

WET RAG

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Spring | 08

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Spring Edition



Club President's Report



Geoff Cook

President - South Pacific Divers Club I have great pleasure in announcing that following the Annual General Meeting of the South Pacific Divers Club on Monday the 21 July 2008.

Geoff Cook President – Vice President -Jason Farlow Treasurer -Mark Pinna

Secretary -Peter Iwaszkiewicz

Photographic Officer -Noel Taylor Dive Organiser -Scott Egginton Dive Organiser -Any Del Riccio Dive Organiser -Simon Gayler Dive Organiser -Dave Chillari Dive Organiser -Robert Doust Dive Organiser -Mitchell Cook Dive Organiser -Danielle Egginton Social Organiser -Andreas Thimm Social Organiser -Ann Turner Social Organiser -Fran Thai Low Social Organiser -Leo Bergagnin Club Historian -Denis Robinson Club Historian -Tom Byron Club Historian -Leo Bergagnin

Communications Officer -

Communications Officer -

To the outgoing members who served on the previous Committee you have left the Club in a very good position financially and have positioned the South Pacific Divers Club well in the greater diving community. Accordingly you all have the appreciation and thanks of the members for the efforts and contributions.

Scott Leimroth

Dave Chillari

To the incoming committee, we each have jobs and goals that we would like to achieve and I know that we as a team are more than capable. Diving in the last few months has deliberately been more social. Post Dive BBQ's seem very popular amongst participating divers and of course partners and family. These BBO's will continue.

Getting out of our diving comfort zone and diving new sites and wrecks will be an ongoing priority goal of the dive organisers. We have arranged for several interclub dive days and dive weekends, diving their wrecks and their reefs. "Calendar wise" our dive organisers have been set a task of setting a more dives diversely covering all levels of diving in the club from beginner to tech, day and night dives, shore and boat dives with regular weekends and overseas trips away. All these dives are advertised and promoted on the South Pacific Divers Club Forum at www.southpacificdivers.com . Club Members need to register on line to get access but you will be surprised to see the amount of diving, trips away and social events that are planned.

Communication amongst members is the key to building ties, friendships and ultimately to dive. Quite a few of the members and most of the committee have "Skype" hooked up on their PC. Virtually every night free online phone conversations plot and scheme the coming weeks diving.. So here is a tip. If you want to really get diving then get on line and get involved...

Guest speakers at our meetings seem very popular and will continue for continued education and entertainment of members and friends. Tim Smith from the Department of Planning (Formally the Heritage



Dept) with be the Guest Speaker of the South Pacific Divers Club in September and will be discussing access to Heritage Listed Wrecks such as the Lady Darling, Bega and M24 Midget Submarine. This should be an interesting evening with his audiovisual display and I am guessing Question and Answer time will be.... brisk...!

The Wet Rag is the voice and view of the South Pacific Divers Club. Please support it with your contribution of dive reports and photos of our dive related activities. Its success to the point where is has a monthly download of 17000 issues per month is astounding. Communication internally through our on line Club Forum has been very powerful. Our calendar, discussion, chat, sales and swaps and dive reports are there in this effective tool.

I look forward to a great year of diving with our South Pacific Divers Club which certainly has a lot to offer the diver both new and experienced and with your involvement friendships within our club will grow stronger.



In closing I welcome and value the support of the incoming committee and we will strive with renewed enthusiasm to make this coming year the Year of the South Pacific Diver.



Geoff Cook President 2008-09

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Editors Report

Wow! what effort goes into getting this e-magazine published. Having very recently taken up the position as temporary Wetrag editor, I have gained an immense respect for the previous editor, Scot, who managed to pump these out at the rate of one per month. We are starting a slightly new format that includes video. So, if you have a video camera or video mode on your still camera, send some footage and have it shared with all. Being a volunteer designed, not for profit publication, we need as many articles that will interest you, the diver, as we can get. If you have had

a good experience with a new dive, or new equipment, or just want to tell others about some diving related matter, please make a contribution to us. You might want to even ask a question and it can be answered by very experienced divers. All we need is a story and a few pictures to go with the article. If you don't have the time for writing, you can supply the article in point form and we will turn it into a story. So help us out and contribute to this wonderful publication so we can contine providing this great resource.

Safe & Happy Diving David Chillari Acting Wetrag Editor



The WET RAG is published by South Pacific Divers Club Inc. Editorial content can be sent to david(@)southpacificdivers.com

Rebreather Safety.

by Cedric Verdier, David R Lee & Dr Howard Scoff

Unconscious Recreational Rebreather Divers & Rescue Techniques

Cedric Verdier is the founder of the TRIADE Project, established in 1999, discovering and exploring more than 20 virgin wrecks located in the south of France between 70 and 130m / 230 and 430 fsw.

In 2002 he was the first diver to identify and dive the British Cruiser HMS Manchester off Tunisia.

Amongst other dive "Firsts" he pushed the limits of the Sra Keow cave in Thailand, using his Megalodon Closed Circuit Rebreather.

He was also a member of the Yamashiro Project and is the only diver who explored the Japanese Battleship HIJMS Yamashiro sunk in the Battle of Leyte in the Philippines in November 1944 and resting at a depth of 196m / 650 ft.

Cedric is a PADI Course Director and a Trimix Instructor Trainer for IANTD, PSAI, ANDI, DSAT and TDI. He spends most of his time teaching cave and mixed-gas rebreather courses at the diver and the instructor level.

He is a past Regional Manager for PADI Europe and DAN and has written 5 books and more than 150 articles about diving.

He was recently appointed as the NACD Cave Diving Safety officer for South-East Asia.

As he is always travelling all over the world, you can mainly contact him by email at info@cedricverdier.com or www.cedricverdier.com



CEDRIC VERDIER, DAVID R. LEE, Dr HOWARD SCOFF

Verdier C., Lee D.R., Scoff H. – 2008 – Unconscious Rebreather Diver and Rescue Techniques – Various techniques have been designed and tried to rescue an unconscious recreational rebreather diver who passed out underwater or at the surface. A one-year study done by the authors has allowed fine-tuning some techniques to increase the chances of survival.

Keywords: rebreather. unconsciousness. blackout. rescue. hyperoxia. hypoxia. hypercapnia

Introduction

There is at the moment no guideline and no protocol for the proper rescue of an unconscious recreational rebreather diver at the surface or underwater. Protocols exist in military or commercial diving contexts but cannot be applied in extenso by the recreational rebreather diving community (1) (2) (3).

The authors have studied in details 32 fatalities that occurred in the past few years in the rebreather diving community (4) (5). They have also be witness of or directly involved in 3 cases of rebreather diver blackout that ended in a positive outcome. They were also instrumental in the testing phase of rescue techniques taught to 20 rebreather divers with no previous experience in rescue techniques (6).

Based on this study, a lot of important considerations have been noticed, emphasizing the lack of rescue training for rebreather divers. This training should emphasize:

- 1. Simple and easy to remember techniques. In a real life emergency the technique is always more complex to perform and more difficult to remember, even if the rescuer practises it on a regular basis. Because of the inherent task-load experienced by any rebreather diver, a successful rescue tends to be more rare than its OC counterpart.
- 2. A protocol that is flexible enough to be used in most of the circumstances:
- <u>Any kind of recreational diving equipment</u> dry suit or wet suit, Full-Face Mask (FFM) or usual half-mask.
- Any kind of environment open water, flooded cave, ice, wreck penetration.
- <u>Any depth and breathing gas</u> Deep Trimix dive with long decompression obligation, shallow no-decompression Nitrox dive.
- <u>Any kind of rebreather</u> back-mounted or Over-the-Shoulder (OTS) counterlungs, Semi-Closed (SCR) and Closed Circuit Rebreathers (CCR), chest, back and side-mounted rebreathers, with or without Bailout Valve (BOV).

In the study cited in reference, one of the most important problems that has been noticed was the lack of priority during the rescue. In a recent rebreather fatality where the victim died and the rescuer was severely bent (severe symptoms of neurological decompression sickness), it has been emphasized that the most important factors of a rescue are:

- 1. The safety of the rescuer (like in any type of rescue, there is no reason why a potential fatality should end up in two fatalities) (7).
- 2. The most life-threatening problem for the victim. In most of the cases, drowning should be considered as the major threat. Hypoxia is also a very important issue. People can recover from decompression sickness (DCS) or even from Arterial Gas Embolism (AGE), not from complete drowning. In most situations, the most appropriate protocol is to bring the victim to the surface safely and as quickly as reasonable (3).

Cause of unconsciousness underwater

The reasons why people pass out underwater can be extremely various and complex. A large array of medical conditions can trigger unconsciousness at various levels of exertion and in various circumstances underwater or at the surface. These medical conditions should be screened and spotted during a fitness-to-dive medical exam (8). However some of them can stay undetected even by diving medicine experts.

Causes of unconsciousness can also result from diving-related problems such as (9):

- Cold (sudden or long exposure).
- Marine Life Injury (bite, sting, injection of toxin).
- Vomiting (seasickness, vestibular disorders, etc).
- Decompression Sickness and Pulmonary Barotrauma.
- Inert Gas Narcosis.
- Carbon Monoxide Toxicity.

Some rebreather-specific problems can also trigger physiological problems at the origin of a blackout (10) (11) (12):

- Hypercapnia (excess of CO2).
- Hypoxia (lack of O2).
- Hyperoxia (excess of O2)

The initial cause of the unconsciousness is not really crucial and the rescuer shouldn't loose a lot of precious time to determine if they are dealing with Hypercapnia, Hypoxia or Hyperoxia. However Hyperoxia is a case on its own, as a convulsion could appear. Susceptibility to a high level of oxygen varies both between individuals and within the same person from day to day and the occurrence of convulsions might create additional problems and delays for the rescuer (13).

