



THE SYDNEY PROJECT TECHNICALLY SPEAKING

Blue Holes Exploration Trip

By Andy Del Riccio

TRIP TO GLADSTONE

Early May 2009, and the idea of a trip to explore possible blue holes and associated cave structures in the Coral Sea is mooted at a Sydney Project meeting. As a bit of a sea-change from trying to dive on deep wrecks prone to current, the appeal was strong and before long a team of some 10 divers was signed up and ready to prepare for a trip to the (relatively) unknown.

The Pompey hardline reef complex (Great Barrier Reef) is a large series of reefs NE of Gladstone beyond the Swains reef. This location came about as a series of circumstances, a known charter boat comfortable with the idea of a dive exploration trip, the use of satellite imagery showing potentially many 'blue holes' and it 'only' being a 17.5 hour drive from Sydney all combined to set the wheels of preparation in motion.

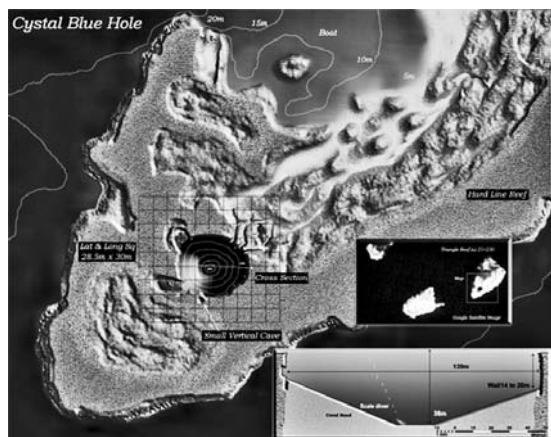
And what preparation! Stuart McGregor, as chief agitator and researcher for sites spent days (weeks/months) examining imagery, tabling tides and sea conditions and co-ordinating an exacting online dialogue as to how best to conduct the diving. The possibilities were that the dives could include holes going to 130m, with tidal currents 1 to 15kts, in areas that could only be accessed by small tender boats.

Practice sessions to cope with these conditions were conducted in Botany Bay using small Dories, in an effort to make sure we could find any diver swept away by currents. A clever system using marine radio and a GPS unit saw each diver loaded with a 'survival pack' they could use to call for a lift back to 'base'. This contained not only these two items, but also an PLB, water, strobe, torch, Light-stick space blanket and a bit of lead to trim out the pack to neutral buoyancy.

The questions, thinking and communicating kept on going until almost the last day, when Gladstone saw 9 divers arrive to board the MV Norval at Gladstone marina. Stuart McGregor, Dave Apperley, Samir Alhafith, Frits Breuseker, Tim Cashman, Craig Challen, Andrew Del Riccio, Agnes Milowka, Kevin Okeby all got past the banana curtain and were ready to go.

LOADING BOAT – EQUIPMENT TAKEN

Saturday October 14... 9



suspicious characters started to mill around the Gladstone Marina, and one by one drove up to an unpretentious timber vessel, the 20m MV Norval, built in 1973 by Millcraft Boatworks in Brisbane. Being a timber ship with a full displacement hull, the team happily took on the challenge of filling every available space with equipment, including:

- 4 G cylinders of oxygen
- 2 G cylinders of Helium
- 9 CCR rebreathers (inspirations, visions, a Classic KISS, O2ptima, Megalodon and a homebuild) including 30+ 3L cylinders)
- Compressor
- 2 gas boosters
- 5 scooters
- 2 U/W video setups
- Bailout cylinders, drop tanks of trimix, nitrox and oxygen
- Shotlines, weights and floats
- 6 survival packs
- 9 laptops
- Charging equipment for the plethora of scooters, cameras, computers, GPS, sounders, etc.
- Ladders for the three 4.2m tenders to be used for diving
- Personal diving gear, clothes etc
- 15 cases of beer
- Cases of soft drink, water, nibbles etc.

By the end, the poor old Norval was about 15cm deeper in the water! By cleverly hiding much of the gear in the hold and steerage, the back deck only looked completely cluttered! Was it a challenge? Yep. Did we have cars break down? Yep. Forget things at the last minute? Yep. Amazingly, by around 5pm, the boat was loaded with equipment,



food for the trip and all the divers! We now had a 27-hour steam to the first destination, Barrier Star Blue Hole.

NIGHT / CROSSING TO SWAINS' REEF

The crossing gave the team an idea of what was to be home for the next 8 days. The Norval is a stable little boat, manned by an amazing skipper Scott and

a deckie Morgan, for whom nothing was too much trouble. Some would mutter about the generator going all the time, but those in the know knew it was a very handy acoustic screen for some diver's snoring!

