

Tech Dive NZ

Newsletter August 2011

www.techdivenz.com, info@techdivenz.com

WELCOME TO OUR MONTHLY NEWSLETTER



Welcome to the August edition of our monthly TDNZ newsletter. We thought we'd grab your attention with one of the pictures from our recent Truk Lagoon trip, taken by Cas during a dive on the Kiyosumi Maru. Yes it's real and a sobering reminder that none of the wrecks in Truk have been purposely sunk! Jamie has written a very comprehensive trip report, so if you want the low down on all the wrecks we dived, including one originally from NZ, then check out pages 2 and 3 below and also our website.

But it's not just Truk, this has been a really busy month - with another winter sun trip to the Great Barrier Reef happening, plus our fourth 10 x 10 x 10 weekend and our mud fest - the Rotorua Tough Guy Challenge.

The Great Barrier Reef trip was a 4 day live-aboard going from Cairns to Cod Hole and back. Lots of sharks and turtles were seen, plus some very big Potato Cod, what we'd call Grouper here in NZ. On the 10 x 10 x 10 trip we gave away our first two free days, as John and Christian both passed the 6 dive-site mark. Which means the winner of the free-weekend will be decided on the very last trip - it's going to be exciting. If you are interested in reading about this latest trip then Christian has written a great trip report which is also up on our website.

As for the Rotorua Tough Guy event, well although only Jamie and Tony attended (everyone else who originally said they would go wimped out!) they did us proud, coming in together, placed 425th out of 1,465 competitors. And yes it was muddy - with 4 swamp/lake crossings completed, with one deep enough to get freezing cold water up to the armpits. Anyone up for the event next year?

Save diving everyone.

LOCATION HIGHLIGHTING A GREAT NZ DIVE SITE



This month our featured dive site is a location far more famous for its above water scenery - Milford Sound. Just about everyone has heard about this fantastically beautiful place and certainly for most visitors to New Zealand it is on the 'must-do' list. But it is also a great diving area, if you make the effort to visit.

There are several things which make this a very unique dive site. Firstly there is often a fresh water layer sitting on top of the salty sea water. The thickness depends on how much rain has been falling (our guide said it rains on average 2 days out of 3) and on the day we dived the fresh water layer was 6m deep. This layer is usually a very dark green

which meant our torches beams looked like Star-Wars style light-sabers.

Secondly due to this dark fresh water the diving conditions under the layer are almost night dive like, or to lead into my point, more like conditions found during deeper dives (50m+). Which means species found usually only at great depth can be found very shallow in Milford Sound - most notably Black Coral. We saw several enormous black coral trees at only 12m deep and all covered in red and yellow worms.

The third and final unique feature of this dive is that although the dive itself is at sea level you need to include altitude planning as part of your dive plan - unless you are coming in by boat - which would be a very long trip. There is only one road into Milford Sound (worth a drive just by itself) and it goes over a pass which is 940m above sea level at it's highest point.

But despite (or maybe because of) the remote location this is a dive well worth doing. We saw dolphins and a small school shark whilst diving and apparently you can also see Spiny Sea Dragons if you look carefully. And because it is such a beautiful location you might even be able to persuade any non-diving partners to come along for a day trip as well.

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DIVING

TRIP OF THE MONTH

Chuuk Lagoon - Micronesia July 17 - 24th

Today it is hard to believe that the isolated and tranquil islands of the Federated States of Micronesia (Chuuk, Yap, Kosrae and Pohnpei), formerly known as the Caroline Islands, could be the scene of a major battle. Today visitors are greeted by swaying palm trees, smiling locals and the warmth and sunshine typical of the idyllic Pacific. But step back a few generations and Chuuk was a closed territory, off limits to all visitors. Formerly controlled by Germany it had been taken over by Japan in 1914 and in the inter-war years had been turned into a major logistical hub and home operations base for the Imperial Japanese Navy's Combined Fleet. By the outbreak of war in the Pacific, Truk Lagoon (now renamed Chuuk) was heavily fortified, had several airstrips and was garrisoned with 1,000's of troops.

By 1944 the Japanese were in full retreat across the Pacific with American forces slowly clearing them from one island chain at a time. As part of the preparations for the invasion of Eniwetok (Marshall Islands) it was decided that in order to maintain air and naval superiority Truk had to be attacked. During February 17-18th 1944 the



American's launched Operation Hailstone, attacking both ships and airbases with over 500 aircraft, launched from 5 aircraft carriers. The resulting Japanese shipping losses exceeded 220,000 tons. This was destruction on a massive scale.