A grand mal convulsion generally occurs in three phases:

- 1. The 'Tonic' phase a period of body rigidity. It is dangerous to attempt to surface the casualty at this stage because spasm of the glottis and respiratory muscles will result in inadequate exhalation and may therefore provoke pulmonary barotrauma. Fortunately this phase doesn't last more than a minute.
- 2. <u>The 'Clonic' phase</u> during which the casualty undergoes true convulsions. This can last for widely varying periods of time. Some studies and discussions with medical experts tend to show that the airway is not blocked at this stage.
- 3. The 'Post-Ictal' phase during which the victim rests and actually resumes breathing. Depending on the circumstances, the victim can "wake-up" and be confused, disoriented or even combative for quite a long time, or simply stay unconscious. Other convulsions may follow the first one, sooner or later (14).

Protocols

1. Stabilizing the victim in the water column.

It has been shown during a few rescue attempts that it might be extremely difficult to stop a free-falling unconscious rebreather diver in mid-water (15).

- If the diver is found unconscious close to the bottom, the rescuer should find a stable position on the bottom.
- If the diver is found unconscious in mid-water or during deco, the easiest technique used during the study has been to maintain the depth by grabing the ascent line.

Out of 57 rescue attempts performed during the evaluation phase of these protocols, all the rescuers have obtained very promising outcomes every time another diver, regardless of their level of training and experience, has helped them (6). So it's strongly recommended for the rescuer to try by all means to attract attention and get some help to:

- Send an emergency SMB to make the surface support aware of the situation (in open water).

- Go through restrictions or simply to take care of the navigation (in a cave).
- Remove the victim's gear and to provide first aid (at the surface).
- Control buoyancy and body position on the bottom and during the ascent.

2. Assessing the situation

The rescuer has to assess the victim, the equipment and the environment in order to determine the best course of action and if the ascent has to be immediate or slightly delayed. In any case this assessment should be quick and shouldn't delay the rescue but make it more efficient. The rescuer has to deal with a high level of stress, time pressure being quite important. The following elements have to be quickly assessed:

- The victim
- The equipment
- The environment

2.1 The victim

Is it an oxygen toxicity seizure? In case of a convulsion underwater, the dangerous part being the Tonic phase, the victim's depth has only to be kept constant at the very beginning (a few seconds up to one minute) (16). If the rebreather diver doesn't wear a FFM or a neck-strap that efficiently protects their airway, drowning is a major concern. Therefore the main priority is to bring the victim to the surface as soon as safely possible.

Is the victim breathing? If there is no obvious sign of breathing (no bubble, no chest movement, no movement of the counterlungs), it is of the utmost importance to bring the victim to surface to administer artificial respiration/Cardio-Pulmonary Resuscitation (CPR) (17).

2.2 The equipment

Does the diver wear a FFM or a neck-strap that efficiently protect their airway? If it's not the case, even if the diver has still their mouthpiece in place, risks of drowning are quite high, even if the rescuer tries to maintain the mouthpiece in place. Any delay in the ascent should be avoided.

Is the mouthpiece still in the mouth? If not, a rescuer shouldn't attempt to replace it but should rather ensure that the rebreather dive/surface valve (DSV) is switched to the surface position (closed) to avoid unnecessary loop flooding. The rescuer should try to seal the mouth and ascent immediately.

Is there any water in the mask? A partially or completely flooded mask could be a major problem for the victim's airway. If it's the case, several protocols suggest pinching the nose during the ascent (3).

Is the loop content safe to breathe? This is only a concern if the diver breathes and their airway is protected. The rescuer can check the pO2 readings to make sure that the victim will be able to breathe a safe mix during the ascent (18).

<u>Hypoxia</u>: checking the loop content during the ascent is crucial, as the pO2 will drop when ascending to the shallows.

<u>Hyperoxia</u>: Flushing the loop with diluent or switching to a Bailout valve (BOV) could be an option. However one should also consider that breathing a high O2 mix in the loop could be beneficial on a decompression standpoint. In case of Mixed-gas diving, the open-circuit (OC) mix has to be breathable all the way up to the surface and the amount of gas in the tank has to be sufficient.

<u>Hypercapnia</u>: Without a proper scrubber monitor, it will be difficult for the rescuer to assess the CO2 level in the loop but it's not a major issue anyway. A diluent flush will help in any case, as it could also help in case of a partial loop flood (19). Remember that, in order to

efficiently flush the loop on most of the units, the rescuer has to open the overpressure valve (OPV) first.

2.3 The diving environment

Is there any physical problem that could delay the ascent? An overhead environment (cave, ice, wreck penetration) could delay the ascent as the rescuer will have to swim to the exit point.

A strong current in open water could also make the rescuer considering swimming to an ascent line rather than drifting far from the boat.

Is there any physiological concern that could delay the ascent? If a breathing victim with a properly protected airway (FFM, neck strap) has a significant decompression obligation, the rescue has to consider the possibility of performing the required stops to minimize the risks of DCS.

3. Ascending to the surface

If the victim doesn't breathe or doesn't have a properly protected airway, the ascent to the surface should be immediate (15). However the rescuer could have a significant decompression obligation as well. In this case, three main options are available:

- Ascending with the victim at the surface, providing 1st aid or handing the victim over to the surface support, then eventually follow a missed deco procedure (3).
- Handing the victim over to another diver with no/less decompression obligation.
- Sending the victim to the surface on their own, hoping that the surface support will be efficient and fast enough.

Discussions with divers involved in rebreather diver rescues have shown that this is a

personal decision, based on a lot of factors that have to be quickly considered by a highly stressed rescuer (20):

- The apparent state of the victim (not breathing since a very long time, etc).
- The amount of decompression obligation and the perceived risk of DCS.
- The accepted risk (that could depend on the relationship with the victim).
- The efficiency and the availability of the surface support.
- The surface condition (rough sea where the victim might not be seen by the boat crew, etc).

3.1 Opening and protecting the airway

The rescuer must definitely ensure that the victim's airway is open. This is easily done by holding the victim's mouthpiece in and keeping the neck slightly extended. However some studies show that an unconscious diver can hardly suffer from airway blockage and the related pulmonary barotrauma.

3.2 Controlling the ascent

It's often very difficult to keep control of the buoyancy of 2 divers at the same time, particularly in the shallows. Some techniques might make this phase easier:

- Inflating the victim's Buoyancy Compensator (BC) to start ascending.
- Opening the victim's loop OPV (and the dry suit purge if appropriate).
- Controlling the victim's BC purge.
- Controlling the rescuer's own buoyancy by emptying their BC, opening their dry suit purge if appropriate, and purging their own loop on the way up.

3.3 Establishing positive buoyancy at the surface

If the loop is not flooded, the main thing to do is to fully inflate the victim's BC, providing enough buoyancy to maintain the diver at the surface. The DSV should be closed when removed from the mouth to avoid loop flooding and loss of buoyancy at the surface (at the origin of several unsuccessful rescues). Depending on the equipment or if the loop is flooded, it may be necessary to release some weight or accessories (canister light, sling tank, etc).

3.4 Providing first aid

This means first care for the victim AND the rescuer:

- Calling for help. If no help is available, it may be necessary for the rescuer to stop for a few seconds to keep the stress level reasonable and assess the victim and the resources available at the surface.
- Ensuring the victim is breathing or initiating in-water artificial ventilation (17).
- Handing over the victim to the surface support or swim to the nearest platform available (boat, shore, etc) in order to provide better care (CPR/1st aid/emergency O2).
- Arranging for evacuation (nearest chamber/ diving physician).

Discussion

During this study, the authors discovered several potential problems further complicating the rescue of an unconscious rebreather diver.

- Some divers with open-circuit technical diving background have sometimes been trained to remove a regulator supplying a hyperoxic mix to replace it by another regulator (21). This procedure shouldn't be applied to unconscious rebreather divers because of the unnecessary delay to do so and the risk of flooding the rebreather loop. Furthermore opening the mouth to put in a regulator might only achieve water introduction/drowning. Some rescuers feel confident in attempting to seal a second stage with a breathable mix against the lips in the hope that if breathing resumes air will be inspired instead of water. The authors believe that none of these actions should delay the ascent or compromise the efficiency of the rescue.

- In case of a malfunctioning unit (leaking solenoid, ADV, manual injector, BCD inflator, etc), it may be difficult for the rescuer to quickly find out if there is a leak, where it comes from and how to stop it. The rescuer has to be aware that the rescue could end up in an uncontrolled ascent with missed decompression stops and higher risk of DCS. The risks inherent to a rescue should be fully understood and accepted by the rescuer. These risks should be explained in a rebreather-oriented rescue training program, along with the appropriate missed-decompression procedures (3).

A few studies have been done to fully understand the mechanisms of rebreather accidents (22) (23). However more information are needed to encompass the large array of circumstances of recreational rebreather rescues.

