

TWO NEW SHOW CAVES AT WAITOMO!!

- Kent Henderson

About to go Black Water Rafting...



Two new show caves at Waitomo! What!?! – I hear you cry! Well, it is true!! (soon, anyway...). Read on....

While I have been to New Zealand quite a few times, my family has never dawned its door, and thus it was that I was induced to rectify this sorry situation (they didn't have to try very hard....). So, with my wife, Marise, and step kids Nathan (24) and Tara (22) in tow, we arrived in Auckland on Thursday 4 November for a ten day sojourn. I had, of course, to 'suffer' the tourist bit to begin with (Rotorua, etc) before we arrived at Waitomo.

We arrived there in our hire car late afternoon on Wednesday 10 November, whence I immediately pulled up at the *Waitomo Museum of Caves*, to be warmly welcomed by the inimitable Fiona Hodson (who had kindly booked much of our trip), and by ACKMA Life Member Kevan Wilde, the Museum Director. 'The Wildeman' was in fine form, as ever.

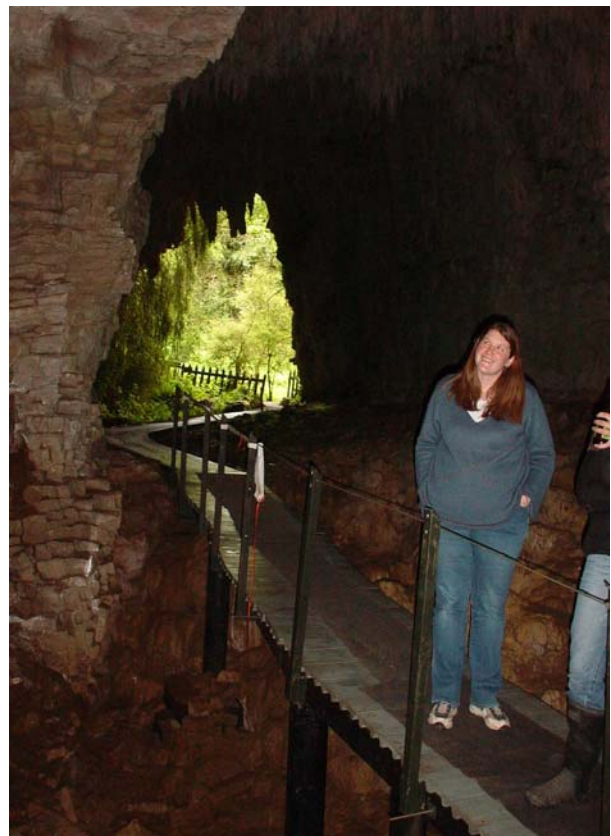


The gathering point at Spellbound Tours

After that appetiser, it was off to the home of Pete and Libby Chandler, who had very kindly offered to put us up for a few days. I wondered how they were going bed down the four of us, given they have three kids of their own, but all was arranged. It was great to catch up, and much chatting, imbibing and a wonderful Libby dinner followed! I

also cast my eye over the locally famous 'Great Wall of Chandler' – that massive retaining wall Pete built at the front of their home, and which I was invited to 'officially open', with much ceremony, during a previous visit to Waitomo about two years ago (and reported in a previous edition of this Journal). It still looked resplendent, albeit absent of the 'expected' brass plaque marking that occasion (!!).

The next morning it was off to indulge my family's desires. At 9am we fronted up to *The Legendary Black Water Rafting* to join a 'Black Labyrinth' tour (formerly the Original or BWR1 tour). We were warmly welcomed by ACKMA member Van Watson, the BWR Operations Manager, and after a brief chat we were shown our wetsuits! My wife in a wetsuit was interesting, but I better not say any more, or seriously risk (what's left of) my manhood. Upon returning to the BWR base there to welcome us was the redoubtable John Ash himself, whereupon we had a brief chat (we had to rush off to *Lost World*), but we made arrangements for happenings later in the week.



Jo Short at the entrance to The Spirit Cave

As members will be aware, Pete Chandler and John Ash sold BWR to Tourism Holdings Limited (THL), which also operates the *Waitomo Glowworm Cave*, and *Aranui Cave* at Waitomo. Pete took over the former section of the BWR operation known as *Spellbound Tours* (more on that later), while John Ash became principal consultant to THL on the redevelopment of *Ruakuri Cave* (more on that later, too).

