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# JUNE ON









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#### **Editorial Submissions:**

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# NOTICES

VSAG Committee meets at 7 p.m. every 2nd Tuesday of the month

(except in January)

All Members Welcome



VSAG meets 7pm for an 8pm start, on the third Tuesday of every month at Clare Castle 354 Graham St, Port Melbourne VIC 3207 See you there!

#### VSAG on Facebook

Did you know VSAG now has a Facebook page? Check it out at <u>https://</u> <u>www.facebook.com/groups/</u> <u>vsag.divers/</u> and 'Like' us.





UECWA our sister club in Western Australia is pleased to offer reciprocal diving arrangements to VSAG members.

#### Underwater Explorers Club of Western Australia

Postal Address PO Box 382, Melville WA 6956

Email: info@uecwa.com.au

Meetings Esplanade Hotel The Esplanade, Fremantle, WA Boat

Port Coogee Marina Chieftain Esplanade, North Coogee, WA

We are delighted to announce that we have now established another relationship with an interstate club that will allow you to dive with them if you wish to and vice versa.

The club is the Tas Uni Dive Club. You can check them out at : <u>www.tudc.org.au</u>



#### To email all VSAG committee members: committee@vsag.org.au

Your VSAG Committee 2020–2021

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#### **DEMISTIFYING TECHNICAL DIVING**

#### DEMYSTIFYING TECHNICAL DIVING

- By Ian Scholey .



Technical diver.

Before I start, let me make it verv clear that I am not a Technical Diving Instructor, so what I am going write is a combination of to knowledge gained as T have completed courses, along with my own opinions based on my practical experiences. Although there are many similarities between the way believe the training agencies Technical Diving should he conducted, there are also many differences. This, in part, is because Technical Diving is still evolving as scientific knowledge expands, new equipment becomes available and new ideas are tried and subsequently discarded or adopted. Being able make informed decisions about what

works for you is an important part of Technical Diving.

#### What is Technical Diving?

A lot of club members will already have completed their first Technical dives without realising it. Any dive where you are unable to head straight to the surface can be classified as Technical That includes dives that penetrate shipwrecks, enter caves or where no-decompression limits are exceeded. Although many of us do these types of dives from time to time and we usually have no issues, the truth is we may be doing so without the training, equipment and contingency planning to do so safely. We take risks and accept that we are doing so. Technical diver training does not remove the risks, but it better equips the diver to recognise and manage the risks during more complex dives.

#### What Equipment is needed?

There are a few basic principles when it comes to equipment:

1. Take only the equipment required for the dive. If it isn't needed, don't take it.

2. Have back-up equipment. This is important because if something critical malfunctions, you don't have the option to go to the surface.

3. Streamline your position, and therefore your equipment, as much as possible, to provide ease of movement and avoid snagging both above water but most importantly in the water.

Given the increased depth and longer dive times typical of technical dives, most technical dives are done with twin cylinders. As well as allowing you to have the gas required to complete your dive, the twin set is configured with an isolation valve so that, if necessary, due to a regulator failure, one cylinder can be turned off and the other cylinder still be utilised. This is the concept of 'redundancy' that is commonly adopted across many areas in Technical diving.



Twin manifold.

The primary regulator is attached to a long (7 ft) hose to allow it to be easily handed off to, and used by, an out of air diver. This is connected to the right-hand tank and the hose directed down, then across and around the diver and behind the neck such that the second stage is breathed as normal with the hose on the right. The backup regulator is attached to the left-hand tank of the twins and worn on a necklace around the neck and is on a short hose since this will not be shared.

Other equipment is duplicated to allow for failures. For example, a spare mask is carried, a timing device is carried as well as a computer, a back-up light is carried alongside a primary light.

The use of twins and stage bottles typically dictates the use of a wing type buoyancy device. This also assists the technical diver to maintain the correct horizontal orientation in the water. This position is important in reducing drag and in keeping as much of the body as possible at the same depth to allow for optimum decompression.



Twin Set.

Another consideration for Technical diving is the extended time in the water. As such, Dry Suits are worn unless dives are in very warm water.

In temperate waters, it isn't uncommon for a heated under-suit to also be worn. It is surprising how quickly the cold can become an issue when completing decompression stops, as movement is limited.

### How are Technical Dives Conducted?

Technical dives are usually conducted in teams, the ideal number is 3 divers, with each diver taking a predefined role. Every Technical dive starts well in advance of getting into the water or even getting onto the boat. Dives are planned and plans agreed by all the team members.