Conclusion

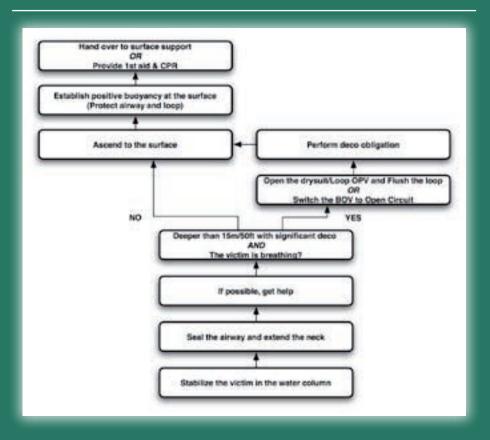
Even if most of the training agencies and official bodies dealing with recreational rebreather diving all agree on the lack of safety related to solo rebreather diving, this kind of practice is still very popular. The authors came to the conclusion that to increase the chances of survival in case of rebreather-related accidents occurring underwater or at the surface, there are several needs to fulfil:

- Need for a buddy. To quote Carl Edmonds (11): "The practice of Buddy diving is the single most important factor in rescue. It requires that each diver is responsible for the welfare and safety of his companion". Training simulations have shown Open Circuit rescuers to be as efficient as Rebreather rescuers, if the rescue protocols to follow are clear enough.
- Need for proper team procedures. A buddy too far away and not aware of the situation is almost as useless as no buddy at all. Having a buddy ready to perform a rescue means that the team is not spread over a long distance on the bottom or during the decompression phase of the dive and follow real team procedures (effective communication, constant buddy check, etc).
- Need for proper training. A well-trained buddy has usually more chances to perform an efficient rescue than an un-trained one, even when dealing with a high stress load (20).
- Need for proper safety equipment. Some accessories can definitely help in case
 of a rescue situation (FFM or neck-strap as individual protection, shotline and SMB in
 open water, etc).

References

- (1) "Proceedings of Rebreather Forum 2.0", M. Menduno, Diving Science and Technology, USA
- (2) "NOAA Diving manual: diving for science and technology", S. Spring, NOAA Office of Undersea Research, USA
- (3) "US Navy Diving Manual" vol. 4, Naval Sea System Command, USA
- (4) "NDC Diving Incidents Reports" (1999 to 2007), B. Cumming, British Sub-Aqua Club
- (5) "Annual Diving Report" (2001 to 2007), N. Pollock and al, Divers Alert Network
- (6) "DIRrebreather Rescue Workbook", C. Verdier, DIRrebreather
- (7) "The Encyclopedia of Technical Diving" T. Mount, International Association of Nitrox and Technical Divers
- (8) "Fitness for Diving" Alert Diver European Edition, Divers Alert Network
- (9) "Diving and Subaquatic Medicine" 4th Edition, C. Edmonds, C. Lowry, J. Pennefather, R. Walker, Arnold publishing, UK
- (10) "The Prevention and Management of Diving Accidents" (revised October 1997), Royal Navy Institute of Naval Medecine, Report No. R97066, UK
- (11) "The Story of CO2 Build-up" Rev. E. Lanphier
- (12) "Carbon Dioxide and the Rebreather Diver", H. Packer
- (13) "Oxygen and the Diver", K. Donald, Best Publishing Co., USA
- (14) "Current Thoughts on Mechanisms of Hyperoxic Seizures", J. Brian, University of Iowa Hospitals and Clinics
- (15) "Private correspondence with 3 rescuers of rebreather divers", (France, Hong-Kong and UK)
- (16) "Glottal patency during experimental cortical seizures in piglets", Leaming, Academic Emergency Medicine
- (17) "PADI Rescue Diver Manual", Professional Association of Diving Instructors, USA
- (18) "Performance of Diving Equipment", Research report 424, Health and Safety Executive, UK
- (19) "ANDI Recreational Diving with Closed-Circuit rebreathers", E. Betts, American Nitrox Divers International, USA
- (20) "Stress and performance in diving", A. Bachrach, E. Egstrom, Best Publishing Co., USA
- (21) "Oxygen Toxicity protocol", S. Hunsucker, Woodville Karst Plain Project, USA
- (22) "Rebreather Fatality Investigation", R. Vann, R. Pollock, P. Denoble, Divers Alert Network

- (23) "Compilation of Technical Diving Incident Database", J. Bozanik
- (24) "Technical Diving, too far too soon?" J. Bozanik



appendix Rebreather rescue Flow Chart

Courtesy of DIR Rebreathers



The Dangers of Rebreathers



Adelaide based hyperbaric surgeon Dr Richard Harris (AKA Dr Harry) was lucky to escape injury when his Mk15.5 rebreather suffered a catastrophic meltdown.

While returning from an expedition to the Nullabor. A fire, possibly caused by a faulty battery ignited the O2 and caused a fire that engulfed his beloved 4WD.

We are happy to hear that the insurance company has paid up.



South Pacific Divers Club has now been established as a DAN Asia-Pacific Promoter.

Our Promoter Number is P-513.

Please ensure that this number is included on all application forms submitted to DAN even if you apply online via their website.

The Club will recieve points for each NEW member that signs up with DAN and quotes the number above. These points can then eventually be redeemed for merchandise, hopefully we will be able to get an oxygen first aid kit or even some books for the club library.

We only receive points for signing up new members and only for members who are residents or nationals of the Asia-Pacific region (excluding Japan).

DAN provides:

Worldwide Emergency Evacuation Coverage for Members.

Optional Dive Injury Insurance Services for Members.

Funding and/or manning 24-hour diving emergency hotlines throughout the region. Non-emergency diving medical advice, accident management training, and undertaking data collection and research to enhance dive safety.

JOIN DAN TODAY www.danasiapacific.org



DIVE WITH THE PAC



Come along to a club meeting or a dive. Fill in the membership form at the back of the Wet Rag today!

Join South Pacific Divers Club!
With a 45 year heritage of exciting
adventure diving we have a lot to offer you.
Join us and be part of our ongoing club
activities including regular club dives, trips
away and great social events.





Dive Report...

The Currajong Obsession

by Peter Iwaszkiewicz

Saturday looked like another beautiful day to get hit by a yacht or some other recreational vessel and what better place for that than Bradleys Head. Coincidentally the waters, just off Bradley's Head, is the resting place of the famous and fabulous Currajong. After checking the tides (which is important unless you want to end your dive in Parramatta) we picked the magic time. The orders were given and Jon Evans and I entered the water at 8.30am on Saturday 2nd of August equipped with only a single 12.21 tank and a 5 litre pony of 40% nitrox. The plan was to follow the compass bearings all the way to the Currajong, spend some 15-20 minutes there and return to the shore while avoiding the need for a deco and therefore an imninent death by a jetcat. Upon entering the water straight away we noticed the unusually good visibility (basically no solid matter floating anywhere) and a shrinkage enducing low temperature of 15C. Due to the visibility being so good (some 12+ meters) the trip to the wreck was a breeze and took only 8 minutes. From some 20+ meters we were welcomed by the looming shadow of this great wreck. I have to say, that even though I have done this dive a couple of times, the approach to the wreck always takes my breath away. We found ourselves right at the bow of the ship but at the very bottom of it. Looking up, you'll see the 4+ meters silloutte of the ship and only then you'll get to truly appreciate its size. For Sydney waters, it is really something. After some 10 minutes of slow exploratory swim Jon and I got to the stern of the ship, examined the remains of the rudders and proceeded to turn back. At present the wreck is covered in oysters and silt so any obvious entry points are blocked. Consequently it was not a penetration dive by any stretch of an imagination. Nonetheless, exploring the deck area and occasionally venturing to the side of the ship looking through scattered debrief was a lot of fun in itself. The fish life

was sparse. The only exception to that rule was the numerous moray eels living in various gaps and in between loosely scattered debris. After some 20 minutes on the wreck both of us were reaching the turn-around gas level. Another 10 minutes of a slower swim later we landed safely back in some 2 meters of water. Wow, that was something, was our consensus! It was not the wreck, not the weather, not the visibility and surely not the narcosis (the average depth of that dive was just over 25 meters) but a combination of all of those elements that made us decide to repeat the dive on the following day.

In fact, we loved it so much that both Jon and I agreed to put ourselves through the pains of twin tank shore diving just so we could get more of the good stuff the next day. On the day, we were joined by Mark Simpson and Fran Thai-Low who decided to dive it on single 12.2l tanks. Not a bad option this time of the year unless you have a dry suit. The water was truly cold both days, not much over 15C. Our plan was simple, do everything as

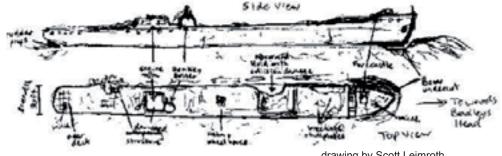


Courtesy of Michael McFadyen

The Currajong Obsession

by Peter Iwaszkiewicz

per the previous day's dive only longer and slower. Have air, will travel! Yet again the swim to the wreck took no longer than 8 minutes even though we stopped for a quick coffee on the way. Upon our arrival we were welcomed by a couple of tired mermaids and one very strange looking fish. Some greetings were exchanged, admission fees paid and we proceeded to explore the wreck some more. This time we were in no rush and spent more time exploring few specific 'target' areas eg. the stern, and the remains of the destroyed bridge. After some 50 minutes of sticking out heads into every hole we could find and lifting pretty much anything looking remotely interesting we decided that it was the decent thing to do to head back to the shore. Little did we know that we were about to stumble upon one of the biggest conspicacies of today recreational diving, 'The Great Decompression Lie' as I now like to call it now. Heading back to the shore after some 60 minutes of diving (50 if which were spent on the Currajong) my Uwatec computer showed me some 14 minutes of deco @ 3 meters. You can imagine my astonishment when I realised that my buddy, who spent the entire 50 minutes pretty much 3 meters away from me had none! No deco whatsoever! Consequently to avoid both of us getting sliced in half by a passing yacht Jon surfaced pretty much straight after getting back whereas stupid me stayed at 3 meters staring into my computer for the next 14 minutes. My expectation was that upon surfacing I'll find Jon bleeding profusely from his ears writing his will on the asphalt in his own blood. But instead he was safely drinking his tea wondering what was so interesting at 3 meters that kept me occupied for the past 14 minutes. Touching base with Jon two days later and finding him in perfect health only reconfirmed my worst fears. The whole decompression theory is a scam! It is just another tool that big companies use to scare naïve people into buying more and more expensive dive computers. Computers that supposedly are meant to keep



drawing by Scott Leimroth

them safe while diving but in reality are just glorified depth gauges. The truth is that we don't get bent! Bubbles are your friends!. Everything good in life has bubbles in it. Don't be afraid of them, just ask Jon (contact details will be released upon request).