A cut-down track section in The Spirit Cave – Pete Chandler got this idea from the ‘Moses Walk’ section of Marble Arch Cave in Northern Ireland



Our BWR trip was great, as expected – my third time, but my family’s first, of course. The great professionalism of the operation has not changed one jot. We all had a great time! After lunch, it was off to do *Lost World* – that 100m tandem abseil down the *Lost World* tomo and through what is a very large cave (I had previously done it back in 1997). How the kids would go, and especially my wife, I had no idea.

As it turned out, they handled it with ease (despite considerable jitters when standing on the jump-off platform...). Again, the professionalism, excellent guiding, and exquisite safety regime of the operation was every bit as good as I remembered it. What I had forgotten is the 30m vertical ladder out of the cave after the cave walk-through following the abseil. Marise and I did it tough (sigh...) – although Nathan and Tara slipped up without a worry.

That evening, it was off to the famed Waitomo Tavern for dinner with Pete, Libby and family, and a further catch up with Kevan Wilde, John Ash, as well as Robert Tahī, the Manager of the *Waitomo Glowworm Cave*. ...another late night (as it invariably is in the Waitomo Tavern)!



Pete Chandler at the entrance of the Mangawhitikau Glowworm Cave

The next morning, the Friday, it was off first thing to visit the *Waitomo Glowworm Cave*, which started with a brief catch up with Ephraim Emery, the Glowworm Cave’s Karst Resources Officer. Of course, it is mentally necessary to do as early (or late) a tour as possible, or else risk being overwhelmed with Asian tourists. The family enjoyed it. I was extremely impressed with the guide on our tour – Garth Costar. His interpretation was as good as it gets – just the right amount of (quality and accurate) information, perfectly paced, and delivered in a wonderful laid back, ‘matter-of-fact’ style. I’d write him a reference in an instant. Garth also speaks (very usefully!) fluent Japanese, I understand. If, as I assume is the case, the other 20+ *Glowworm Cave* guides are as good as he is, Robert Tahī et al can be very well satisfied with their training.

Very little change has occurred at the *Glowworm Cave* since my last visit – nor does it need to be, frankly. I have widely commented previously on its updating in this Journal, so I will not bore you with repetition. Needless to say, the cave is very well resourced, and managed, particularly given its massive visitation.



Incomplete raised tracking in the Spirit Cave

After this tour I was ‘prevailed upon’ to take the family on the fifteen minute drive to Otorohunga to visit the *Kiwi House* and go shopping, but I managed to get them deposited back at Pete and Libby’s by mid afternoon for a ‘rest’ (shopping is exhausting, as any female will tell you...), while I went back to the *Museum of Caves*. After a long chat with the ‘font-of-all-local-gossip’ Fiona, a bit of look through the wonderful library, and a further chat with John Ash who was passing through, I inspected the wondrous Museum itself. A few newer displays were in place since my last visit. I noted the plaque and photo dedicating the museum’s audio-visual centre to the late Peter Dimond. The museum is, without doubt, a world class benchmark of its genre.

ACKMA people at the Spellbound BBQ.
L to R: Peter Chandler, Kent Henderson,
John Ash and Greg Martin.



That evening, Pete and Libby had especially arranged a 'meet and greet' BBQ dinner at their *Spellbound* operation. Most local ACKMA members and *Spellbound* staff were invited – and most were there (perhaps they didn't know I was coming!). The two caves used by *Spellbound Ltd* are *Mason's Mangawhitikau Glowworm Cave* and *Mason's Dry Cave*. ACKMA member Derek Mason used to run tours to them until he leased cave operation, sold the rest of the farm, and retired to the town of Cambridge (one hour's drive north of Waitomo) a few years ago. I, and other delegates, toured both during the 1997 ACKMA Conference at Waitomo, famously descending to the valley below his house, and to the caves, in 'motorized hay carts'.

When Derek retired, he leased out his cave operation to BWR, which re-named the operation as *Spellbound Tours*. Pete and Libby Chandler kept this lease, by design, when BWR was sold to THL. Presently, the *Mangawhitakau Glowworm Cave* is visited on the *Spellbound Tour*, and soon *Mason's Dry Cave* also known as *Te Ana o te Atua* (*The Cave of the Spirit* or *The Spirit Cave* – a translation of its Maori name).