BARRIER STAR BLUE HOLE – SEARCH, FIND AND DIVE

The first site to be dived was known as Barrier Star Blue Hole. Arriving late afternoon, the boat had to navigate a narrow channel around to the outer reef. A slow steam about the area of the hole saw the sounder show 70+m. the first site was located! The plan emerged, somewhat like a wreck on descent. The hole would be shotlined, and divers would be able to swim from the Norval over and down to start exploring. The late afternoon sun saw some complete a checkout dive to make sure equipment was working. Once again, my venerable KISS classic operated flawlessly. Not so sure about other things like the brand new shark shield, that leaked on its first dive...

On each site, Stuart took out tinnies with sounder, GPS and chart plotters to make detailed surveys of the site. In time, detailed maps of each will be produced from this data, and from that collected by the divers.

The first dives on Barrier Star saw divers at 30, 50 and 87. I decided to stick to my original plan of a 50m diving limit, finding there was lots of life present as I crossed over to the wall of the hole from the shotline. Barrier Star gave the appearance of a classic sinkhole, with as brief vertical descent, before the wall started to slope outwards. Clams, whips, gorgonians and black corals festooned the wall, with small fish living in the nooks and crannies. Once I got to 40m there was a distinct change in both the amount of life present and the water. Becoming much

more opaque, I saw few shellfish, very few fish and only silt covering everything. The wall continued to slope outwards, and so light diminished, my torch picking out hard detail while around it all became a vague blur. Small depressions in the hole wall sometimes opened out to shallow caves, and short tunnels, including one at 45m that appeared to go back a ways – and was only the diameter of a bucket. The next short tunnel saw me face to face with a blind shark and a few clams. Having swum against the perceived current, I started a slow ascent up the wall in the same direction, in order to cover more ground –



much the same as before. By 30m I reversed course and encountered Agnes and the ship's chain at the top of the hole in 20m, where deco was a pleasant ride up and down on the swinging mooring.

CRYSTAL BLUE HOLE

After a long steam returning to the Swains the Norval once again navigated right up to where our next site was. Crystal Blue Hole is located within the reef structure, and as such needed to be dived from the tinnies. A shot was placed in the hole and I enjoyed the morning sun keeping an eye out for divers as they explored the site. Crystal ended up being a shallow hole, only some 30m deep, with limited fish life and evidence of much coral damage from past cyclones. I did a shortish dive here on OC, to get a look at it, shortly before we moved on to our next sites.

The next site never appeared! It was an alleged deep hole of over 100m depth, provided by fishos, which 'you can't miss'. We missed it, but it's very nice to go cruising on the reef! Continuing on our way, we were off to alleged site number two, a 'Wonky Hole' which may be a fresh water spring on the ocean

floor. As our skipper Scott ventured that he had fished this site, we knew there was a good chance of success, and, soon enough, we had a hole on the 60m sea floor.

The hole extended another 25m in the sea floor and exhibited similar features as our other locations, a definite Blue Hole, aged, collapsed in places, and filled with sediment of the ages. For my dive, I shared the time with Tim Cashman, taking a reel to swim clockwise around the base of the hole. Probably the greatest feature of this area was the huge black coral trees in places over 2m tall and extending out just as far.

Corkscrew sea whips also loomed large at this site, as did our ubiquitous grinning clams. No tunnels or caves of note, so at around 25 minutes bottom time, we started a leisurely ascent – mine a tad too slow (3m / minute), seeing me clock up an extra 30 minutes of deco as reward. Seeing as we were some 12 hours from rescue, a bit more deco wasn't going to hurt anything, apart from the roast getting burnt. Lucky I'm a veggie!

KEYHOLES

Our last site was what we called a Keyhole looks just like that on the charts: a keyhole in the reef. Diving in here appeared to be problematic, with a lot of shallow reef between the sea and the hole, until skipper Scott drove Norval straight into the hole and set anchor there... while a large hole, it too was filled with sand and only 20m deep. Fish and coral life was much better here, but one could still see that recent weather had taken its toll on the marine life here.

Our trip ended early in Sunday morning, docking back in Gladstone around 5am. Most hands were up and ready to start the worst part of a trip – unpacking. With a human chain-gang: we unloaded all the G cylinders, scooters, rebreathers, tanks, and personal equipment. It only took 2 hours, and we were ready to have a second breakfast at the local yacht club, followed by celebratory drinks, and then lunch, drinks, dinner, drinks and a good night's sleep. With luck, another trip will be planned for 2010.

The Sydney Project is a technical diving club that welcomes new members, so if you're interested in joining or just keeping up with our activities, then check out our website at www.sydneyproject.com