In any case, Currajong is a real treat and the time to dive it is now. The colder months are definitely your choice. They offer a better chance of a day with clear waters and relatively less water traffic on the Harbour.

Disclosure: Some parts of this story may not be 100% accurate. Subscribing to the 'Bubbles are your friend' theory can kill you. Using Jon's computer can kill you. Diving is fun! I hate writing dive stories!

CREATUREFEATURE

Bega Shark Dive Fiji

by Geoff Cook

AQUA-TREK ULTIMATE SHARK ENCOUNTER, FIJI

Aqua-Trek Beqa at Pacific Harbour offers the outstanding diving in the Beqa Lagoon Choose from soft coral diving, wreck diving or Fiji's number one shark diving!

"No other shark dive in the world offers the variety of Bega Lagoon dive. On a single dive it is common to see seven species of sharks including massive bull sharks and enormous tiger sharks... On one dive you will see more species of sharks than the average diver sees in a lifetime! If you love sharks, Aqua-Trek's Beqa Lagoon dive is a must do."

On the dive you enter the world of the shark, the most evolved and least understood predator in the ocean and witness up close their unbelieveable strength, grace, precision and commanding presence in its own environment.

Aqua-Trek Beqa pioneered shark diving in Beqa Lagoon and now offers an exciting and unique chance to dive with ocean's most feared creatures. The variety of shark and fish species found on this dive rivals any excursion of its kind. Numerous bull sharks up to 10' are on most dives, along with the frequent gray, white and black tip reef sharks, nurse sharks and silvertip sharks and even the elusive oceanic white tip.

But the buzz is when you hear the warning tap on a spotters tank and at that point you know that big tiger sharks are in town. As the Tiger Sharks turn up you can feel the rise in the level of adrenaline. I can tell you... It is really awesome. Two tiger sharks, one 10 foot and the other 13 foot. Both females and passing within a foot of your position... Then it is hard not to say you are 'aware that you are in their domain. For the fish lovers you can also see thousands of 20-25kg giant travellies, humphead wrasse, red bass, surgeon fish, triggerfish, cod, a 220 kg Queensland grouper, bait fish and many others!

Aqua-Trek initiated the shark encounter as a way to educate divers about sharks and the problems they face. As much as 80 percent of some shark species have been wiped out in the last 10 years by fishing and consumption of shark meat and shark products.

Furthermore, the media has contributed to damaging their reputation by over-publicizing shark incidents. Sharks play a crucial role in the oceans ecological system and the more people know about them, the more advocates they will have in the fight for their survival.

Since Aqua-Trek began offering the shark encounter, the Fijian village that holds customary fishing rights to the area has agreed to protect the site and turn it into a marine park with an entry fee that goes back to the protecting village. The original area that was selected was basically baron and devoid of meaningful fishlife.

Now... some three years of shark feeding dives three times a week the fishlife in the area has exploded and repopulated the area.

Aqua-Trek shark encounter is one of the most exciting, rewarding, and educational experiences offered in the sport of diving.

Bega Shark Dive Fiji

Recent shark specials on television have contributed to disproving the theory that sharks are just mindless eating machines, and people now travel the world to dive with and photograph sharks. We are offering you the opportunity to dive with these magnificent creatures. Divers can see for themselves why sharks should be more respected than feared. Repeat divers learn more about them each dive, but never fail to be humbled by their presence.

The shark dive takes place on the mainland side of Beqa Passage. The dive depth is 80 feet (25 meters), and lasts about 20 minutes. Divers are not in a cage, but situated on the reef around the perimeter of the dive site. Bins of discarded fish from a local factory is brought down and left for the fish to feed on while divers observe.

How safe is a shark dive? The answer is that no dive involving sharks is guaranteed safe. The safety record associated with shark dives is exceptional. "In 30 years, some 500,000 divers have made shark dives without a fatality", "Shark dives are a wonderful tool, they provide people with first-hand knowledge of what the species is all about teaching people that sharks are beautiful creatures that need to be protected". Sharks are unpredictable animals, but they are also very smart and can differentiate between you and the bait. Because feeding dives are more controlled and supervised by the operators, it is said that these dives are actually safer than your typical open water dive. No-one has ever been hurt over the years on our shark encounter.



Nearby the operators have purposely sunk two steel fishing vessels. Late last year one was deliberately sunk upside down about 30 metres from the Shark Feeding Arena to facilitate a "Fish

Sleep" inside the upturned hull on the reef. In time it too will become part of the reef.

Cost of the two dives with supply of all dive gear, that was at best a bit shabby (but welcome to Fiji...) was F\$189 or about A\$115 and therefore great value and one of the best dives I have done in years.

Geoff Cook Barjumpa.

Satellite tagging of tiger sharks at Raine Island

There is very little known about the basic biology and ecology of tropical sharks. Over recent years there has been an increased concern over the status of shark stocks around the world. The reproductive strategies and life history of sharks make them extremely vulnerable to overfishing.

Recent advances in technology allow for remote tracking of sharks using satellite technology to learn more about the home range and migration patterns of these animals.

Raine Island (11o 35" S., 144o 02" E.) is an elongate sand cay approximately 830m long and 430m wide at its widest point, and is the primary site for the largest cohort of nesting green turtles in the world. Tiger sharks are



also known to frequent this area, particularly during peak nesting season, from October to February. Satellite tagging of tiger sharks at Raine Island offers a unique opportunity to study the movement patterns of this tropical apex predator. Elsewhere in the world migration patterns of tigers have been found to coincide with their food sources; e.g. albatross chicks fledging in the French Frigate Shoals northwest of Hawaii, where these animals are known to migrate vast distances.

Observations at Raine Island over the last number of years indicate that during the turtle nesting season there is a large population of tiger sharks during this period. Such a population is not present in the winter months, suggesting that these sharks migrate to the region. It is hoped that through this study we will be able to demonstrate the geographic linkages between turtles and tiger sharks, and the role of Raine Island in the ecological interconnectivity of the Great Barrier Reef Province. Findings from standard tagging of tiger sharks in different parts of the world have been difficult to interpret. It has been found that some tigers stay in the one location, while others have travelled up to 1,850 n. miles (Randall, 1992). It is well known, however, that tigers migrate into higher latitudes from tropic seas during the warm months.

Occurring in a wide variety of oceanographic conditions, tiger sharks range from close inshore to the open ocean. Their diel movements have been tracked over a 24 hour period by Tricas et al. (1981)(Randall, 1992) where a 400 cm female was tagged with a telemetric device in the north-western Hawaiian Islands. The shark ranged over an area of 100 km2, traveling faster by day then night. 68% of the day activity was spent deeper than the reef drop-off at 40 m, whereas 83% of the nocturnal activity was spent in depths shallower than the drop-off. Numerous authors have described their diel movements as readily coming inshore at night, however rarely being seen in the shallows during the day.

Tigers do not school, but have been observed in groups of two to six or more. These assemblies may be transitory or due to the presence of food (Randall, 1992). Eating habits vary greatly with the availability of prey items, and tiger sharks consume a larger variety of animals than other sharks. Rays, sea turtles, sea snakes, bony fishes, sharks, seals, sea birds, dolphins, cephalopods, crustaceans, and jellyfishes all form part of the tiger sharks' food source. Even terrestrial mammals are consumed, as well as man-made products, including indigestible plastics and metals. Due to their large size and their coarse serrated teeth which function like a saw, tiger sharks have an incredible ability to consume large prey and even the seemingly indestructible carapace of giant sea turtles (Randall, 1992).





Tiger shark tagging technique



Sharks are attracted to the inflatable by burley of fish carcases



The researcher waits with the 'shark claw'



The shark is tail roped with a spring loaded clamp.





The electronic tagging device is attached

When immobilised it is drawn

to the boat



Shark is released quickly and stress free



for the movie on tagging techniques

CLICK ON THE MOVIE ABOVE



www.sharkresearch.com



Tiger Shark Research

Tagging the tigers

From wrestling white-tips to tagging tigers, Undersea Explorer has supported shark research since 1995. Their six-day expeditions run regularly throughout the year; venturing to where the warm Coral Sea waters offer incredible visibility and coral walls drop to a depth of 1000 metres.



Where the currents meet at North Horn at Osprey Reef, large schools of tuna, barracuda and a variety of sharks can be seen. Among them are species such as white-tips, grey and silvertip whalers, leopard sharks, thresher sharks and schooling hammerheads.

The company has taken shark diving to unusual levels, thanks in large part to their involvement with marine researchers. Divers can observe the capturing of sharks underwater, and watch as they are brought to the surface for measurement and tagging. The experience has been described as being akin to watching a non-frenzied grey ballet, and yields incredible close-up photo opportunities.

Undersea Explorer's frequent access, to an easily monitored population of reef sharks, facilitates long-term comprehensive studies into the shark's diet, growth rates, breeding times and movement

patterns. Several components of the research includes the identification of individual animals, consistent monitoring of the population, and recording of growth characteristics.

The company has recently been involved in the deployment of the Osprey Reef Grid; a project spearheaded by the Australian Natural History Unit. The "grid" refers to a network of receivers which are placed in key locations around Osprey Reef, and then "pingers" (a device that transmits a signal) are attached to a number of sharks, manta rays and potato cod. The receivers then record the presence of tagged animals that pass within three to five hundred meters in any direction: enabling their movements to be tracked. The grid provides improved representation of the home ranges of tagged animals, which then assists habitat protection efforts.