Pete Chandler highlighting glowworms in the Mangawhitikau Glowworm Cave

Mangawhitakau Glowworm Cave is a stream inflow cave, packed with glowworms. Derek had a boat for navigating tourists through it, as does *Spellbound Ltd*, but they have also added considerably upgraded pathways, handrails and

other infrastructure. It is toured with helmets and lights, the latter being mostly off to view the glowworms. In short, the development of the cave is top notch (as is to be expected).

The two caves are part of the Mangawhitikau karst area, separated by a dry stream bed valley – a winding 12 km drive south of Waitomo. In a smallish grassy 'plain' between the entrances to both caves, Pete and his staff have constructed a covered BBQ/shelter area for tourists, and the site of our BBQ. I suppose about thirty people turned up, inexplicably (!), including many ACKMA luminaries, such as Kevan Wilde; Jo Short (The *Waitomo Museum of Caves* Education Officer); John and Martha Ash; ACKMA Fellow and serving Committee Member, Dave Smith; Derek Mason (himself!) and ACKMA Fellow and Past President Greg Martin. It was wonderful to catch up with them all!



The group at the new excavated tourist entrance to Ruakuri Cave



A view down the new tourist entrance

About to descend through the Drum Entrance



Before the expansive BBQ that was to follow, Pete 'dragged' us off to *The Spirit Cave*. He had told me he was developing it, but I had no idea how and in what way – he kept pretty 'mum' about that. I recalled *Mason's Dry Cave* (so called as it has no permanent active stream through it, as has *Mangawhitakau Glowworm Cave*) as a VERY muddy, and gluggy, walk through. It is still muddy and gluggy, but not to walk through – as Pete, and his staff, have all but turned it into a full show cave!!!! I was blown away. They have placed 250 metres of concrete pathways (in places) and raised walkways (in other places) through the cave, together with viewing platforms. Some hand railing is in, with more to come. I was stunned (as were the local ACKMA notables on the tour!). AND, the cave will soon be fully lit, as a full show cave!! Oh my God!!!!



Pete Chandler, Kent Henderson and Dave Smith in Hollow Hill Cave

Phew! It goes without saying, but I will anyway, that Pete has developed the cave to the highest standards. Over dinner later his staff told me of his utter fastidiousness in overseeing every aspect of placing the infrastructure in the cave – often to their complete exasperation! Tough, I say! Well done Pete! For the many raised walkways in the cave he has used recycled plastic (the idea coming from *Ngilgi Cave* at Yallingup, Western Australia). It looks the goods, is completely durable, and most importantly non-polluting. He has not yet installed the lighting, which will be 240 volt stepped down to 12 volt, with some LEDs. For power, they are presently using a diesel generator located 100m from the cave. I suggested to Pete that he might consider solar power. Given the relatively low power draw down, this is very realistic option – maybe our first solar powered cave (a world first??)!! Anyway, Pete will look at the options carefully no doubt. He expects to have the cave development completed and open to tourists by Christmas!!! Wow!! I cannot wait to get back to see the finished product!!



Van Watson demonstrating the bolting of raised pathways in Ruakuri Cave

So, after dinner, it was off following Pete to do the glowworm tour – the *Mangawhitakau Glowworm Cave*. Wonderful!! My stepson, Nathan, reckons it 'slaughters' the *Waitomo Glowworm Cave* it both the quantity, and up-closeness, of the glowworms. I can't publicly comment on that of course, expect to say that Pete's operation is absolutely fabulous, and a tremendous experience. The night, and a most memorable day, was topped off by Pete's three kids putting on a fireworks display – not inappropriate, either!

