private land.

Cave search and rescue

NORTH ISLAND SAREX, WAITOMO

There will be a cave rescue SAREX in Waitomo on 6th August.

Based on feedback from last year’s event the CaveSAR team have decided to run a different format from previous years. The aim will be to have a realistic exercise controlled from underground by a compact team. The exercise will occupy all participants and they will be able to test themselves in a range of roles within their comfort zone.

The exercise will run from 8 am to 4 pm, starting from the HTG hut. A meal and debrief will be held in the early evening at the hut.

The cave for the exercise will be Gardner’s Gut. Depending on numbers, rescuers will operate in two stretcher groups of 15-20, at one or more locations in Gardner’s Gut.

The route through the cave to the rescue site may involve SRT for those with this capability. The focus will be on patient care and transport using the new stretchers, with some lowering and hauling as well. The various roles such as underground controller, stretcher controller, and patient will be changed regularly to give as much experience as possible in various roles.

There may be other aspects such as medical evaluation, the Cave-Link communication system, and managing a “hotspot”. Contact Jonathan Davies or Murray Wilson.

SOUTH ISLAND SAREX, TĀKAKA HILL

There will be a vertical Cave SAREX at Corkscrew Cave, Tākaka Hill, on 1st October. Corkscrew is a 200 metre-deep cave near Harwood Hole with many small pitches, so participants will need to be fully competent in SRT.

There may also be some other modules to focus on stretcher handling and communications in other caves nearby. This exercise will be open to participants from other regions.

DEEP CAVE SAREX, MOUNT OWEN

The National Deep Cave Sarex which was due to be held in 2022 will now be held in 2023, from 10-12 March.

The location for the exercise is Bulmer Cavern. Participants in this exercise will need to be highly experienced vertical cavers.

SUMP RESCUE TRAINING, EAST TĀKAKA

There will be a sump training exercise in the Tākaka Valley from 13-15th January 2023. Further details will be available nearer the time.
Trip reports

TE ANA KEA, MOUNT OWEN

By Kieran McKay

I don’t know why we do it really. I used to think the motivation was the old cliche of “going where no one had every been before”. I think these days for me personally it’s more curiosity that draws me onwards: where does the wind come from or go to? Where does the water go?

As I ease myself over the edge of the pitch my foot holds, made up of unconsolidated mush breakaway into the darkness. Everything we touch falls to pieces. There was one big piece of mushy chert in our way and I gave it a kick and it fell off the wall, revealing some nice solid blue marble. With a single bolt in Troy deemed the pitch safe and abseiled to the bottom in a shower of debris dislodged by the rope. Gavin Holden and I watched as Troy rigged a second pitch and disappeared. Troy was off doing what he does best, grovelling in the small shit, while Gav and I waited. We were in a largish chamber and the way on was blocked by a huge rock collapse. Having seen many of these I had my doubts as to whether we would get any further so I just sat down to wait for the expected no go news.

The three of us are the left overs of the annual 2021/2022 Bulmer expedition to the karst area around Lake Bulmer. The idea of the expedition each year is to find more passages in the nearby Bulmer cave to add to the 80 kms already found. This year instead of being in Bulmer we are at the bottom of this new cave we had discovered purely by chance eight days earlier. We were at the time heading for a large entrance feature at the head of a steep gulley about 300 m above the NW corner of the Bulmer Lake. Pip Rees and I had spied the entrance the previous day while doing a high walking circuit around the lake.

Marcus Thomas, Bruce Clulow, Gavin Holden and I dragged ourselves up the steep scree and grass slopes to the base of the climb up to the entrance. While searching for a route we walked into some freezing cold air pouring down the mountain. We discovered the cold air was blowing out of a small hole and beyond was a deep shaft. This was totally unexpected, so we were not really prepared for a vertical caving trip.

The cold air was blowing out of a small hole and beyond was a deep shaft. This was totally unexpected, so we were not really prepared for a vertical caving trip.

Nevertheless, I borrowed a poly top from Bruce and dressed in long cotton pants made a quick recce of the cave. A short way beyond the bottom of the 20 m pitch I had to pull some boulders out of the way to gain access to a narrow canyon descending into the mountain. The wind was extraordinary: incredibly strong and very cold. A short way down the narrow canyon I popped out into a large chamber and the way on was through a small dirty crack. I wasn’t really dressed to go further.