Sixty Years later in 2004 I had my first visit to the Lagoon. Back then I was a keen but relatively inexperienced wreck diver, still using a single tank – although I occasionally carried a small side-slung bottle for accelerated decompression. I distinctly remember three wonderful things from

this trip. Firstly how intact the wrecks were relative to those I usually dived in the English Channel. The wrecks in Truk Lagoon were easy to navigate, easy to penetrate and it was easy to identify where you were at any given time. They were also crammed with artefacts and cargo, something almost unheard of in the heavily plundered UK waters.

Secondly I remember the life and colour – the wrecks were all heavily encrusted with both hard and soft coral and home to a large amount of marine life. And of course unlike the UK the water was calm (totally enclosed in a lagoon), warm and clear. In fact it was almost like we had two separate dives every time we got into the water, one a wreck exploration and the other a tropical reef dive. And thirdly I remember our boat. Following some advice from a group of divers we had met on a previous trip we had opted to do a live-aboard instead of land-based diving – and it was a great choice. We stayed on the Odyssey and it was more comfortable and luxurious than our flat back in London. I loved it. By the time I left I knew I wanted to return for more.

Seven years and over 1,000 dives later I finally returned, using my rapidly approaching 40th birthday as the spur to get organised. Again we stayed on the Odyssey and again the trip was amazing. Here are a few of the highlights:

Kiyosumi Maru

87m, 8614-ton passenger-cargo ship built in 1934 to provide a service between New York and Kobe, Japan. Converted 1941 into an armed auxiliary cruiser, with 8 anti-aircraft guns and a pair of torpedo launchers. Located in the Repair Anchorage, resting on her port side. Starboard side rises to within 14m of the surface.

We did two dives on this wreck, including our shake down dive at the start of the holiday. With the wreck lying on her side the single prop is clearly visible and in the aft hold you can see two spare prop blades still strapped to a bulkhead. In hold 4 I remember a couple of bicycles, but otherwise the holds are relatively empty. Just outside of hold 2 there was a small display of various artefacts and a skull, serving as a reminder of the ships violent end. Holds 1 & 2 are easily



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dived by less experienced divers as they both have huge holes from torpedo impacts. On our second dive we explored the engine room, which although not easily accessible is wide open once you are inside.

Yamagiri Maru

134m, 6438-ton passenger-cargo ship built in 1938. Located in the Repair Anchorage, resting on her port side. Starboard side rises to within 9m of the surface.

At the time of her sinking this wreck was undergoing repairs so was virtually empty, however the remaining cargo is of particular interest. When the first divers visited the aft two holds they reported finding 18" artillery shells – the largest shells ever used by the Japanese Navy. This report was subsequently published in a variety of different guides to Truk Lagoon. However, since that time divers have returned and accurately measured the shells – they are only 14". But they are still enormous, scattered about the hold and lying against the drive shaft. Most of the bridge and superstructure have gone on this vessel, but the engine room is full of surprises – particularly the skull which was clearly wedged into a lathe by the force of an explosion. It is easy to miss as it is tucked away and directly above your head as you enter the small machine shop area. This dive was also memorable for the amount of coral and life, particularly a

neon pink anemone towards the stern.

Fumitsuki

103m, 1193-ton Mutsuki Class Destroyer, built in 1926. One of only two true warships sunk in the lagoon, the other is the destroyer Oite. Originally moored in the repair anchorage, but damaged and sunk north of Udot whilst trying to escape the American raid. Sits upright on the seabed at 38m with a slight list to port. The deck is at 30m and much of the superstructure rising above that. No penetration possibilities.



We only did one dive on this wreck as it has no viable penetration options; complete gear removal would be the only way, and even then it would be very tight. However as she sunk away from most of the islands the visibility is considerably better and it is easy to glide along above the wreck and appreciate how streamlined she is compared to the cargo vessels. You can also see how quite how twisted and buckled she is – a result of the American raids. The props are clearly very different from the Marus, designed for speed rather than power. The torpedo launcher just in front of the superstructure is clearly identifiable, as is the deck track used for moving the enormous long-lance torpedoes around. The stern gun is only difficult to recognise because it is so encrusted with coral. A beautiful dive.

Shinkoko Maru

152m, 10,102-ton naval tanker built in 1940. One of eight tankers used to refuel the ships involved on the attack on Pearl Harbour. Located north east of Udot, sitting upright on the bottom at 38m. The superstructure rises to within 12m of the surface.

