

Nullarbor Karst Plain Project 2013

Jamie Obern

The Nullarbor Plain – taken from the Latin ‘Nullus’ and ‘arbor’, meaning no trees, is a desolate wilderness area covering parts of Southern and Western Australia. It extends for almost 1,100km at its widest point and whilst considered almost completely uninhabitable by Europeans, it is home to a surprisingly large amount of wildlife, from emu and eagles to kangaroo and camel. Most excitingly for some people it is also the world’s largest single piece of limestone – a material which when combined with water over long periods of time can give rise to fabulous cave systems. So whilst to many people this is just a blank spot on the map, with a single thin spidery road running across it, to cave divers it is a mecca. In fact back in 1983 the record for the world’s longest cave dive was set here – somewhat irritatingly for the locals by a team of upstart Frenchman.



Since then other areas have claimed ever longer caves, but despite losing the record this area still emits a powerful siren call to adventurous divers from around the world. And our expedition would be no exception. Casey McKinlay, David Rhea and David Doolette were flying in from Florida. Steve Trewavas was coming from Melbourne; Joe was coming from Brisbane; Gareth, David and Andrew were coming from Sydney; Rick and Monika were coming from Adelaide and Mel and I were heading over from Auckland. Simply coordinating everyone’s schedules, obtaining all the necessary permits and amassing all the equipment from our sponsors- Suex, DUI and Halcyon Australia – sometimes felt like an impossible task. But as it turned out that was just the beginning.



Let’s start with the easy bit, getting 90kg of dive equipment from Auckland to Adelaide. Now add this to the already groaning trailers and we can begin the 1,600km drive into the middle of the desert. Even this isn’t straightforward; we have to do most of the driving during daylight, in order to avoid crazy kangaroos which sometimes leap toward car headlights with devastating consequences.

After two days of long, straight, flat roads we arrive at Cocklebiddy Roadhouse, where we have a room booked – somewhere to have showers and charge batteries. We dump our stuff and grab a cold beer before bedtime; we have a lot to do tomorrow. As we walk into the bar we see the sign – ‘Cocklebiddy: Population 8’. When the full team arrives tomorrow we’ll outnumber the locals by 50%. As we walk into the bar a scruffy bearded bloke comments ‘You look like cave divers.’ Unsurprisingly they don’t get many other visitors who stay for longer than a night. (Worryingly, by the end of our trip the same guy no longer looked scruffy.)

The next morning we set up base camp close to the cave, pitching enough tents for half the group to sleep. The plan is for most people to alternate between camping and the roadhouse, so no one goes too long without a shower. Rick has organized enough swag bags for everyone; we have a kitchen tent and tables, a camera tent, a generator and most important of all a huge beer esky. For toilet facilities we have a spade and lots of bushes – just watch out for the snakes and scorpions when you squat down.

At last we are ready to do our first reccy into the cave. We want to make sure we can find the water and we also need to check what ropes and other climbing equipment are required to get all the gear in. The water is 90m vertically below us, but not directly below. There is a short vertical drop into the sink hole, leading to a steep loose rock slope, followed by some proper caving through tight passages, more unstable rocks and a long horizontal slog from the entrance of the main underground chamber to our diving entry point. Our plan is to get 11 divers into the cave, take photos and high def video and take some scientific samples - plus to do it all again at a second cave site before we leave. As I return to the fresh air at the top of the sink-hole the ambitious scale of our plan hits me. This is probably the most difficult and potentially most dangerous place I've ever tried to dive.

Let me give you a feel for conditions inside the cave. Although at the surface it drops below freezing each night, the temperature in the bottom half of the cave is stifling – shorts and t-shirts only, meaning we have to carry in lots of water to keep hydrated. Several sections of the cave require traversing steep yet narrow areas, with drops beneath our feet into the darkness below. A slip in one of these areas will likely mean broken bones and with heavy equipment on our backs we have to be particularly careful. There are virtually no flat areas in the



A swag bag covered in early morning frost

cave; nowhere to stand comfortably and plenty of places to bash your head – helmets are mandatory. But worst of all are the loose rocks, which we are continually climbing over. We all move very gently, in constant fear of sending medium sized rocks cascading onto our team-mates below or worse freeing one of the monster sized rocks which would be fatal. There are even a couple of car sized rocks, wedged precariously above our heads. I find the best policy is to try to forget about them and not to look up. On the few occasions I do look up I find myself muttering about the joys of golf.