Tiger shark tagging takes place during Undersea Explorer's remote far northern trips. Sharks are

attracted to an inflatable Zodiac using a string of tuna heads tied to a chain; and once they are close enough, researchers clamp a device around the base of the tail in much the same manner



as a handcuff. A rope runs from the claw to a buoy, and once the shark has tired itself out pulling the buoy, the researchers return to the boat and affix a satellite transmitter to the shark's dorsal fin, then measure and release the animal. Each time the shark's fin breaks the surface, the transmitter sends a signal to a satellite, allowing the shark's movements to be tracked.



This has revealed that they roam well out into the Coral Sea, down the Queensland coast, and even up to the Gulf of Carpenteria.

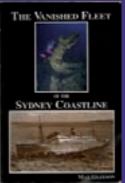
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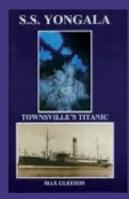
Shipwrecks of the Australian East Coast

Max Gleeson









Max has combined his passion for Australian maritime history, his love of wreck diving and his award winning photography to produce a three book series on NSW Shipwrecks, and one on Australia's premier wreck dive, the Yongala. Each book provides a rich insight into Australian Maritime history through the use of original historical photos, colour underwater shots of the wrecks as they appear today, detailed accounts of wreck disasters, the events leading up to them and the susequent courts of marine enquiry.

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Protecting our Grey Nurse Sharks

the giant puppy dogs of the ocean

from Shark Diver Magazine Issue 4 2004

"When you visit an aquarium you often come across a large ferocious looking shark with a mouthful of long pointy teeth that looks like it could devour you in one gulp. This is the look that sends shivers down the spine of anyone who goes swimming after watching a Jaws movie..."

Fortunately this species is quite harmless and it is the poor misunderstood grey nurse shark who's appearance gives the impression that it could indeed be one of those 'man eater' shark species. However, the grey nurse shark is no longer considered a dangerous species by divers and is a very popular shark with aquariums due to its fierce looks, big pointy teeth and ability to survive well in captivity. I liken the grey nurse to a giant puppy dog; they are a very curious species and are known to be placid when treated

The grey nurse shark Carcharias taurus is a species found worldwide and is known in the US as the sand tiger shark and in Africa as the spotted ragged-tooth shark. In Australia, the grey nurse is under serious threat and the east coast population is listed as 'critically endangered' meaning that there is a very high possibility that the species may become locally extinct.

with respect.

In the past, the grey nurse shark had an undeserved reputation in Australia as a man-eater. This reputation led to indiscriminate killing of the species by spear and line fishers from the 1950s to 1970s. The mass slaughter of thousands of grey nurse sharks led to a dramatic decline in the numbers along the east coast of Australia. Divers reacted to this decline by voicing their concerns to all that would listen and the NSW Government protected the shark in 1984, making it the first shark to be protected in the world.

However, the east coast population has still not recovered since its protection in 1984 and there are serious concerns that the numbers are still declining pushing it towards extinction. Scientists have estimated that there is between 300 and 500 individuals remaining on the east coast. This is not encouraging data for the grey nurse.

One of the major contributing factors to the species decline is its unusual reproductive biology. Grey nurses reach sexual maturity at 4-6 years for males and 6-8 years for females. They are an

ovoviviparous species, meaning that they give birth to pups after they have hatched from eggs the uterus. This is where the reproductive system gets interesting. Up to 15 embryos start developing in each of the two uteri and the two most advanced embryos in each uterus then eat all the other developing embryos and unfertilised eggs. This phenomenon is known as inter-uterine cannibalism. So they have basically eaten all their brothers and sisters before they are born!

The gestation period is also very long, lasting 9-12 months and the two pups are born at about 80cm to 100cm in length. Females only reproduce every 2nd year, therefore on average only 1 pup per female is produced per year.

Research on the grey nurse sharks in Australia has found that they migrate north - south at certain times of the year. It is believed that their migration is in relation to changing water temperatures, as

they are generally found in water temps from 18 - 24 degrees celsius, and that they are also following prey species such as the jewfish and mullet.

Conservation

The plight of the grey nurse shark is now starting to be taken seriously by the Australian government and scientists. In June 2002, the Australian government released a national recovery plan for the species with the main recommendation being that all grey nurse shark aggregation areas must be protected as 'sanctuary' zones and that all forms of fishing should be banned from these sites. Unfortunately for the shark, fishers do not share these views and there has been strong opposition to the protection of these sites for the grey nurse.

The largest numbers of grey nurse sharks are found along the coastline of NSW. In December 2002 the NSW Government declared 10 grey nurse aggregation sites as 'Critical Habitat' for the species. These 10 sites are where grey nurse aggregate and conduct important activities such as mating, feeding and pupping. The declaration of these 10 grey nurse shark critical habitat sites is a first for Australia and the only time critical habitat has been declared in the ocean for any species. Within these 10 sites special regulations apply for fishing and scuba diving, which minimise any potential impact from these activities on the grey nurse. Its to early to determine if the protection of these sites will benefit the shark, hopefully overtime scientists will find that shark numbers will increase within these locations.

Tracking the GNS

As part of the grey nurse shark research program, scientists have initiated a tagging program to gain a better understanding of their migration patterns and to provide a better estimate of their absolute abundance in Australian waters. Sharks are caught by divers using a baited barbless hook, which is then taken to the surface where it is placed in a sling along the side of a boat. Tags are placed through both dorsal fins and display a three-digit number that is easy to observe by divers underwater. When divers observe one of the tagged sharks they can call the 'Grey Nurse Shark Hotline' to provide details on tag number and the location.

One of the first sharks to be tagged was Neptune who was released back into the wild in May 1999 at Flat Rock after spending three years in the Seaworld aquarium located in Queensland. I resighted Neptune for the first time in June 2002 at Fish Rock in NSW, three years after his release. The distance between his release site and Fish Rock is over 400km kilometres, he looked healthy and content hanging out with 20 of his fellow buddies in the Fish Rock shark gutter.

Diving with Grey Nurse Sharks

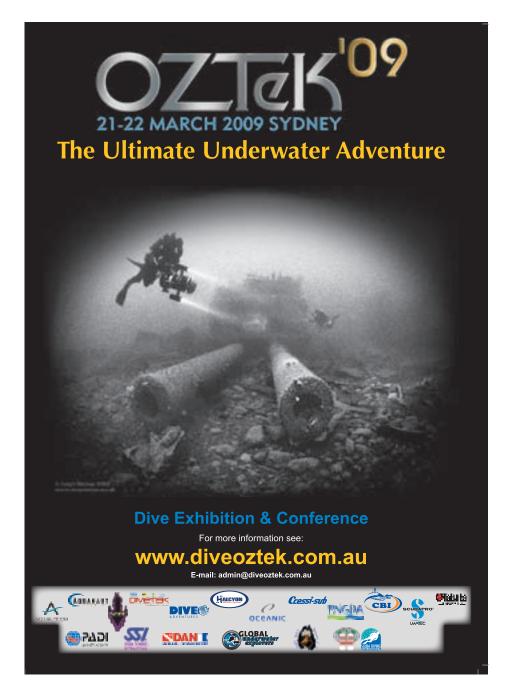
I have been fortunate enough to dive all the grey nurse shark aggregation areas along the Australian east coast and I have several favourite locations where you can view these 'puppy dogs'. In Queensland the best spot is a site called Wolf Rock located off Rainbow Beach. At Wolf Rock it appears that there is a resident pack of females that are present all year round and the males come in over the summer months to mate.

In New South Wales, there are ten excellent locations to choose from, these are the critical habitat sites that were mentioned previously. Of these sites, my favourite spot to dive with the sharks is at Fish Rock at South West Rocks on the NSW north coast. At Fish Rock, large numbers of big males and females can be observed during winter and I have been fortunate to Witness on two separate occasion's sharks attempting to mate in the shark gutter. Another good spot to view some big grey nurse sharks (larger than 3 metres) is at the Pinnacle off Forster on the NSW north coast.

An excellent location to photograph the grey nurse is at the Tollgate Islands on the NSW south coast over the January to April period. Up to 30 sharks can be found in a gutter that i only 10 metres deep and on a good days' visibility excellent wide angle shots with natural light can be taken. This is my favourite spot to shoot images as bottom times are longer due to the shallow depth and the sharks are very curious at this location and will swim straight up to you. On more than one occasion I've had to move myself out of the way of a shark that was not interested in changing direction! There is even a site located on Sydney's doorstep, Magic Point located near Bondi beach and its only a 20 minute boat ride out from Sydney harbour!

So if you ever get a chance to visit Australia, try and fit into your schedule a visit to one of these grey nurse shark locations for a dive with this critically endangered species. Who knows, it might not be too much longer before diving with the grey nurse in Australia becomes a very rare event...







NEWS RELEASE

30/04/08

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OZTeK'09 Dive into Adventure

Keeping the passion alive by putting the thrill-factor back into diving, the *OZTeK'09* Diving Conference & Exhibition's tenth anniversary event is rapidly gathering momentum to again prove that, "few shows in the world can pack a punch quite like Australia's OZTeK".

A highlight event on the calendar of international diving shows, *OZTeK'09* returns to Australian Technology Park in Sydney, Australia, over the weekend of the 21 – 22 March 2009 and will again feature an exhibition showcasing the very best that the world of diving has to offer complemented by an international cast of speakers and presenters acknowledged as being among the worlds leading authorities in their respective fields of diving expertise.

With a full programme of theatre presentations, seminars and workshops spanning the complete range of diving interests - including deep wreck and cave explorations, underwater photography and film-making, hyperbaric medicine, diving safety, developments in diving technology, marine conservation and more - the topics and talks will be both informative and entertaining, and provide the diving community with the opportunity to meet, listen to and learn from, some of modern diving's most accomplished personalities.