The plan has several components and includes:

1. What is the objective of the dive?

2. What role will each diver play?

3. To what depth will the dive be and how long will the team stay at that depth?

4. What will the ascent look like, at what depth will decompression stops be completed, how long will each stop be and at what time in the dive will each depth be arrived at? 5. What gas mixtures will be used and how much of each gas will be required?

6. At what depth will switches between gas mixtures be made?

7. At what depth will SMB's be deployed?

Each team member reviews and agrees to the plan, overlaying their own gas consumption and necessary contingency. In order to achieve safe contingency levels, it is a fundamental requirement to have enough gas in reserve to get yourself and a buddy safely to the surface.

It will probably surprise people to know, that in Technical dives, it is usual to not dive to your computer's decompression schedule but instead to use it as a timer and back up. Decompression stops are pre planned to a degree that the plan usually ensures that decompression requirements on the computer are cleared long before the planned stops are completed, thereby providing additional safety.

### How do Technical divers decide on which gas mixtures to use?

Again, there are a few basic principles here. Firstly, it's important to understand what is trying to be achieved with the different breathing mixtures. In essence there are three issues that we are trying to mitigate.

#### Decompression

The first is to allow the gases absorbed by our body at depth to be safely released (decompressed) back into the blood and ultimately breathed out. without causing bubbles (decompression sickness). The speed of the ascent and the decompression stops we make are important in achieving this safely. Breathing gases with higher oxygen content (e.g., 50% or 100% oxygen rather than the 21% in air) helps this process by increasing the concentration gradient between inert gas in the body (mostly nitrogen) and the gas breathed into the lungs. This accelerates decompression, the time required reducing for decompression to be completed. As such, we use higher concentrations of oxygen in our breathing mixtures than the 21% found in air.



Stage Tanks

#### **Oxygen Toxicity**

There is a problem with breathing Oxvgen under pressure, it becomes toxic. The art to technical diving is to breathe the highest % Oxygen possible to speed up decompression while not breathing it at depths where it is toxic. Now, obviously, there are practicalities to consider here. Each mixture requires a separate cylinder, and you can only carry so many cylinders and in fact cope with the complexities of breathing the right gas at the right depth. It is usual then to optimise your back gas (the gas you will mostly use to descend unless diving very deep and at your maximum depth) for the depth you will dive. For example, for a 45m dive, 25% oxygen is the highest content that is safe because this equates to a partial pressure of oxygen of 1.4 atm. Standard decompression mixes used are 50% Oxygen between 21m and 6m and 100% Oxygen at 6m and less.

#### Narcosis

Nitrogen (the other 79% of air) becomes narcotic under pressure and with the increased depths of Technical dives, this must be managed. To do this, a third gas, Helium is used to remove some of the nitrogen from the mixture. Helium does not have the same narcotic effect. The mixture of oxygen, nitrogen and Helium is called Trimix. The level of Helium added to the mixture in place of Nitrogen is usually aimed at giving an equivalent narcotic effect to diving on air to 30 m eliminating the worst effects of narcosis in most people.

Trimix also provides a solution to the problem that the 21% oxygen found in air becomes toxic beyond 56m. The human body can survive on oxygen levels below 21%. So for deeper dives, some of the oxygen is replaced by helium also.

Our decompression mixes are carried in stage cylinders that are attached to our webbing at the waist and shoulder on the left-hand side. The labelling of these cylinders is a critical safety factor due to the consequences of breathing a mixture below its maximum operating depth (MOD). As such, each stage is clearly marked with the gas mix inside it and the maximum depth at which it can be breathed as well as with our initials, so we don't pick up someone else's cylinder by mistake.

#### What is typical Technical Dive like?

The best way to answer this may be to take you along on a Technical dive. Last weekend I dived the Fawkner, a wreck at 45m in the Ships Graveyard, with my regular buddy, Chris Porter.

Here is how that dive was executed.