The three of us are the left overs of the annual 2021/2022 Bulmer expedition to the karst area around Lake Bulmer. The idea of the expedition each year is to find more passages in the nearby Bulmer cave to add to the 80 kms already found. This year instead of being in Bulmer we are at the bottom of this new cave we had discovered purely by chance eight days earlier. We were at the time heading for a large entrance feature at the head of a steep gulley about 300 m above the NW corner of the Bulmer Lake. Pip Rees and I had spied the entrance the previous day while doing a high walking circuit around the lake.

Luckily the new cave is really close to the Bulmer Lake camp, though with a 260 m climb up tussock and scree to the entrance. Though this meant we did not have to get up early to go and explore it, it did mean a real sweat fest climbing the steep slopes in the full sun.
Nicole Millar, Anna Stewart, Gavin Holden, Pip Rees, Marcus Thomas and I all set off to see what lay beyond the small passage where I had stopped. Marcus and I made quick time getting through the little crack.

At the top of the first climb in Te Ana Kea

Beyond while sitting on a small sediment covered ledge we could see a huge drop into a massive black space. Though the rock was quite rotten, after some searching I was able to find a bollard for a sling and rock good enough for 3 removable bolts. Three metres down I found more good rock and was able to build a re-anchor. Abseiling into the blackness was pretty exciting, the passage looked really big, it felt like we had stumbled onto a significant cave. The pitch was only 20m, so much for our massive drop. Nearby down-slope we found another pitch and after a 20 m abseil dropped into a 5 m wide, 10 m high passage heading steeply down hill. We scampered down two interesting climbs before stopping at a pitch. From here we surveyed back to the others who were happily drinking coffee in the first chamber. In one very short trip we had got down to 100 m in depth and surveyed 120 metres of passage.

On our third trip we noticed the draught was going downhill, not up into our faces. Perhaps we were going to end up in the nearby Bohemia cave. After two pitches and 75 m of nice narrow canyon we arrived at a junction. Left and downstream stopped after a few metres, right went upstream and so did the draught. I followed it for 50 m where a rockfall barred me from going any further. We all felt a bit deflated and headed out. Cave just over 140 m deep and 200 m long. The big question in my mind was what had happened to the very strong draught we could feel at the entrance? On the way up the third pitch on the far side at the same height as the pitch head I could see the opening of a passage. I was very confident this was the passage from where all the draught blew.

Troy Watson had turned up and took little convincing to join me. We put together a climbing kit made up of a heap of removable Petzl pulse bolts, quick draws, climbing rope and karabiners and staggered slowly up to the cave. As far as our climb went, I had noted that there was good rock to about halfway, then there was a band of really bad rock. I hoped to climb to the base of the bad rock, then do a rising traverse up the base of the bad rock all the way into the new passage. I led the first pitch for about 15 m; then Troy led off on the traverse pitch. Despite the awful rock he nailed his way up slowly and carefully. A couple of nery hours later he got to the top. The passage was horizontal for 15m, then it went straight up. We were pretty tired and strung out by the climb so abseiled off and returned to camp.

Helictite cluster in Te Ana Kea

Unfortunately no one else wanted to join us and expedition members were dribbling off to go home. Back in the cave in our new passage we had a closer look at the way on. It was impossible; the rock was really bad and there was no enticing draught. However all was not lost. While sitting at the belay station the day before I was adamant I could hear a rumbling noise and directly behind me I could see an alcove. The alcove lay 30 m away and slightly lower, and the route crossed very bad rock. I did an abseil traverse across the wall for 20 m., with some redirectors for the abseil rope to stop me taking a huge swing across the wall if I slipped. I managed to get past the bad rock, but I was now below it and there was six metres of climbing to get to rock which looked strong enough for a safe anchor. The aid climb up took a bit of soul searching as the drill bit went into the rock like it was butter. With a huge amount of relief I moved up into a position where I could touch it. Getting the hammer out I gave the rock a tap just to check, but instead of the nice “ting” noise you get from solid rock, I got a “thunk”, indicating poor rock. I tried a couple more spots and found solid rock, and placed two good bolts for the belay anchor.