Appealing to diving enthusiasts at every level of experience and interest, the *OZTeK'09* Exhibition will feature the very best and latest in equipment trends and innovations, technology, training, underwater photography and travel opportunities.



Sydney.4thSeptember2008:-Nowonsalethroughparticipatingdivestores, diveclubs, or directly from the organisers, everyone pre-purchasing a two-day Gold Conference Pass to OZTeK'09 will be entered into the draw to win an overseas diving holiday courtesy of Dive Adventures.

To be staged at Australian Technology Park, Sydney, Australia, from the 21st – 22nd March 2009, the internationally-acclaimed, OZTeK'09 Conference will again feature an action-packed programme of presentations, seminars and workshops designed to spark the imagination and keep the passion alive.

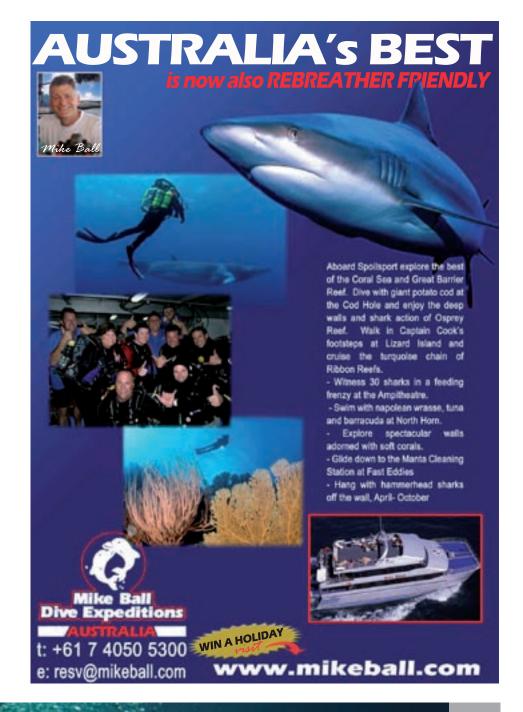
Offering a unique opportunity to be enthralled, educated and entertained by some of diving's most celebrated identities, the growing speaker list already includes: Leigh Bishop, (UK); Dr Mike Gadd, (Singapore); Grant Graves, (USA); Kevin Gurr (UK); Jill Heinerth, (USA); Richie Kohler, (USA); Simon Liddiard, (Indonesia); Pete Mesley (NZ); Ron Micjan, (USA); Dr Simon Mitchell, (NZ); Martin Parker (UK); Carl Spencer, (UK) and, Rick Stanton, (UK): While from Australia, the line-up already includes: Samir Alhafith, Kevin Denlay, Richard Evans, Dr Andrew Fock, Max Gleeson, Karen Gowlett-Holmes, David Harasti, Dr Richard Harris, Greg Hodge, Trevor Jackson, John Lippmann, Des Paroz, Mark Ryan, Warrick McDonald, Tim Smith, Richard Taylor and Steve Trewavas.

While admission to the exhibition, (just \$15.00 for the day) together with half-day Conference Passes will be on sale at the door on the day, there's no better way to enjoy the entire OZTeK'09 experience than with the advance purchase of either a Gold or a Silver Pass.

Pegged at the 2007 rate of just AUD\$220.00, the Gold Pass offers delegates full two-day access to all of the speaker presentations, break-out sessions, workshops and seminars, as well as unlimited access to the exhibition and other Exhibition activities. Single day access (either Saturday 21st – or Sunday 22nd March) is also available by purchasing a Silver Pass at AUD\$132.00.

The complete passport to the world of diving excitement, Gold and Silver pass-holders to the OZTeK'09 Conference are set for an underwater adventure like no other.

To book your Pass to OZTeK'09 - or for further information about the event - check out the website at: www.diveoztek.com.au or e-mail the organisers at: admin@diveoztek.com.au



Coming of Age

by Trevor Jackson

It started to get a bit repetitive. People glancing at their watches to check that it wasn't April the 1st, or waiting for a punch line. "Sorry, you fair dinkum Trev? Are the guys at Mike Ball really going to start taking rebreather divers on board?". "Yes we are" I would reply, "Queensland is coming of age."

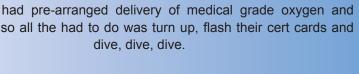
Mike Ball Dive Expeditions have had a habit of setting trends since its inception in 1969. Nearly 30 years later Mike is still breaking new ground. In the last few months the dive crew aboard Spoilsport has been developing a new set of dive procedures that will allow us to become the only liveaboard in Queensland that can legally supervise and conduct rebreather diving - without the need to import specially qualified staff. This has always been a major hurdle as most vessels do not have the staff trained up to do the job.

With the vast and awesome Coral Sea at our doorstep, it seemed almost medieval to exclude rebreathers from the boat just because everyone else had put them in the too hard basket. Out at Osprey Reef, where close-up encounters with sharks and manta's are common, we could only wonder how much better the interactions would be for divers who weren't creating bubbles; how much closer could we get to take those photos.

In the early months of 2008 we began to piece it all together. What gear would we need, what staff needed to be trained, which procedures needed to be created? It was a big task but the enthusiasm to embrace rebreather technology had swept through the company. Everyone wanted to learn and evolve.



In July this year we loaded five rebreathers onboard along with some very excited divers and steamed north on our inaugural rebreather trip. Onboard we had pre-arranged delivery of medical grade oxygen and softener lime so all the had to do was turn up, flash their cert cards and dive, dive, dive.



And dive they did. Touching distance from minke whales, turtles and tigers. An elusive thresher shark came to visit, and the walls of Osprey rose up cathedral like from the vast and endless depths. It was awesome and now it

was available to the world.

Australian divers whether they are in large groups or small, can now enjoy the pristine waters of the Coral Sea whilst taking advantage of the many benefits which rebreather diving brings;

> longer bottom times; closer marine life interaction and ultimate silence. No longer will you have to use private vessels or bring your own

supervisor to enjoy rebreather diving in Queensland.





Spoilsport offers the ultimate in diver comfort and there is plenty of room onboard for the extra space that rebreather users require. So now the only question a rebreather diver might need to ask about using a unit in Queensland is "Do I fancy hovering on a bottomless wall at Osprey Reef surrounded by hammerheads in 70m visibility hearing only the sounds of the ocean?" If the answer is yes, it's time to get on Spoilsport.

Dive like an Egyptian

by Will Loveday

When most people think of Egypt they think of the Pyramids and the Sphynx, however Egypt is also home to one of the most varied set of diving experiences available in one trip.

Whilst not being close to Australia, Egypt is a very popular destination amongst European divers due to the ease of getting there and the abundance of corals, fish, wrecks and Pelagics once you arrive, not to mention the normally warm and very clear water. Visibility is not uncommon in the 30-50m range and for most of the year only a thin wet-suit is required. Those of us with a little less bioprene have to wear a dry-suit there in December to March due to wind chill when you get out of the water, and the water temperature ranges from 20 around that time of year to 28 degrees C in July and August, the hottest months.

There are 2 main diving centres in Egypt:- Sharm El Sheikh is positioned on the Sinai Peninsula bordering the Gulf of Agaba and also provides day boats and live-aboards to the Gulf of Suez. Hurghada is further south on the Egyptian mainland providing live-aboard and day boats to the more southerly Red Sea destinations such as the Brothers Islands.

This article focuses mainly on the delights of diving from Sharm el Sheikh. Sharm offers travellers the full range of diving activities from your first try-dive, all the way through to the worlds deepest technical wreck dive. and has dive sites to suit all abilities.

The most dived sites are the local sites called 'The Gardens' used mainly for training due to their sandy bottoms and limited depth. Name due to the closeness to the harbour you have Near, Middle and Far Gardens with the in-between sites of 'Niddle' (between near and middle) and 'Fiddle' (you guessed it, between middle and far....).

As you might expect they offer a slightly more limited number of corals and fish than some of the more famous sites due to the large numbers of trainee divers that have used them over the years. Having said that, they

still have a number of rock pinnacles teaming with glass fish and other fish life, and the pinnacles also house some well known cleaning stations where certain 'in the know' guides have their regulator and teeth cleaned by the very friendly cleaner wrasse that live there. The site does also have some occasional visits from Large Napolean Wrasse, Turtles, Mantas and even the picture of the Whaleshark in this article was taken at the Gardens.

Imagine seeing that on your first open-water dive! There are also the old red sea classics, parrot fish, clown fish, antheas, trigger fish and the like – I could go on.... (Whaleshark photo's kindly provided courteousy of Gareth Millson, these and other images are available for purchase from www.scorpionfish.co.uk)

To the north of the Gardens near the island of Tiran and in the centre of the

Gulf of Agaba is a named after the people mapped them, Gordon, Woodhouse and

Easily accessible these sites are only experienced divers due currents, deeper dives coral reefs. They are to divers in search of Sea's more interesting they are the best place to find Hammerhead Sharks.



Whale Shark and Divers

series of 4 reefs who originally Thomas, Jackson

by day boats, available to more to the stronger pristine and also a favourite some of the Red inhabitants, as

For the Techies out there you have some very interesting deep caverns and swim throughs to go and play in. The corals here are fantastic and offer an amazing range of colours and varieties. I've also been lucky enough to see hammerheads and manta's on the back of Jackson on my last 3 trips there, it doesn't get better than that.

At the front of Jackson you also have a red anemone that glows in the lower

light at around 28m depth and sharks are also occasionally seen there, I've been fortunate enough to see a Leopard Shark and White Tip Reef Shark there as well. The other reefs are also worth a look as they are covered in pristine coral and have a massive array of fish.