We use a bit of software called MultiDeco to plan the dive well in advance. The plan looked like this . We used a conservatism factor GF 50/70.



| Step          | Depth<br>(m) | Time  | Total Run<br>Time<br>(Mins) | Gas               | Notes                                      |
|---------------|--------------|-------|-----------------------------|-------------------|--|
| Descend<br>to | 45           |       | 1                           | Air               | 34m/min descent rate                       |
| Level         | 45           | 23.41 | 25                          | Air               | 1.15 ppO2,                                 |
| Ascend to     | 21           |       | 27                          | Air               | -10m/min ascent<br>rate                    |
| Stop at       | 21           | 3.36  | 31                          | 50%O <sub>2</sub> |  |
| Stop at       | 18           | 1     | 32                          | 50%O <sub>2</sub> |  |
| Stop at       | 15           | 1     | 33                          | 50%O <sub>2</sub> |  |
| Stop at       | 12           | 1     | 34                          | 50%O <sub>2</sub> |  |
| Stop at       | 9            | 4     | 38                          | 50%O <sub>2</sub> |  |
| Stop at       | 6            | 15    | 53                          | O <sub>2</sub>    | 1.60 ppO <sub>2</sub> Maxi-<br>mum allowed |
| Surface       |              |       | 59                          |                   | 1m/min ascent                              |

The calculated gas use for the dive was 2849.9 litres of air, 487.4 litres of Nitrox 50, 531.0 litres of oxygen making a **total of 3868.3 litres of gas**.

I reviewed the plan, overlaying my own gas consumption rates. I satisfied myself that between us we were carrying enough gas to provide contingency for the loss of a gas source.

Both Chris and I were diving with twin 12L tanks of Air, an 11L cylinder of 50% Nitrox and a 5.7L cylinder of 100% O2. The questions I asked myself were based on two scenarios:

1. If either Chris or I lost the gas in our twins at any stage on the bottom, would the other have enough air to get us both safely up to 21m where we could switch to our 50% mix?

2. If either of us were to lose the gas in either our 50% mix cylinder or 100% cylinder, would we have enough gas between us for us both to complete our required decompression stops?

This is planning for worst case scenario as in the case of this dive we would probably each be able to look after ourselves. In the first scenario one we could use the isolation manifold to shut down the failed side of our twins and continue to breathe from the other side and in the second scenario we would complete our decompression stops using a combination of our back gas and the other decompression gas we were carrying.

Note, that whilst this was our dive plan and we based our plan on the gases described above (i.e., air, 50%  $O_2$  and 100%  $O_2$ ) there are other factors that can be taken into consideration and on other occasions you might chose to do a 45m on Trimix to reduce nitrogen narcosis and gas density. These are decisions that are made by individual dive teams and reinforce the fact that there is not one absolute answer in Technical diving and divers must have enough understanding of the dive, the theory, their risk appetite, fitness, and dive conditions to make a decision for themselves.

The objective for the dive was a simple sightsee and photography dive. As I was carrying the camera, we agreed the following to complete our plan:

1. Chris would manage time and depth

2. I would lead the dive at the bottom with Chris following behind

3. I would deploy my SMB at 45m before beginning the ascent

4. Chris would switch between gases first

5. Chris would deploy a second SMB at 21m after we had both completed our gas switches.

Well before the dive, twins and stage tanks are put together and checked, the dive computer is set up with the various gas mixes to be used, the plan is written onto a dive slate to be worn on my arm, my Drysuit is prepared with a spare mask and line cutter going into the left hand leg pocket and my SMB going into the right hand leg pocket, my reel is stowed into a pocket on my webbing, lights are checked and finally my back up computer, fins, gloves, hood and mask are stowed in a mesh bag.

A trolley makes getting the gear down to the boat a whole lot easier!

Once the boat arrives at the dive site and sets the shot line, the next step is kitting up. First, we slip into the twin set and weights and secure the belts. Next fins, gloves and hood goes on and finally the stage bottles are grabbed from under our seat and attached. The first gas we will breathe goes on first with the next gas going above it. With everything in place pre dive checks are done. Both the primary and secondary regulator is breathed, the wing is inflated, deflated and inflated again, stage tanks are primed and a final run through of equipment is completed. With all checks completed the next task is to stand up! With the amount of weight we are carrying, this is always hard and you hope that the drop off will be quick and the boat doesn't rock too much. We wait impatiently for those sweet words - Go, Go, Go and splash into the water

At 5m we complete an in-water safety check. In turn, we check each other's gear for any leaks, dangling equipment or other issues and each demonstrate that we can hand off our primary regulator if needed. This is important as the primary regulator is on a long hose and a badly placed hose could prevent it being passed off in an emergency. If all is well, we continue our descent

We communicate during the dive using both lights and hand signals but other than the occasional oks or a flash from a light to point out something of interest, there is no need for much communication on the bottom.