After two strenuous days of activity we have installed a couple of zip lines, some safety lines for the steeper sections of the cave and lowering lines for the main vertical drop. We've hauled in 6 scooters, 3 rebreathers, 2 stills camera, 1 video camera and enough open circuit gear for 3 divers. We have 250m of air line from the compressor at the surface to the waters edge, electric lighting, emergency food and water and so far, apart from a few scrapes and bruises, no one and no equipment has been damaged. At last the first team can get into the water.

By now I'm sure some of you are wondering 'WTF' is the point of all this? Five days from leaving Auckland to get set up; plus five more days at the end - two to get the gear out, two to drive back to Adelaide and a final day for flights. I must admit when I went to bed at the end of day 5 a little part of me was wondering along the same lines. Would the diving really be worth it? But of course it was – otherwise why would I bothering write about it.

When you finally get into the water you are confronted by near perfect visibility and 21 degree water temps. As you sink below the surface you gently nudge the scooter trigger and glide down at a relatively steep angle through a collapsed area until you join the main passage. At this point you get your first sense of the majesty



of the dive – a motorway sized passage, stretching away from you as far as your light will shine – which is when you think to hell with majestic contemplation, crank up the speed on the scooter and turn into a joy riding boy-racer. This is a fabulous cave for scootering, with lots of space and little chance of scattering silt everywhere. The visibility is so good that keeping track of your buddy and the line is easy, so the scootering is completely relaxed and magical.



Happily you don't need trimix for this cave and you can do most of the open circuit dives with just double 12s and a stage bottle. Planning is a little more complex with the scooters, particularly as a battery failure and swimming exit would lead to a significant decompression obligation, so to make life easier we place oxygen bottles at 6m.

As well as the main passage there are several side passages worth exploring, all with varying geology. There are breakdown areas, collapses, domes, flatteners, sculpted rock, air-pockets and more,

with the continually changing nature of the cave easily keeping you interested. One of the rift passages we briefly visited was spectacular. However, the main destination for most of the team was the huge dome which marks the end of the first sump. This enormous totally enclosed chamber is only accessible by diving and so has only been seen by a handful of visitors over the years. We all made a special effort to ensure we had enough gas to visit this area and enough energy to de-kit, climb out of the water and walk about for a while. And if you look hard enough you'll also find the visitors book, signed over the years by some very famous figures in the cave diving world.

But aside from joy riding and perfecting our scooter technique this trip had a serious side. Our first priority was to take samples of the slime like substance which grows on several of the ledges in the Nullarbor caves. It hangs like snot in some places, but generally tucked away from divers' bubbles, so many divers never even notice it. The microbial samples we took were destined for researchers at Macquarie University, who hope to compare the slime from different caves to learn more about its origins.

Our next priority was to obtain high quality imagery of the caves, both through stills photography and video. The huge HMI lights we used last year for the Shaft Project were again perfect for this cave, illuminating it to an extent where the video could really capture the size and scale of the huge tunnels. As I complete this article Andrew our videographer is putting the finishing touches to a teaser trailer for YouTube – keep an eye on the TechDive NZ Facebook page and we'll let you know when it's available. There are also a selection of stills images already available on line – look up Nullarbor Karst Plain Project 2013 on Facebook.

TECH DIVE New Zealand

To conclude, this was a very complicated and ambitious project, involving a large team of very experienced divers. I could write far more about all the dives we completed, the logistics and the team members, but much of this is on Facebook or will get presented during various planned talks and also made available to all once the full video is complete. By simply looking at time underwater it's hard to justify all our efforts – in two weeks I did just 3 dives – however, if you look at the quality of the time underwater it is unparalleled. To visit rarely seen cave in virtually pristine condition is a pleasure all passionate cave divers will understand. To do this in so remote and challenging an area simply adds to the sense of achievement. So for the foreseeable future I will refrain from taking up golf.

