## THE ACKMA 2013 POST CONFERENCE FIELD TRIP SUB-URBAN INVESTIGATIONS in AUCKLAND

John Brush

During the recent ACKMA conference, participants were treated to a spectacular range of cave and karst features in and around Waitomo and, towards the end of the post conference field trip, a lucky few were able to take a look beneath suburban Auckland. No limestone in sight, but the city is built on or around 50 volcanoes and some of those had lava flows that formed caves – or lava tubes.

Peter Crossley. Photo: John Brush

Most of Auckland's volcanoes were active 24,000 -35,000 years ago and it is likely many of the lava tubes that formed in the flows collapsed ages ago. In more recent times, numerous lava tubes have been badly damaged or destroyed by quarrying, by road works, or to make way for buildings. Too often, the tubes that remained were regarded as convenient rubbish dumps or drains for stormwater - or worse. For too long, lava

tubes were not officially recognised even though some were of deep cultural significance to local Maori and others were of special scientific interest. It is only in recent times that any of the caves beneath Auckland have had some form of protection or official status and this is in no small part due to the efforts of local caver Peter Crossley who has been striving to save, document and protect the caves.

We were fortunate to have Peter as our guide for our two days in the Auckland area.

Our first stop was a former quarry site once operated by NZ Railways. Only two caves survive here. At the first, Rumley Cave, we were met by John McClaren, a Department of Conservation (DOC) officer and by Malcolm Paterson, a representative of, and heritage officer for, the local Maori Ngati Whatua Orakei hapu (clan), who welcomed the party and offered a traditional blessing.

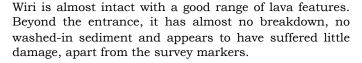
Rumley Cave is a low tube hidden beneath a small cast iron manhole cover that was obscured by illegally-dumped rubbish. Soon, everyone was moving up slope to the more spacious and interesting Wiri Cave. This 290m long cave is arguably the most spectacular lava tube in New Zealand. It is now a site of special scientific interest and is protected by a heavy metal gate and a restricted-access permit system. That it survived at all is amazing. It has quarry workings on three sides and works for a new road were in danger of taking away the inner end. Even after the significance of the cave was officially recognised, professional surveyors contracted by the Government left their mark with survey stations cemented to the lava floor and huge bright red station numbers spray painted on the walls.



Mary Trayes finds a survey station. Photo: John Brush



Lilly Petrovic in Wiri Cave. Photo: John Brush



Although many Aucklanders have done their best to obliterate their caves, Peter took us to a leafy suburb where Sean and his wife Annie are very proud of the cave in the backyard of their home on Landscape Road. They even bought the adjoining block to secure the entrance and squeezed a small grant from the local council for safety works. Like many caves in Auckland, this too had once been used as a dump – as evidenced by a cone of building rubble beneath a now-blocked entrance some distance into the cave. Carl is using local volunteer labour to slowly remove the rubble.



Landscape Road Cave. Photo: John Brush

Not far away in another leafy suburb, we stopped at the kerbside and watched in amazement as Peter used his special master key, sometimes known as a jemmy, to deftly remove a manhole cover on the nature strip along Kitenui Road. By many accounts, the 250m long Kitenui



Greg Middleton at the entrance to Kitenau Cave. Photo: John Brush

Cave is one of the most notable caves in Auckland once you get beyond a low crawly bit just beyond the 3m entrance pitch. This cave was discovered in 2006 when local utility workers broke through into the cave. After lengthy discussions, plans were approved to put a lid on the cave and the concrete base for the lid incorporates, at Peter's request, eye bolts for attaching a ladder. If only Peter had remembered to bring the ladder on the day of our visit! Noticing the gathering crowds on her nature strip, a helpful neighbour kindly offered to fetch a step ladder from her garage, but one or two of our party quietly said "Shhhhh! Thanks, but no thanks. Don't tell Peter, but we've seen (or crawled) enough for one day". And so the manhole cover was replaced and our vehicles headed off in various directions to find accommodation for the night.



Don Haider thinks twice about a crawl in Landscape Road Cave. Photo: John Brush

Next morning, a select group (Pete Chandler, Greg Middleton, Marjorie Coggan and John Brush), met up with Peter Crossley at Devonport Ferry Terminal on the north side of Auckland Harbour for the short 15 minute trip out to Rangitoto Island. At just 600 years old,



Peter Crossley, Marj Coggan and Pete Chandler Photo: John Brush

Rangitoto is the youngest volcano in the Auckland area. The island is a popular walking spot and the 1-hour climb to the crater rim provides spectacular views of the nearby city. As pleasant as it was sitting in the sun admiring the view, the bush and the bird life, we were soon dragged away by Peter. He was on a mission and before long we were thrashing through thick bush over rugged terrain on the remote eastern side of the island. "Kermies Cave is just 100m ahead", he said at one point. It might as well have been 100km for the progress we were making. As we slowly got closer, Peter's GPS started sending us around in circles and then Pete C found a pit several metres deep and maybe 5m across. Peter said unless it had a thick rope hanging down into it, it was not what we were looking for, so forget it. Nevertheless, ACKMA Cave, as we unofficially dubbed the find, was soon fully explored. Although there were only short sections of intact tube on either side of the collapse pit, it was interesting in that the feature had not been previously recorded by local cavers. Peter later concluded our find was in line with the trend of the lower end of Kermies Cave.



Greg Middleton in the new ACKMA Cave. Photo: John Brush



Marj Coggan in Kermies Cave. Photo: John Brush

Continuing to circle with the GPS, we soon located the two entrances to Kermies Cave. The promised thick rope was there and was of welcome assistance in climbing into the cave. Down-flow from the entrance, there were some nice flow lines, levees, benches and lava "tidemarks" and the floor was rough a'a lava. Towards the up-flow end of the cave, most of the cave lining had broken away to reveal the yellow, red and black lavas and scorias through which the cave had formed. Very pretty, but loose.

After leaving Kermies, we headed for the public access caves on the island. DOC has erected signposts and constructed rough tracks to several caves, but we chose the direct route through the thick bush. The caves appear to be a popular attraction and in spite of this they seemed to be in reasonable condition, aside from minor littering and mud tracking. We first visited Kermode (or North Cave), which has a nice lava fall, followed by quick trips through Southern and Middle Caves before heading downhill to the wharf to catch the last ferry of the day. All in all a most interesting day. Thanks Peter.



Marj Coggan in Kermies Cave. Photo: John Brush