At 23 minutes into the dive, Chris signals with his light that it is time to prepare for our ascent. I unzip my right leg pocket, remove my SMB and clip it to my reel ready to deploy it.

At 24 minutes, I inflate the SMB and send it to the surface.

At 25 minutes, Chris gives me the signal to ascend to 21m, during the ascent to 21m I turn on my 50%  $O_2$  mix cylinder and retrieve the

regulator from the rubber bands that attach it to the cylinder.

At 27 minutes, we have arrived at 21m. Chris signals to me to watch his gas switch to 50% O<sub>2</sub>. He holds the regulator out and asks me if he is OK to switch. I follow the hose to the cylinder and check the labels and then check the depth before giving him an OK signal. He takes his primary regulator out of his mouth, replaces it with the regulator on his  $50\% O_2 mix$ cylinder, then clips the primary regulator off onto a D-ring on his right shoulder. He then switches the gas in his computer. All the time he has kept his eyes on mine using me as a visual reference to maintain his buoyancy at 21m. With Chris now breathing his first decompression mix, I signal to Chris to watch my switch and the process is repeated. When we are both switched. Chris removes his SMB and reel from his right pocket and inflates it using a hose from his 50% mix.

Our transitions have gone smoothly so we still have a few seconds to complete at 21m before Chris signals for us to ascend to 18m.

As each minute ticks by, Chris signals again to ascend the next 3m.

At 9m Chris unclips his primary regulator and swaps it with his 50% mix, going back onto air. He then stows the regulator back under the bands on the stage bottle, turns on his  $100\% O_2$  cylinder and removes the regulator from the rubber bands. With his change complete, I do the same and we ascend to 6m. This temporary switch back to our back gas is so that we avoid switching from one stage bottle to another, making it clearer as to which cylinder the regulator is attached.

At 6m, Chris signals for me to watch his switch to 100% O<sub>2</sub> and verify that he is about to breath the correct gas. With his switch made and his computer switched, it's my turn and the process is repeated.

The decompression on 100% at 6m is always the longest stop and we have time to check each other again for any dangles or other issues. This is also the time when I switch on the heated under suit if I am wearing one. as this is when the cold catches up with you. Before we reach the 53minute point of the dive, our computers clear of any decompression requirement. This is because they have been purposely set to a slightly less conservative setting plan than the we are diving (conservatism in dive planning and gradient factors (GF) are a topic for another day!).

At 53 minutes, Chris signals to ascend to 5m and we begin the process of slowly reaching the surface. Ascending by 1m every minute we head back up. Holding a depth of 1m is perhaps the biggest buoyancy challenge of the day with any swell causing our feet to breach the surface .

At exactly 59 minutes, as per our plan, we are back at the surface and signal OK to the boat.

After a slow climb back up the ladder with the weight of the gear kicking in again, we are back in our seats. Immediately, there is a quick review of the dive and we both feel it went very well. Back on dry land we will complete our review of the dive over coffee. What went well, what could we have done better, what would we do differently next time.



Technical Diver.

I hope that this article has given you a flavour of what Technical Diving involves. I personally find Technical Diving a challenge and something I enjoy very much but accept that it isn't for everyone. It is a continual learning experience and I usually feel that I have returned from each dive a better diver, as I always seem to learn something or identify something I need to focus more on, to make myself a better individual and team diver. I have so much more to learn.

For anyone interested in taking the step into Technical diving, we are blessed in Melbourne to have some excellent deep dives and some brilliant Technical Diving instructors, so what are you waiting for?

You will need to have a Nitrox and Deep Diver certification as a prerequisite. Depending which on agency you opt to train with, the first Technical qualification usually qualifies you to dive with up to 99% Nitrox and with 100% O<sub>2</sub> to a maximum depth of 45m. As with recreational diving, there are then progressive courses to equip you for Trimix, greater depth and longer decompression.

- Ian Scholey. 🛠



### **DIVER SAFETY**

#### Medical Conditions in SCUBA Diving Fatality Victims in Australia, 2001 to 2013

#### John Lippmann and

David McD Taylor

The authors searched the National Coronial Information System for SCUBA diving-related cases during 2001–2013, inclusive. Coronial findings, witness and police reports, medical histories, and autopsy and toxicology reports were scrutinised for pre-existing medical conditions and autopsy findings. Predisposing factors, triggers, disabling agents, disabling injuries and causes of death were analysed.