We did 3 dives on this ship, two during the day and a night dive – and WOW! This ship is everything a true romantic would envisage about a pacific wreck – all life and colour, a photographers dream. All the wooden walls and most of the ceilings and floors of the



forward superstructure have rotted away, leaving a metal frame work perfect for soft coral to colonise. And yet you can still see several identifiable features, including the 3 bridge telegraphs. Lower in the forward superstructure there is a galley, complete with enormous rice cookers and a sickbay complete with medicine chest and operating table. At the stern you can see depth charge launchers and both the bow and stern guns are worthy of magazine covers.

This report continues on our website:

www.techdivenz.com/reports.html

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DIVING

WHAT'S COMING UP

GUE Fundamentals

September 14-18th [Wellington]

October 20-24th [Auckland - Labour Day]

Learn how to back-kick, how to hover and why many of the world's dive ninjas all wear the same equipment configuration. This class is the gateway to all GUE training and an excellent starting point for would-be techies.



The course is a very intense 4 days, but you will have a great time and you will learn loads. In fact Jamie is so confident you will learn a lot he offers a money back guarantee: a full refund if you don't think the course was worthwhile. How good is that?



10 x 10 x 10 - FINAL TRIP

September 24-25th

This is our final trip and also the trip where we'll find out who has won the free weekend - will it come right down to the wire and a mad rush to get in the water first? This trip is also Jamie's 40th birthday (he thinks he looks younger) so make sure you bring your best party clothes if you come along.

Cave diving live-aboard trip

October 4-6th

We are running a 3 day (mid-week) trip to the Poor Knights, specifically to target the caves. Our main aims are to do multiple dives in the longest two caves - Taravana and Scary, weather permitting. We will also be doing some full cave training dives and some surveying work in Taravana.

This is an excellent opportunity to explore the 'hidden' Poor Knights and/or get an insight into what Full Cave training involves. Due to the sheer size of Taravana, multiple dives are required in order to truly appreciate and explore it fully. Trips such as this one are the only practical way you can do this.

Mikhail Lermontov

October 14-17th

This is NZ's biggest and most totally awesome wreck dive! It has 12 decks, lots of artifacts and areas to explore and it's all located in a max. depth of only 37m - perfect. Having done 4 trips in the last year we've now learned how to access some of the wrecks best kept secrets - but they will remain a secret unless you come on this trip. Some of the areas you can visit include:

- Leningrad Restaurant
- Sadko Bar and Duty Free area
- Kitchens & Crew's Mess
- Swimming Pool and Neptune Bar
- Library, Cinema and Projection Room
- Bolshoi and Panorama Lounges
- Bridge, Captain's Cabin, Radio Room
- Gym & Sauna



Auckland Marathon

October 30th

Come and cheer for all the TDNZ club members who are running.



Oceanz Dive Conference - Tauranga

November 12-13th

This is NZ's only dedicated diving conference and exhibition and will be held at the Baycourt Complex in downtown Tauranga. There will be equipment and training providers exhibiting, a photography competition and a range of speakers, including Jamie from TDNZ. Hopefully this is the start of a great and regular NZ event. See page 4 for more details.

Blue Creek Resurgence

December 1-8th

Following our very successful exploration in February this year we are going back for another trip. We have divers visiting from all around the world for this trip so it's a great opportunity to pick their brains for advice and expertise. And don't worry if you're not a cave diver, we also need willing helpers for carrying stuff to and from the cave - it's only 1.7km each way so not too bad.....

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OCEANZ DIVING CONFERENCE



After a long absence NZ will soon be getting it's only dedicated diving conference and exhibition back again. A decade ago this conference used to be one of the highlights of the NZ diving calendar, so it's great to see it returning.

Based at the Baycourt Complex in downtown Tauranga over the weekend of 12/13th Nov.

www.oceanzdiveconference.com

this conference promises something for everyone, or all divers at least! There will be equipment manufacturers, wholesalers and retailers exhibiting, training organisations, conservation groups and dive clubs all represented. There will be a photography competition, diving events and a gala dinner. There is also an entire program of speakers, who will present on a wide variety of topics.

Speakers list (we will keep adding to this list as more speakers are confirmed.)

DARREN SHIELDS

Six times NZ Spearfishing Champion

DR ROGER GRACE

Marine biologist and photographer

PETE BETHUNE

Founder of Earthrace Conservation

PETE MESLEY

Photographer and Rebreather Instructor

STEVE TREWAVAS

National Director of the C.D.A.A

JAMIE OBERN

NZ's only GUE and Cave Instructor

This should be a regular event in NZ, but in order to make it successful we need your support. Check out the website, get your tickets and tell your friends. We're going to be there - we hope you will be too.