Troy abseiled over and we managed to derig the climb and retrieve the rope. Luckily for us the next bit of rock was excellent and I aided around the corner into what we thought was just an alcove. The first hint we were onto something was when I swung around the corner into a freezing cold draught.: we had found our wind. When I pulled myself over the very loose lip of the climb I could see a large rock-strewn passage heading off in the distance. Much to our surprise we had cracked it!
After Troy arrived and we had tidied up the climb and retrieved our rope we went off exploring. After our hearty 4 pm lunch of cheese and crackers we wandered off down the passage. There were a couple of dodgy climbs where full commitment was necessary and falling was just not an option. We also passed beautiful formation: the walls in many places were adorned in an incredible array of helictites. Eventually we arrived at another pitch, but time was marching on so we called it a day, surveyed and bailed for camp and dinner.

By mid morning on the 6th day we were trudging back up the hill. We rigged the pitch we had stopped at the day before. Troy abseiled over the edge and before his face disappeared he was standing on the bottom! I think the illusion was enhanced by tired brains. The exploration technique we adopted was, Troy would go out front and look for the way on and I would puddle along surveying. This worked most of the time. There were occasions where Troy disappeared up, I went down, found the way on and ended up in front. Only a few stations after the pitch we came across a serious looking collapse. A duck under a big boulder, up a gravel slope, through a little hole, down a belly crawl and across a thin slab of rock many metres off the ground. Here the large canyon we had been following had changed dramatically to a much smaller canyon only 5 metres high.

The formations in this area were absolutely stunning. I do not get too over excited by formations, these though took my breath away. Masses of very intricate and delicate white helictites intertwined amongst each other like seaweed or bunches of snakes. Our constant companion and guide, the omnipresent draught was still blowing strong. The passage got smaller and smaller and more and more beautiful until it became a 1½ metre high, half metre wide rift. Very, very carefully we eased our way passed the spaghetti formation only to be confronted by a pitch.

Took us a long time to sort out the pitch and get our gear through. Beyond this point the passage deteriorated. A rockfall almost stopped us until Troy fought his way through to larger passage. Here the cave instead of being tall was low and rocky. While Troy thrashed his way downstream I searched some alcoves and found the wind blowing up a vertical tube. Wriggling up a few metres I found myself at the top of a pitch and looking down into large passage. We decided to have a poke downstream for a bit, then check out the draughting passage. After wriggling through some cruddy narrow rifts we ended up at a depressingly nasty looking loose pitch-head.

Back at the draught again, we rigged the pitch, which took ages as all the rock was quite untrustworthy. Troy set up to abseil, I surveyed. At the base of the climb just below Troy, I shot the Disto across for a splay shot. Right beside the red spot of the laser I could see a very small and interesting black spot - it looked like a hole in the gravel. Pushing my finger through the hole and scratching away some sediment I could look through, there less than half a metre away lay the bottom of the rope. We dug out the hole and I squeezed through. We explored and surveyed about 100 metres upstream to a large aven - the source of the draught, no doubt. Downstream got too tight very quickly.

Our final day in the cave turned out to be a pretty good one. The expedition was now down to three: Gavin Troy and me. This was going to be our last trip and we were going to derig no matter what. So this brings us to the end of the cave, sitting in the drippy rockfall chamber waiting for Troy. After quite some time I decided I had better start surveying towards him.
Before I got too far he appeared up a very narrow canyon. “It’s pretty tight”, he warned. Access to the canyon was via a bold step above a five-metre drop. The tight bit was really tight. After trying all angles, getting stuck and nearly getting through then getting stuck again, Troy had to remove a small lump off one of the walls. Then it was easier.

I continued my survey. Troy had found a large chamber so I thought that would be a good place to stop. Following his cairns I climbed up between very unstable looking rocks. Goodness knows what kept them all in place, it was just best to ignore the danger and concentrate on the survey. Troy’s cairns led me to a chamber of sorts. Thinking it was the big chamber where he had turned back, I stopped the survey and had a look around. Sliding down through a little hole I found myself in a larger chamber. At the bottom of this I came across a 10 metre pitch into a big canyon. Climbing up a stack of rocks I found the draught blowing through a rock choke which I easily demolished and crawled through into a small tube; 30 metres along this I needed a rope to access the floor of a large canyon. Time to head back to the others.