Further south along the Sinai Peninsula is found the Ras Mohammed National Park. This is a protected marine reserve area with arguably some of the best reefs in the Red Sea. The most famous sites are 'Shark and Yolanda' and 'Jack Fish Alley'. When you dive in at 'Shark and Yolanda', the dive normally starts on Shark Reef jumping in quickly as the waves push the boat slowly toward the reef.



Batfish

Once you are down depending on the time of year, there are usually a large school of Jacks, and a large school of Barracuda between you and the next reef. The currents can be a bit changeable so this is either a strong fin towards Yolanda or a fast drift, though if you time it right it can be just a gentle drift or fin.

This site has everything to offer from Nudi-branches, Guitar Sharks all the way up to a well known Black Tip shark and not forgetting until 2007 Dave the once famous resident Turtle. Dave having had his shell damaged by the prop of a boat, was rescued and had his shell repaired by the National parks service (try google for the full story).

The main reef then takes you to the wreck of the Yolanda. There are a number of tales about how the ship crashed into the wreck however the one obvious truth is that it was carrying a cargo of baths, toilets and the captains

BMW, bits of which are scattered amongst, and have actually begun to form part of the reef system. This area of the dive is normally encrusted with Blue Spotted Rays, and the nooks and crannies of the reef also house a number of Morays which can be seen being cleaned by the Blue Cleaner Wrasse. There is also a resident Napolean Wrasse which on my last dive there was hunting with one of the Morays around the reef, which was spectacular to watch.

The main part of the wreck has fallen off the edge of the reef plate, plunging down towards the 800m max depth but stopping short at 205m. Whilst undiveable for most of us recreational divers, for those of a technical persuasion this was the site of the worlds deepest wreck dive. During the attempt by Leigh Cunningham and Mark Andrews last year they spent an impressive 6 minutes

there, with the help of various support divers, winning the world record.



Spotted Eagle Ray

So this neatly leads us onto the last part of my article – wrecks. If you like to 'get wrecked' then the Red Sea really does have a few interesting options. The pinnacle of the Red Sea wrecks has to be the SS Thistlegorm. This was a British merchant navy vessel loaded with various goods, which was found by German bombers allegedly searching for

the Queen Mary. The pilots dropped two 1000lb bombs on the ship killing 9 crew and sinking the ship.

The ship is at approximately 32m depth at its deepest going up to about 16m at the upper-most reaches, and currents can be extremely strong so this is for advanced divers only. This is however an ideal depth for use of Nitrox to extend your bottom time. Due to the strong currents, many divers do very good flag impressions holding onto the boats mooring line while doing their safety stop at the end of the dive.

For that reason, descents and ascents are always done on the lines to the boat, so be prepared for an active dive. Having coped with the currents and depth there is a lot to see. You have Enfield rifles, boots, tyres, trucks, BSA Motorbikes, a train, a large gun, ammunition, winches and then there are the fish...

On the wreck you will normally find schools of Bat Fish and Barracuda that circulate, Crocodile Fish sit there trying to blend in, and Nudibranches can be found holding on for dear life when the current picks up. There are also resident Lion Fish constantly hunting, and various other species can be found in and around the wreck.

The wreck is easily penetrable, and for most of the dive there is clear access to the surface when going through the hold area's. There are some concerns about how long the wreck will last as it's such a popular site and some work has been done



boot on SS Thistlegorn

to reduce the damage by boats tieing onto the wreck (sometimes it looks like there are enough boats attached to re-float it!) so get out there and see it whilst it's still diveable! For more information on this wreck there are whole books out there – go and have a read.

It's hard to come up with another wreck dive that matches the spectacle of the Thistlegorm, however there are a number of other wrecks available to dive. The first one which is easily reached from Sharm is the Dunraven, which still has the original boiler in place. It's a less challenging wreck dive for the not so experienced divers, with an easier swim through, though a lot less to see it's a good intro to wreck diving.

A lot more eerie and further south is the Salem Express, this is accessible from Hurghada by day boat or by liveaboard, and at 32m max depth going up to

10-12m it is about the same max depth as the Thistlegorm, though with the less challenging currents and better min depth, it is more accessible again to less experienced divers.



Armoured Personnel Carrier

The Salem Express provided a ferry service from Egypt to Saudi Arabia before it sank in 1991 when the captain made a fatal decision to try and navigate through a treacherous reef system at night in a storm. Sinking in just 20 minutes the captain's decision caused the death of at least 470 people and he also went down with his ship.

Due to bodies still being on board deeper within the wreck, most guides will only let you penetrate the captain's cabin out of

respect, and as you navigate around the wreck and see the un-used life-boats and scattered possessions there is definitely an odd feel to the dive. Despite that it's still an interesting dive, and the surrounding area has a nice selection of marine life too, including Morays and lots of Gobi's and Clown Fish.

So if you are interested in great viz, warm seas, Turtles, Sharks, Manta's, Whalesharks, huge schools of Fish, wrecks or just a warm holiday when it's cold in Europe - Egypt is definitely the place to go! The pricing from the UK is extremely cheap off season, so you get diving to challenge the Maldives but at a third of the price. Who can argue with that!





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History File Tom Byron- 50 years of diving

Lifetime member Tom Byron celebrates 50 years of scuba diving

It was the winter of 1958, seven years after the first scuba regulator appeared in Australia, when I purchased every single piece of scuba diving gear in Mick Simmons sport store at the Haymarket in Sydney. It consisted of one rubber hood, a rather small face mask, a 40cf grey cylinder with canvas straps and a twin hose regulator, the brand name now escapes my memory, I think it may have been an old British "Sealion"

a small pair of rubber fins a pair of gloves a weight belt and a dodgy type of knife. After buying the complete outfit for approximately 50 pounds (\$100) the salesman said to me "Well son you have just bought our entire stock of scuba diving equipment. My reply was "Is there any air in the cylinder?" He said to me. "I don't know; try it out in Gordon's Bay near Clovelly". I did the next day, Saturday. Within minutes of entering the water without any instruction of how to use the gear, as no instruction agencies were



in this country at that time and without a wet suit, I could not see a thing, the inside of my mask fogged, water was beginning to get up my nose,

my ears were beginning to pain and the air tasted bad and hard to breathe. After about 15 minutes underwater breathing became extremely difficult and I started to swim toward the surface as fast as I could and found myself out at sea a long way from land, or so it seemed. The swim back on the surface was difficult particularly when free styling. Back on the beach blue and shivering with cold and lungs half full of sea water, I pondered whether I had made the right choice buying diving gear that cost more than two weeks wages at that time.

However, no matter what happened that day I was hooked on scuba diving. A week



or two later I decided to have another attempt at the new sport of scuba diving but there was little air in my cylinder and I knew of no one who could fill it for me. I thought there were bound to be one or two people in the telephone directory. But there was nothing. What a mess, a brand new scuba unit I cannot use. So back I went to Mick Simmons with my empty cylinder under my arm hoping they could fill it for me or perhaps know of someone who pumps air into diving tanks. The salesman was most helpful. He said he did not know of anyone in Sydney. "So why in hell did you sell me the tank in the first place?" I said, and then left the shop.

Well that's it. My career as a deep sea diver had ended almost before it started. The following weekend I took my girlfriend Renee, later my wife, to Clovelly Sea Pool for an outing and you guessed it there as large as life itself was another scuba diver. He had air in his tank and I did not. He told

me that at Clovelly was a person who had one of those things that pump air into diving cylinders. He also said, it was in his backyard and introduced himself as Colin Peard. He charged me two shillings and six pence (26 cents) to fill my tank. At the time I thought it was a bit of a rip-off.

During the next few years the biggest impact on the fledging sport of scuba diving was a series of Hans Hass films on television called Diving to Adventure. But the one that had the most profound effect upon the diving community and the general public was the long running series titled "Sea Hunt". Mike Nelson (Lloyd Bridges) was its hero. He always got his man, there was no extreme violence and no one was murdered. They were both shown on Sunday nights one at 6.00 o'clock the other at 6.30, so every Sunday evening after a days diving I would be glued to my black and white television set.

During the early to mid 1970s I embarked on a number of expeditionary dives throughout the South Pacific Islands and Atolls. With a small group of experience dive buddies we visited places such as Egum Atoll, Hermit Islands,

Wuvulu Island, Maldives, outer Coral Sea Reefs and Atolls, the Cook Islands, the Louisiade Archipelago large group of islands

and many more too numerous to mention. The most exciting by far was our month long trip along the Louisiades. When we arrived at Russel Island at the far end of the archipelago, we were met by wild tribesmen that had rarely seen



white people before. Their ancestors about 120 years ago killed and ate 300 Chinese from the wreck of the sailing ship St Paul that struck a reef not far

from the island. Whilst there I dived upon this wreck and explored two World War 11 submarines that lay nearby in a large coral lagoon.

By 1990 I had published 7 divers guide books covering all of the New South Wales and Queensland coast from Tweed Heads on the New South Wales.



Queensland border to Thursday Island at the top end of Queensland. The four Queensland books cover the Great Barrier Reef as well as the Coral Sea reefs and Atolls. I also wrote the first history book about scuba diving and spearfishing in Australia. (The first 80 years between 1917 and 1997. All of my ten books now come with separate CDs and video clips. Recently I wrote a book regarding shipwrecks along the southern New South

Wales coastline and another about reef sites also along the southern coast of this state.

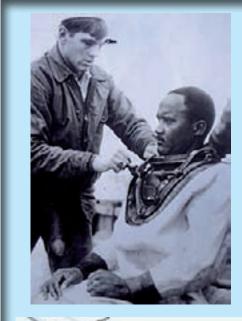
In all the books published I have dived mapped and described 1272 reefs and shipwrecks (some not yet listed in my books) locations along the entire east coast of Australia, more than any other scuba diver in this country and I am still continuing to locate new reef and wreck locations for future divers guide books. All books now come with CDs.