Their findings are listed below

- There were 126 scuba divingrelated fatalities identified during the study period.
- Forty-six (37%) divers were identified as having a significant medical condition which may have contributed to their incident.
- The most common condition was ischaemic heart disease (usually associated with severe coronary artery narrowing) which had been diagnosed in 15 of the divers.
- Thirty-two (25%) deaths were attributed to cardiac disabling injuries such as ischaemic heart disease and arrhythmias, although a cardiac disabling injury was thought likely in another six.
- Respiratory conditions were implicated in eight (6%) deaths, at least four associated with cerebral arterial gas embolism.
- At least 14 (11%) divers who had contributory pre-existing medical conditions had been cleared to dive by a medical practitioner within the year prior.

- The prevalence of obesity in victims (37%) was substantially higher than in the general population (28%) and in divers in general who appear to have a lower prevalence of obesity than the general population.
- Divers aged 45 or older had a fivefold incidence of death than those younger.
- Decompression sickness was responsible for 1% of deaths, the main cause being omitted decompression.
- Arterial gas embolism (air embolism) was responsible for 15% of deaths so it was a significant cause of death.

The authors concluded that chronic health-related factors played a major role in almost half of these deaths; primarily cardiac conditions such as ischaemic heart disease and cardiac arrhythmias. Although Fitness-to-Dive assessments have limitations, the high incidence of cardiac-related deaths indicates a need for 'older' divers to be medically assessed for Fitness-to-Dive.

The authors note however that getting a dive medical doesn't guarantee that something won't occur. Some medicals are far more thorough than others, depending on the skill of the examiner and the honesty of the diver, among other things.

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Dr John Lippmann OAM

will be a guest speaker at a future VSAG club meeting, talking about First Aid for Divers.

Chairman and CEO at Australasian Diving Safety Foundation/DAN Asia -Pacific Foundation Lt Australia, 3 yrs 6months.

Founder, Chairman, Director of Research Divers Alert Network DAN Asia-Pacific 1993 - Present 28 years Melbourne, Australia

Dr John Lippmann has been involved in researching, teaching, writing and consulting on safe diving, decompression and accident management for both divers and the general community for more than 30 years. He has specialised in certain areas including resuscitation, first aid, oxygen administration, diver rescue, various aspects of decompression and the investigation and reporting of diving accidents, fatal and non-fatal.

John has authored, or co-authored, many books on diving safety.

# **LOST & FOUND**

#### 13 Months in I-SOLA-tion

David Geekie and Peter Mosse

#### David's Story

Being retired meant I could dive when the conditions were enticing and I didn't have to push the limits when the weekends weren't optimal. I also had dive buddies who were available frequently when the weather allowed.

Mike and I met up with Walter at Newhaven and followed Peter Galvin's Stroker towards Cape Woolamai where we left them and continued to the Pinnacles. Neither Mike nor Walter had dived this feature and we were blessed with perfect conditions. Normally the top of this structure peaking at 9m is very difficult to dive as you are washed over the top and back again with each swell

I had dived this site many times so could act as guide for Walter and Mike on their first visit. I do love the vertical walls on the western side and the small cave (overhang) with the yellow zoanthids. So after following the anchor chain down to 14m on the eastern side to ensure it was well positioned we went back up and over the ridge and down the western side. We headed north, explored the overhang then went around the end of the ridge and down the eastern side until we met the gully between the ridge structure and the peak to its south. Once we had explored this we came back up and then followed the anchor line down to ensure the anchor was going to be easy to extract. The anchor was so shallow I decided to hang around and explore the eastern side of the ridge as conditions don't normally allow a diver to stay there. The area is covered in kelp but it was not inconceivable there could be a dinner waiting to be collected under a ledge. What I did find was a barnacle encrusted SOLA video light almost identical to the one Pam uses on her wrist. It had obviously been there for a considerable amount of time, but I extracted it as a memento of this brilliant dive

When I was in the car, I had a chance to look at the SOLA Light and despite the growth on it I casually slid the switch forward to see if it would still move. I was more than surprised when the switch moved and the LEDs all fired up, it had retained its charge and still functioned! When we got home, I posted a dive report including photos of the video light, showing it still working. I was careful not to be too precise about where I had found it, if it was going to be claimed the claimant would have to fill in the details! I also sent a photo to a generic sales email address for the SOLA light in the USA. A day later I had a grateful response and they requested permission to use the photos if an opportunity arose.