Troy showed me the way to his big chamber. He then did a climb and through a small hole in the rocks could see a really large black space, with a lot of cold wind blowing out. It was late and time to return home. We had to leave the cave with two excellent leads to pursue next time. We arrived back at the entrance just on dusk having derigged a lot of the cave. The dusk turned to night as we walked down the steep hill towards our camp. There was no wind, the air was warm and the stars came out. We stopped off at the lake edge to take in some of the beautiful evening. This was almost the end of the expedition and we had discovered a cave 800 metres long and 180 m deep, and it was still going. I was tired and hungry and no doubt so were Troy and Gavin, yet lying in the tussock looking at the stars was such an amazing feeling, no one of wanted to move. It was a great opportunity to reflect on our adventure together and thank Papatūānuku (Earth Mother) for sharing some of her priceless secrets.

**BULMER CAVERN, MOUNT OWEN**

By Felix Collins, reprinted from Cavity

Hamish Castle, Mike Allen, Sarah Sellars and I opted for a direct helicopter ride to Castle Keep this year to begin the Bulmer expedition. It was quite a shock to go from a dazed, sleep-deprived state (we left Christchurch at about 5) in a sunny meadow, to be suddenly dumped out up a mountain and then be underground in 4 degrees a few minutes later on the front end of a five day camping stint. I think my body was in shock for the first day as I adjusted to the cold and lack of sun, but after a while I more or less forgot about the surface and the camp became quite comfortable. It was much warmer than last year due to the lack of a draft. The trip down to camp 2.5 took in the order of eight hours, with Sarah and I heading off ahead with about 15kg packs.

We left Hamish and Mike to re-rig the entire route in, and blast the pack-wedging constriction in the squeeze not far beyond Close Encounters. Sarah and I finally made it to camp and settled in. We weren’t really sure what the time was, so waited for the others to come before making dinner. They seemed to take quite a while so I checked the time on my Kindle and it said 23:30. I thought, that can’t be right, we haven’t been underground that long! Finally they turned up and confirmed that indeed, it was well after midnight.

The next day was a slow start with all of us sleeping in until about 9. It is amazing how well one can sleep in perfect darkness and near perfect quiet. We took an easy trip down to the Black the Ripper Dig for a look, before heading back to camp for dinner and an early night.

Before we could bed down Nick Edwards and Bruce Clulow turned up from the Lake Camp via Panorama Ledge. Nick came to stay a few days and Bruce was basically making a battery delivery run.
The next day Bruce headed straight out, heavily loaded with flat batteries and camp rubbish. No one was game enough to ask him to carry out their daily deposits! The third day underground, Nick led Hamish and me up the South Park Aven aid climb to a rift that heads off north about 100m up. It had been partially explored before, but there was a pitch that needed rigging for further exploration to continue. We had a great day finding the limit of exploration and rigging anchors on crumbling cherty rock. Finally we ran out of rope and were reduced to using slings and spare prusiks as handlines.

We could see another pitch, but it will have to wait for another day. At the turn-around point there was a delightful piece of delicate furniture. It appeared to be an occasional table, so that is what we called the series. Heading back out we passed some interesting red lobster claws and a set of three plates so it certainly was a convivial place. We added about 100m of low grade survey - low grade owing to the lack of inclinometer and the use of an orienteering rather than sighting compass.

After another serious bout of sleeping - something like 10 hours - we wandered off to Mike's bolting aid climb in the Anchors Away aven. Sarah had done serious duty belaying Mike the day before, so she took a break at camp. While Hamish hung around and belayed, Nick and I explored the area and tried to convince ourselves that we knew the way back to camp. We finally recognised where we were about 10m before getting back to camp, which was a bit embarrassing! We decided to have another poke at the dig, as Nick had not been down there and the shortcut route from the camp is not obvious. After shifting a few buckets we gave up again. It looks as though the solution to the cemented gravel problem will be to dig down under it. Yikes!