Over the years I have won many international underwater photographic competitions. During my lifetime as a scuba diver I have been privileged to meet many wonderful people associated with the sport. Not a bad average.

Thank you for taking the time to read my short and abbreviated diving history. There has also been another life that I have lead during my diving career involving motor sports, a company director and inventor of building products also retail dive stores and dive charter boat operator but all that is another story.

US Navy Diver has ship named in his honour

by David Chillari





United States Navy diving pioneer Carl Brashear has been honoured by having a Military Sealift Command dry cargo ship named in his honour.

Brashear was born in Tonieville, Larue County, Kentucky in 1948. After enlisting in the navy he went on to train as a navy diver in 1954.

On January 6 1966 two US planes were lost near Spain during refuelling. Aboard one of the planes was a hydrogen bomb. Over the next two and a half months he was part of the operation to find the bomb.

During the salvage operation a cable snapped and caused a pipe to almost cut his left leg off below the knee. The leg was subsequently amputated. He was evacuated to the naval hospital in Portsmouth, Virginia where, due to infection, he faced years or recovers and rehabilitation.



Men of Honour(sp?)

After he was fit enough to serve again, from 1967-1968 he was assigned the Harbor Clearance Unit Two, Diving School. After a long struggle, in 1968 he was accepted as the first amputee diver in US history. Then in 1970 he became the first Afro-American Master Diver.

He served another 10 years in the Navy, eventually attaining the rank of Master Chief Boatswain's Mate in 1971.

He retired from the Navy in 1979 with the rank of Master Chief Petty Officer.

Carl Brashear died at the Portsmouth Naval Medical Centre in 2006 His story is told in the 2006 film Men of Honor (Honour)

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Remember, you don't have to be a club member to check us out.



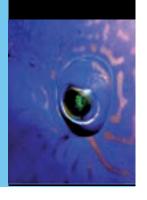
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Celebrity Diver

GEOFF EUEGILL



Born March 4, 1979 in Grove, Northern Territory to an Australian father and Thai mother .6ft 2' Nickname, "Skippy"

Just to mention some of Geoff's performances:

Olympic silver and bronze medallist,

8 times world record holder,

6 times world champion,

5 time commonwealth gold medallist.

Was Cleo Bachelor of the year in 2003

Is involved with various charities around Australia including Ambassador of the Sir David Martin Foundation.

Huegil states some of his passions include,

Surfing, fast cars, spending money, socialising, and scuba diving.

Geoff is a certified rescue diver, Geoff's favourite dive sites are in Thailand.

And has also dived throughout Southeast Asia.

What Geoff loves about diving the most? "The freedom, the time to think and the absolute fascination for marine life".



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SPDC MEMBER PROFILE

Wayne Philips

What's your nickname?

Amongst some lovely expletives Wayno, Waynos, and the infamous "Tackelberry "due to me wearing camouflaged gear. I only wear it because I can get dirty and no one will be able to see it lol.



Have been associated with SPDC for approximately 2 years now. thanks to Dave Chillari asking me to come along, glad I did for I have some wonderful memories and have met some really interesting, skilled and genuinely lovely people. For whom a couple have taken me under their wing for which I am deeply grateful. It all started when I was in Dave Chillari's back yard and saw his bcd set up and asked" hey what does this do"? To which he replied "put it on "before I knew it I had booked a trip on the "SS Nimrod "and hadn't even dived yet!! Literally that week I signed up for the open water course completed as many dives as I could in 3 months and was off to GBR and have never looked back. Once again I must mention how grateful I am to be associated with SPDC, the relaxed atmosphere and down to earth approach not only to diving but our interactions with each other. Go South Pac!!!!

What sort of diving do you enjoy most?

Of late deep n wreck diving, looking forward to doing more wrecks in the near future. Had done predominately reef and rock hops but now alas the taste for rust!!!!Go the Hoff! Love going to new dive sites as the thrill and anticipation of exploring somewhere you have never been before is so exhilarating, some of the Bommies on the Ribbon reefs of the GBR were spectacular .As was diving with the Dwarf Minke whales for 6 hours talk about wrinkly skin!!! Even when we were out of the water and having dinner in the galley we all could see these majestic creatures still hanging around.

What is the most common misconception that people have about you?

That I'm in the Mafia because I wear a suit every day, SIMPLY NOT TRUE!!!!! lol

What kind of music are you into?

I grew up in the era of the 70,s and remembering the disco hits while sitting in the back seat while mum was driving to where ever ,still get happy hearing those hits they bring back "great childhood"

memories "of good times but enjoy a wide variety of music from some classical to 70,s to now including dance music .Favourite piece would have to be Parker bells,s cannon in d major those violins get me every time!

Any phobias?

Heights.Dont want to even go there

What temptations are you powerless to resist?

Mortal sin (A three different chocolate layered cake) who ever invented it should receive a Christmas card every year for the rest of they're lives.

What do you like to do in your spare time when you're not diving?

Professional blugder when in the mood, bike riding, movies and being on a seefood diet I see it, I eat it...

What's your favourite dive site and why?

I Would have to be to date the SS Tuggerah and the Cod Hole made famous by Rod and Valerie Taylor The "Tuggerah being my first real wreck and deep go the Hoff! And the Cod hole for the interaction with those massive Potato cods' was absolutely awestruck watching them being fed!

What's the most annoying thing someone could do to you on a dive?

Silt up and buddies disappearing on me especially when I needed help the most.

If you could go anywhere on the planet to dive where would you go and why?

Anywhere along south East Asia, the combination of warm water, wrecks, and reefs, the marine life and spectacular scenery not to mention the food.....did I mention I was on a seefood diet???lol

If you could have a 'celebrity' dive buddy who would you choose?

Patrick Stewart so I we get caught in current he can say 'beam me up scotty' (ed. Who needs 'Scotty' when you have Scot 'Hoff'



Boat Owners & Dive Organisers



BOAT OWNERS

Geoff Cook

Email: geoff (@) southpacificdivers.com Phone: 0404 554 554

Location: Barden Ridge Boat Type: Barjump'n

Favourite type of diving: Wrecks



Scott Egginton

Email: pennynscott@optusnet.com.au

Phone: 0406 049 449 Location: Milperra Boat Type: Sea Puncher

Favourite type of diving: Wrecks and Deep



Email: bobmay (@) hotkey.net.au Phone: 0428 295 516 or 02 4579 1053

Boat Type: 6.5m Marlin Broadbill, 8 shallow, 7 deep

Favourite type of diving: Reef & Photography

Bob May

Location: Windsor

Peter Iwaszkiewicz Email: pf_plate (@) tpg.com.au Phone: 0424 812 483

Boat Type: 4.3m inflatable - 3 divers Favourite type of diving: Various



Max Gleeson

Email: maxglee (@) optusnet.com.au

Phone: 0416 041 021 Location: Caringbah

Boat Type: Marlin Broadbill, 4 deep Favourite type of diving: Wrecks



Boat Owners & Dive Organisers



Contact a dive organiser if you would like help organising a dive or subscribe to our diving and events email list at: http://groups.google.com/group/spdcdiving

Upcoming club dives are posted on our online calendar one ou forum at:

http://southpacificdivers.com/forum/index.php

To sign up to the forum you must be a financial club member then email jason(@)southpacificdivers.com to get your login and password.

Visitors and guests are always welcome to come along for a dive Contact wayne(@)southpacificdivers.com to find out more about joining us for one of our club dives. Diving is FREE!

We currently have around fifty active members on that list and one or two dives a week are organised via the email list.

Please remember that our club boats are not charter boats and thertefore you may be required to pitch in and help during launching and retrieval of the boat.

Introduce yourself to a boat owner at the next club meeting and see what you can do to help. Respect the requests of the boat owner/captain at all times and treat the boat with care.

DIVE ORGANISERS

Andy Del - Dive Conveynor

Email: diverandy (@) optusnet.com.au Phone: 0411437323

Favourite type of diving: No Bubbles



Peter Iwaszkiewicz - Boat Dives

Email: pf_plate (@) tpg.com.au Phone: 0424 812 483

Boat Type: 4.3m inflatable - 3 divers Favourite type of diving: Various



Jason Farlow - All Dives

Email: jason (@) southpacificdivers.com

Phone: 0417040285

Favourite type of diving: All types.



Jon Evans - Midweek Dives

Email: fishdiver (@) gmail.com

Phone: 0411346215

Favourite type of diving: Boat, Shore, All types.

Available for midweek dives anytime.



Dave Chillari - Night Dives

Email: david(@) southpacificdivers.com

Phone: 0425 209576

Favourite type of diving: Photography dives, shore dives





BUNYIP ON THE PROWL

Who hates their dive gear SO much they are constantly trying to throw it into the ocean?

Which ex-committee member was seen with an 'L' plate on the back of their rebreather with an '80 feet' depth limit'?

TIPS FROM THE GURU

Spring time means warmer weather which is great for an after dive barbeque or luncheon. The water may still be a little chilly but conditions in a good wetsuit or *drysuit* you are sure to enjoy the water.

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coes not offer instruction, advice or supervise to members' civers. It is a condition of Olub membership, that members particular dive, the loctinique used, or choice or equipment and that any clarification in regard to these matters should Olub is non-crofit, non-effliated with any training organisation and is for certified divers. South Pacific Divers Olub Inc. exercise their own judgement in accordance with their risining in depicing whether and/or new to participate in any hereby apply to join South Habitic Divers Club Inc. If We understand the be referred to a qualified instructor or myour certifying agency.

I/We have read the above conditions and accept same as a condition of membership.

DATE	
Signed	