It was not long after this that I was in contact with Peter Mosse discussing an upcoming dive event he was hosting at the Pinnacles and I mentioned finding the torch, to which he commented that he had been with his son in law when he lost it back in January 2020, around Australia Day. The video light had been in the ocean for over 13 months.

#### Peter's Story

My dive log records it this way:

26<sup>th</sup> January 2020. Pinnacles. Buddy: Pete. Dive: 32 m 30 minutes

"We look around the Cape but too much swell, and dirty. Pinnacles less roll. But dirty also. Nice dive along the transverse gutter area below the top. Lots of fish and dusky sea ferns. No gorgonians. Seem to have disappeared. Unfortunately Pete dropped his torch! One of the risks of having more than one item clipped to the same D ring is that you may unintentionally unclip the wrong item.

We have a system of diving from a small 17ft boat that brings the diver to the surface from the safety or deco stop completely ready to slip out of their gear on the surface and get into the boat as quickly as possible. This involves switching to the secondary second stage, taking the bungy off over the head, unclipping the chest strap and unclipping the submersible pressure gauge and dropping it. The problem in this case, and a similar prior. case some months Pete unclipped the SOLA light by mistake and dropped it instead of the gauge. We both watched it pirouette to the bottom

Pete was devastated. It wasn't that old and had been a gift.

I had some air left and dived straight down but the swirling kelp made it very difficult to see anything. It was gone!!

Pete was taking it pretty badly, so I organised for a replacement light at short notice.

I was speaking to Dave about the upcoming Pinnacles event earlier this year and whether he and Pam were coming. I encouraged them to come along because the conditions had been so good. And out came his tale of his recent dive at the Pinnacles and his "find". Dave very kindly agreed to give the light back to its owner, indirectly via Pete's wife Kim Mosse at the BBQ after the Pinnacles Event dive.



So, with the return of the light from Dave, Pete now had two SOLA lights. The decision was which one he would keep. He opted for the new one, so now my son has a bryozoan encrusted SOLA light to light up his dives.  $\clubsuit$ 

# **MAY GUEST SPEAKER**

#### MAY 2021 GUEST SPEAKER JANE BOWMAN PADI COURSE DIRECTOR, EFR INSTRUCTOR TRAINER, CDAA ADVANCED CAVE INSTRUCTOR.

Our very special guest speaker in May was Jane Bowman, PADI Course Director, EFR Instructor Trainer, CDAA Advanced Cave Instructor.

It only took a single trip to the Maldives in 1984, that commenced a love for SCUBA diving that is still as strong today, as then and started what was to become not just a hobby but a career. PADI training has enabled Jane to become one of the few female Course Directors in Australia. She is also an Emergency First Response Instructor Trainer, CDAA Instructor and a Marine Safety Coxswain. A love of photography and marine biology has enabled her to appreciate



Jane Bowman

not only what Victoria has to offer, but better appreciate overseas destinations. Jane has traveled extensively to destinations such as Malaysia, Thailand. Fiii. New Mexico, USA. Zealand. Tonga, Chuuk (Truk Lagoon), Palau, Guam, Solomon Islands, Vanuatu, Papua New Guinea. the Philippines. Indonesia, the Marshall Islands, the Galapagos, Brunei and Niue. Technical diving has included trips to Florida, Mexico, Vanuatu and the Nullarbor to dive the caves plus countless journeys to Mt Gambier to dive in Australia's best cave diving area.

Jane was inducted into the International Women Divers' Hall of Fame in the USA in 2010. She was the second Australian (after Valerie Taylor) to be selected for this award based on her extensive training, teaching and technical diving experience, especially for female divers.

She was awarded OzTek's Industry Recognition Award in 2017. ♦



### First - March 2021



First Place - Follow Me, Tank Cave, Mt Gambier - by Peter Mosse.

### Second - March 2021



Second Place

Short Boarfish, Mornington Pier Rock Wall - By Arthur Kokkinos.

### Equal Third - March 2021



Equal 3rd Place - Just hanging, Golden Arch - by Mathijis Smith

### Equal Third - March 2021



Equal 3rd Place - Mr Magoo, Chinamans Hat - by Mathijis Smith

### First - April 2021



First Place-Kim's Tank Cave, Mount Gambier - by Sherryn Amor

### **Equal Second - April 2021**



Equal Second Place Fish Feed at Ned's Beach, Lord Howe Island, N.S.W. - by Carole Campisano.