On the way back up to camp we met up with Mike and Hamish who had called it a day and were heading back too. The next day was the long haul out to Panorama Ledge. It is a great day's caving with a bit of everything, and lunch in the unforgettable Awesome Aven. After five days in the dark, the warm green humidity of the surface was wonderful, and the lake water was warm enough to pour over oneself as a shower.

MANGAWHITIKAU: GRINSTED LEVELS REVISITED

From Jack Grinsted, Taihape. Photos by Kieran Chandler.

In 1976 Martin Grinsted climbed up out of the Mangawhitikau Streamway and discovered a dry, upper level. As a recently arrived pommy caver, Martin had sucked in a few of his university mates and formed the Waikato Campus Caving Club. This trip into Mangawhitikau included two freshly converted cavers, Trevor Worthy, and Graham Quigg.

Up until this point visits into the up-to-your-neck, swiftly flowing, icy cold waters of the Mangawhitikau had been infrequent. This was because cavers and wetsuits were rare and cavers owning wetsuits were like hens’ teeth. However, Martin had delved into a few wet holes in the UK, where the common practice at the time was to make your own wetsuit. He reckons that it was this wetsuit that was his secret weapon for the new discovery. This is because he didn't use up all his energy keeping warm and therefore had the extra strength left to make the climb out up out of the streamway.

Martin dropped a rope down to the rest of the team and they had a great time scurrying around the wide open passages. However, time was getting on so they headed home with the exciting knowledge of several possible leads into further unexplored passages. As it turned out, this would be Martin's last visit to this area of the cave for a few years — 46 years to be exact.
Due to the attraction of overseas travel, Martin left the exploration and survey of the new cave passages to the rest of the team. When the survey drawings eventually came out he was honoured for his climb and discovery with the naming of the 'Grinsted Levels'.

On 28 May 2022, a few days after his 72nd birthday, Martin decided that it was time to go back for another look down Mangawhitikau, accompanied by his sons Tom and myself. Due to a few gaps in the memory, we invited Kieran Chandler to lead the way.

Deodoriser Pitch.

As the frost began to melt, Kieran and I dropped a rope down into Chinaman's Eye, which had a nice warm draft steaming up out of it. We fluffed around a for quite a while, adding a few removable bolt holes for rebelays to reduce rope rub. With our exit now ready we enjoyed door to door service as we hopped back into Kieran's truck for the drive down to the Deodorizer entrance.

This was my first visit to a North Island cave and I was very excited to be heading into the notorious aerated black water - one of the highest volume cave streamways in New Zealand. Not to mention a visit to the Grinsted Levels with three Grinsteds in the party. However, what I didn't anticipate was the education I was to receive in North Island caves and cavers. The first thing Kieran mentioned as we entered the Chinaman's Eye was "look out for glass - this is the old homestead's rubbish pit!" It turns out that the North Island ease of access over farmland also has a disadvantage. Then, as we battled our way upstream, Tom questioned Kieran on his lack of gloves. His reply was "North Island cavers don't wear gloves". I was astonished. But, given that I now live in the North Island I had no choice but to remove my gloves and give it a go. Yes it was good feeling the smooth rock as we scrambled up yet another waterway. However, when it came to the muddy crawling and broken glass I had second thoughts.

Martin was very pleased to be back for a decent look around the Grinsted Levels. It was awesome to hear his account of the discovery and the great excitement they all had in finding this entirely unexplored area of the cave. For Tom and I, it felt like such a privilege to be underground and enjoying yet another adventure with our Dad, who has given us so many awesome experiences like this over the years.

After we had had a good look around the Grinsted Levels, to appreciate the original efforts of Martin's discovery climb, Kieran insisted that we downclimb, rather than abseil this section. He generously allowed a handline for the entry moves, but from there, we could choose the full free climbing experience.

Mangawhitikau streamway.

Now over Sump Two and out of the streamway, we paused for a piece of birthday fruit cake, before making the tight and awkward exit out of Chinaman's Eye. By the time we had finished derigging and exited the cave, Kieran had already picked up the truck to ensure that there was no unnecessary walking. Great leadership.

Footnote:
Martin used one of my old surfing wetsuits for this trip. However, he insisted that most of his warmth and comfort was provided by his homemade wetsuit vest which he wore underneath. This is the only surviving piece of the original wetsuit he wore for the exploration trip 46 years ago.