The next day, the Saturday, and our final one at Waitomo for this trip, was to be a very full one. Starting first thing, Dave Smith and Pete took Nathan and me wild caving in the massive *Hollow Hill Cave*. We spent about three hours on this adventure. *Hollow Hill* is one of the biggest volume caves in the North Island, only slightly dwarfed, I understand, by a couple of caves in Mt. Owen on the South Island. And massive it is – the elongated main chamber would comfortably take a couple of large cathedrals, and easily! A shallow active stream runs through the system, topped by huge numbers of glowworms. However, on the ceiling they are quite far away, relatively-speaking, giving a 'milky way' effect. One upper section contains some stunning flowstone and speleothem

decoration, known as *Castle Grotto*. The management regime here is boots off – socks only. The cave is managed by the Department of Conservation (DOC), effectively by Dave Smith. Dave issues a maximum of ten permits per year, with a maximum party per trip of four – but rarely are all annual permits taken up. A walk along the streamway of the cave is very much a spiritual experience – absolutely tremendous stuff. Many thanks Dave and Pete, for taking us there.



Pete Chandler and John Ash at the new Ruakuri tourist entrance

So, it was then back to Pete and Libby's home for quick bite of lunch, followed by a dash to the BWR base to don our wet suits for the last (and very pleasant!) surprise of my trip – the tourist re-development of *Ruakuri Cave*! Long had news of this project reached my years, but scantily...

Ruakuri Cave (adjacent to the *Aranui* show cave) is three kilometres past Waitomo village, and it was itself a show cave until in was closed on 6 February 1988. Unlike in Australia (except in a few cases), most land titles in New Zealand are 'centre-of-the-earth' – if one owns the land above, you also own the land below. *Ruakuri* was managed by the Tourist Hotel Corporation, the then operators of the *Glowworm Cave* and *Aranui Cave*. It was realised that the Crown (vested, effectively, in DOC), in fact, only owned the then entrance and a little more of the cave, while the rest was owned by the Holden family, and by the local council under Ruakuri Road.



A bottom up view of incomplete raised tracking in Ruakuri Cave

Frustrations and bureaucracy combined to shut down the *Ruakuri* show cave tour. At about the same time, the significance of the *Ruakuri* main entrance as a *Waahi Tapu* (Maori Burial Site) was recognised and as such it was subsequently designated as a Maori reserve. Since then, many efforts have been made to re-open the parts of the cave beyond with an alternative entrance. All floundered on the huge capital costs involved, which included excavating a new tourist entrance.

Ruakuri Cave is a relatively complex phreatic stream passage cave, featuring considerable active streamways. The cave has long since been used, under licence, by BWR for its two 'black water rafting' tours. It has also long since been the passion of the Holden family and John Ash, in particular, to see the cave re-opened as a show cave. The main reasons John and Pete sold BWR to THL was that the latter committed to undertake this development – coupled with the fact that possible potential conflicts could be foreseen with the cave being used by different operators for BWR trips and conventional tourist usage.

THL has committed a massive \$3.5 million to re-developing the cave for tourists. The cave is quite suited to dual usage, with the BWR 'float through tours' on car inner tubes using the streamways, while the show cave section utilizes upper levels (which features several areas of attractive speleothems).



Paula Jones next to some of the wooden tracking removed from old tourist section

Thus it was that Van Watson (who is in charge of the re-development works) and John Ash kindly invited me to view the work in progress. Also on the trip were Dave Smith and Pete Chandler, plus Paula Jones of *Showdown Productions* in Auckland (a company engaged to do promotions on the cave). However, access to the cave is still not simple! We all had to don wetsuits. As the excavated entrance is not yet complete (a few metres of the tourist entrance remain to be dug), there are only two current ways into the show cave section (aside from the original tourist cave entrance over the Maori burial site, which cannot be used).

Firstly, there is access through the BWR entrance up the valley, which involves getting very wet, and subsequently crawling through a long and relatively narrow linking tunnel to the show cave section, or accessing the cave through the 'Drum

Entrance' – a narrow slot near the new not-yet-fully-excavated tourist entrance. Van, Pete and Dave came in via the BWR route, whilst John 'inflicted' the Drum Entrance on Paula and myself. Prior to tackling the Drum Entrance, we viewed the adjacent tourist entrance excavations. This is basically a very large cylindrical hole in the ground. When complete, it will feature a spiral ramp down to a tunnel which will come into the linking passage at the base of the Drum Entrance. The spiral ramp will also feature considerable interpretive panels which tourists will observe (one hopes!) on their descent.