10 x 10 x 10 WINTER DIVING CHALLENGE

We have reached the final weekend of our winter diving challenge. The standings are as follows:

7 sites done (already won a free day)

CHRISTIAN STIMSON

JOHN LEE

5 sites done (1 away from a free day)

HAMISH McKAY

4.5 sites done (1.5 away from a free day)

CHRIS BARDON

Remember everyone who dives 6 of the 10 sites gets a free days diving, AND the first person to complete all ten sites gets a FREE weekend.

And if we don't visit all 10 sites due to the weather, then the diver who has visited the most wins the free weekend - so given the scores above it is all still to play for. The last weekend should be fun!

FINAL Weekend:

Saturday 24th and Sunday 25th September

The standout dive so far is still 12-Fathom Reef, but it is facing stiff competition from the caves - Taravana and Scary, which everyone seems to love.

The Dives

1. Twelve-Fathom Reef
2. Phil's Pins
3. The Mermaid of Taravana
4. Fresh-water zone in Crystal Cave
5. The Chimney at Fraggie Rock
6. The Window on Landing Bay Pinnacle
7. Drift-dive: Wild Beast Pt:Northern Arch
8. Circumnavigate: Sugarloaf or Scary Deep
9. The air chamber at Red Baron Cracks
10. East or West Caves

We have tried to pick dive sites which show off all the best bits of the Poor Knights, plus highlight a few of the lesser known gems, such as Phil's Pins and 12 Fathom Reef. These are the main sites which helped to rank the Poor Knights as Top 10 in the World.



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PROFILE

CLUB MEMBER OF THE MONTH

Here we profile one of our dive club regulars, find out a little more about them and see if they have any recommendations for us.

CAS TONGUE



NB: Picture shows Cas analysing her double tanks prior to an accelerated deco dive inside a ship wreck. Don't listen to her - she's a techy really - Ed.

Profession/job? Dodgy Sales Rep

How many dives have you done? 300+

What qualifications do you have? Divemaster is all I'm owning up to...., plus Advanced Drinking level 1 and I'm an ambassador for Diet Coke.

When did you start diving? 2000

Favourite NZ dive site? Volkner Rocks. The comfortable and luxurious boat trip, spectacular diving, lots of pretty fish, no other divers out there and NO caves!!!! Or none that the techies have found yet.

Which course would you most recommend? Any taught by Mel or Jamie of course. (Do I get a free beer for that answer?)

What do you love most about diving? Hairy men in tight rubber suits.

What do you do when you are not diving? My body is a temple, so I spend numerous hours in the gym, especially Saturday morning doing TWO classes. (Due to my dedication and not because of the perv factor at all!!!!)

What is the next course you plan to take? I'm still not over the trauma of my last class with Jamie yet.

Where is your next planned dive trip? Truk Lagoon, where I get a young boy to look after my every need; is that not what being a cougar is all about?

Any other information we should know about you? I have met Queenie and her hubby too. Also a pyromaniac in my spare time. In my youth I have completed 4 ½ marathons 2 off road and 2 on road and my times are the same for both types, go figure!!!! Finally I have dived to 65m on air - who needs trimix you wimps? I remember the dive as clearly as all my nights out on the town

DIVE FACTS

DID YOU KNOW?

OXYGEN - it is essential for life; without it we will die within minutes. And as all divers know it is also the primary first-aid treatment for 'the bends' - but oxygen has a dark side too. Breathed at high partial pressures oxygen becomes toxic, causing epileptic type fits, which whilst non-fatal in themselves usually lead to drowning if they happen to a diver underwater. But how much do we really know about CNS Toxicity?

Kenneth W Donald was a senior medical officer on destroyer flotillas in WWII, before moving on to work for the Admiralty's Experimental Diving Unit. He became the British Navy's 'chief oxygen investigator' and conducted numerous experiments (all on volunteers) in order to better understand oxygen toxicity. In 1992 he published a now legendary text book: Oxygen and the Diver.

Amazingly even after years of study KWD was unable to give any definitive answers to the CNS problem. One of the most quoted examples being the navy diver who was "poisoned within 7 minutes on one day and yet resisted the same dose for over 2.5 hours the next day".

So what does this mean for us?

oh!

oxygen

Put simply, 3 things need to be remembered about CNS toxicity:

- It varies between individuals.
- Individual tolerance varies day to day.
- It is usually FATAL!

However, whilst we may not fully understand the mechanisms involved we do know how to avoid it; by strictly controlling our PPO2. Most training agencies now recommend a maximum working PPO2 of 1.4 and a maximum decompression PPO2 of 1.6.

Going beyond these limits, either intentionally or in error is like playing Russian Roulette. CNS toxicity has killed many experienced technical divers. Take it seriously and don't let it happen to you.

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