

BWR Guide Josh Taylor (right), and Brendon Dunne, in the 210 shaft on our Black abyss tour.  
Photo: Richie Morrell.



## WAITOMO UPDATE – BLACK WATER RAFTING & RUAKURI

– Van Watson

In a seasonal business we usually assume that winters are the slow time; for maintenance, reviewing strategy and taking it easy. It's sort of like that except that more gear wears out ahead of you, summer strategies don't seem real with six cars in the car park, and then you have half the staff scattered around the globe – so that keeps the residual crew still flat out....

### BLACK LABYRINTH TOUR

The original and 'legendary' three hour Black Water Rafting tour has been splashing along for nineteen years. Apart from Christmas Day and king floods, the show goes on every day. About 26,000 clients a year gear up and put themselves in the capable care of a couple of guides and head off on the 'cave tubing' tour. We have had seventy different guides working those trips over those nineteen years. (Party next year!)

### BLACK ABYSS TOUR

One of the highlights of this five hour tour is the abseil down the 35 metre entrance pitch. The pitch is a doline collapse into the cave along the fault line. The rocks at the bottom are a convenient landing area but periodically we are reminded that they do come from the roof....

In 1996 some big roof rocks became big floor rocks. This was unnerving at the time and was stabilised with an aerial concrete slab, some stainless re-bar and a truckload of pumice concrete. An engineer agreed with how we figured

it would work so it was all signed off with a Producer Design Statement.

Above that lovely work we still have a funnel doline with 4 – 6 metres of partially mobile clays and soil; loosely held together with hydraulic-potential clay globules and a thin layer of anti-gravity vegetation. Each year about 8,000 abseil clients give the clays a companionable kick as they go past. This undercuts the line of the funnel shape and could lead to an abrupt sedimentation event from the surface to the underworld.



BWR Guide Brendon Dunne displays his rope skills – Black abyss tour. Photo: Richie Morrell.

So, over time we have added more resilient synthetic rock features and are slowly heading to ground level using the 'ascending well-liner' technique. Most wells have an advantage in being

uniform in diameter. Boxing up a synthetic rock to a funnel shape 35m off the floor is similar to building bunks in the front of a boat that hasn't had the keel laid. It has its own charm in that you have to be careful not to drop your hammer, yourself or a quarter of a cubic metre of wet concrete into the void beneath your feet.

The finished rock has to look 'natural'. So our Industrial Abseil Guide (Josh Taylor) digs out around the ulcer, locates solid rock, drills and resins stainless steel rebar into place. A drainage mat is fitted against the rear wall of the clay and then plywood is pinned and wedged into place. Then the cunning bit. Some deformed corrugated aluminium sheet is sprung into funnel shape behind the boxing and mud is plastered over any inside gaps. Down at the mix pile a pumice concrete is brewed from 1 of cement to 2½ sand to 2¼ perlite (a pumice aggregate). This gives a construction accepted MPA depending how you manage the slump factor.

The disadvantage is that if the fault attempts dramatic lateral shift and the stainless rebar holds; then North Island may be ripped off its mountings.

## RUAKURI CAVE – THE WALKWAY TOUR.

This has been underway for a year and a month. There has been a review of what's working and what's not. The guiding has evolved to fit the infrastructure and the 'goods' on show. There is a swing away from the 'Spiritual Journey' theme to more of a 'dynamic and comprehensive cave tour'. Kent threatened to remove his clothes and run

naked down the main and only street at Waitomo; if we managed to get 30,000 clients through Ruakuri in one year. The mental image nearly crippled us so we kept the client numbers to around 10,000 last year. He only needs to take his shirt off (it was loads better when we had no clients at all). As our memories fade and the wager doesn't seem so imminent I am sure we will increase the client numbers.

At the West Coast ACKMA conference in New Zealand last year the 'Ruakuri Builders' still had mud under their fingernails, phone calls from the centre of the earth and glazed looks in their eyes.

At the Buchan ACKMA Conference next year we have booked in to give a more formal presentation on exactly what happened on this major cave development.

## GLOWWORM CAVE

They still don't have a house to live in. Christine Mans has been appointed as Commercial Manager for the THL Waitomo operations. Her role is to tidy up some of the business areas we neglect and to streamline communication with the THL Head Office.

## ARANUI CAVE

Aranui felt left out by not having any attention from new infrastructure or fire disaster so a large thirty metre high Tawa tree hurled itself off the cliff and demolished the outside visitor shelter. People who saw the result were pleased they were not there at the time.



The demolished Visitor Shelter at Aranui Cave. Photo: Dave Smith.