John Ash descending the ladder below the Drum Entrance in Ruakuri Cave

After squeezing down the Drum Entrance for what would be a fascinating four hours underground, John, Paula and I came to a very muddy passage which will be considerably excavated, down about 1.5 metres in places, to allow tourist clearance of the speleothems on the passage ceiling. Fear not, only mud and sediment is to be dug out. At the end of the passage, there is about a 15m drop to the streamway below. A raised steel platform is in the process of being located at this point, offering an exceptional view downward. On occasions, tourists will be able to view BWR groups passing down the streamway. As the 'flying' walkway high up around the cave wall, tapering down later to the bottom, is only partly constructed also, we had to rig with harnesses to safely negotiate the traverse, whence John belayed us down a ladder to a passage half way down and around into the soon-to-be show cave section itself! Wow!

Van has jerry-rigged the old 110v system from the former show cave operation as working lighting.

Monitoring equipment in the Drum Entrance passage of Ruakuri Cave, measuring temperature, humidity, Carbon Dioxide, and seismic activity



One of the first actions in the re-development was to dismantle literally tons of old wooden flooring that used to serve dubiously as the walkways through the cave. This has been 'secreted' in various alcoves off the new tourist track – to be removed from the cave eventually. In its place are now concrete pathways, and (*in situ* or soon to be so) raised galvanised steel walkways, and handrails.

The engineering feats to get all the steel girders into the cave is breathtaking – lowering it all 65 metres down a nearby tomo viewed on the BWR tour. A massive operation. All the steel was designed by taking accurate manual measurements in the cave (evidently it was just too hard for the engineers on computer!), and pre-drilling/slotting the lot. Van tells me thus far only two drill holes were slightly out! What about getting the concrete, etc, into the cave? The solution was to drill a 150mm wide bore hole into the cave (inclined five degrees) from near the Ruakuri Road, following very careful surveying by John Ash in particular. Cement and aggregate have been funnelled down the bore hole in bulk to an electric cement mixer 55 metres under ground. Outside the liner of the bore hole are two 15 mm pipes that carry water and phone lines into the cave. A compressed air hose will also use the pipe which will eventually be a way in for mains power.



Pete Chandler wipes the wet seats of the boat (how kind!) in Mangawhitikau Glowworm Cave.

The Peter Dimond Memorial in the Waitomo Museum of Caves



The tourist path through *Ruakuri* consists of two branches left and right once one descends from the entrance passage. In order to make a loop tour through the cave, a 30m tunnel will be excavated joining the two ends of the branches – at a cost of about \$100,000 I'm advised. The cave will only have two steps joining a small loop (at the *Royal Court* section) remaining – all tracking is ramped (at 1 in 10) from the entrance so is wheelchair accessible. Wonderful stuff!

While the cost of the whole project is budgeted at \$3.5 million, Van tells me he wouldn't be surprised if it came out in the end at about \$5 million. The development is wondrous – only to be expected given the quality skills, and cave knowledge, of Van, John et al. The main 'problem' Van and John are having (aside from solving innumerable technical difficulties along the way) is pressure from THL management to get the cave open as soon as possible. THL wants it open by next February (if not tomorrow!), while Van thinks maybe as late as June. While the tracking is relatively close to complete, the linking internal tunnel has not yet started (though that will probably be done after the cave is commissioned), and the conduit and lighting is still to be inserted – not a five minute exercise! In total, Ruakuri will be a start-of-the-art cave in every way – I cannot wait to see the final result! I have already told Van that, if invited (!?), I will definitely fly over for the official opening.

After our tour, we wriggled upstream (by-passing the *Hidden Waterfall*) and exited via the BWR1/*Black Labyrinth* entrance. I rushed off to shower and change, grab the family, bid Pete and Libby a fond farewell and convey our copious thanks – then to drive the hour to Cambridge to stay overnight Saturday with Derek and Jill Mason. After a fine dinner (thanks Jill!) copious conversation (I was talking to Derek, after all!) and a good nights sleep (having done seven caves in three days, with sore muscles to prove it...sigh...) we set off next morning for Auckland airport and home. My grateful thanks to all at Waitomo who looked after us so well in what was a marvellous and inspirational trip!



Van Watson and Pete Chandler at the main works site in Ruakuri Cave. Note the bottom of the drilled pipe for bringing concrete into the cave (centre top of photo).