### **Equal Second - April 2021**



Equal Second Place - Who Locked the door?? - by Peter Mosse.

### Third - April 2021



Third Place - Tank Cave, Mount Gambier- by Sherryn Amor.

### First - May 2021



First place - Tasselled Anglerfish, Rye Pier - by Marc Alexander.

### Second - May 2021



Second place - Look inside, Cape Woolamai - by Peter Mosse

### Equal Third - May 2021



Equal Third place - .Night dive, anyone? Lagoon Pier - by Stuart Cousins

### Equal Third - May 2021



Equal Third place - .Olwolgin Cave, WA - Sherryn Amor.

### Equal Third - May 2021



Equal Third place - .Olwolgin Cave, WA - Sherryn Amor.

# Arthur's Dive Book Review #5

#### BLOOD IN THE WATER

#### Author Ben Cropp

I'll never forget the first time I saw Ben Cropp on TV. His underwater exploits of enticing sharks to come close to him, so he could kill them with his speargun, had me glued to the TV screen. His adventures where filmed. brilliantly capturing the excitement that lay beneath the ocean surface. Throughout the years, he was accompanied by his beautiful wives. Ben was married three times. His wives participated in many underwater expeditions and were happy to be filmed walking around, exploring and diving in their bikinis. This also captured my attention and definitely got me more interested in diving. From that point onwards, all I wanted in life was to have Ben Cropp's lifestyle. Along with Geoff Naylor, Ron and Valerie Taylor, Cousteau, Jacques Ben Cropp changed my life forever.

Blood In The Water, the Ben Cropp pictorial autobiography is definitely a book you need to have in your personal library. This book gives an amazing account of Ben Cropp's life.





Leading the Australia Team in the World Spearfishing Championship in Sicily.
It is full of many interesting stories that will leave you smiling, laughing out aloud and in some cases shaking your head in disbelief.

The book takes you back to Ben's early days, spearfishing with rubber slings and homemade masks. In 1961 he was the Australian open spearfishing champion. As a 17-yearold, he had the record for the largest cod taken off Byron bay. A massive 45 kilos. He twice represented Australia in the world spearfishing championships.



Ben with a world spearfishing record catch, 41 kg black kingfish in 1957.



The 1961 Australian Spearfishing Champion.



Australia's sole representative at the World Spearfishing titles in Malta in 1959

In the beginning of his career, Ben had a worldwide reputation as the world's leading shark killer but as time went on, Ben changed his ways and turned to shark and ocean conservation. He would fight and lobby the government to protect the Southern nurse shark in grey Queensland and instigate the protection of potato cod at the Cod Hole, east of Lizard Island. The book goes into many other stories of ocean conservation. His work with the Box Jellyfish will definitely raise an eyelid.

The book gives an interesting account of the early days of shipwreck diving and the methods Ben used to discover the wrecks. Over the years, he has discovered more historic shipwrecks in Australian waters than anyone else. His shipwreck discoveries make compelling reading and one that stands out is the Yongala shipwreck. Reading how Ben Cropp salvaged lanterns and the Yongala bell intrigued me to no end. Only 3 years ago, I had dived the Yongala on a VSAG dive trip and now knowing that Ben Cropp had been there 20 years prior, made that dive even more special for me.



Ben with a large 30 cm across box jellyfish, Port Douglas.



Ben's first underwater movie camera in1963.



Ben in an experiment to determine which First Aid treatment (vinegar or methylated spirits) is better for a jellyfish sting.

The book covers the highs and lows of Ben's career. His photos have graced the front pages of many newspapers around the world and on the cover of TIME magazine. He has won numerous international awards for his photography and made many award winning documentaries and adventure films. Ben even opened a historic shipwreck museum at Port Douglas, showcasing his massive shipwreck artefact collection that he had amassed over the years. The lows have been the stigma he carried for a long time being labelled as a shark killer and the sinking of his much loved 48 foot Grand Banks Vessel BEVA. How he lost that boat will bring a tear to your eye.

Ben Cropp takes you on a journey that will astound you, entertain you, shock you, amaze you and most importantly, make you feel extremely proud that you also, experience the intriguing beauty of the underwater world.

The two things that I truly love about this book is Ben Cropp's brutal honesty when describing his recollections and how he felt at the time. The book is also well supported with many beautifully captured photos that depict that moment in time superbly. After reading this book I was left with a feeling of sadness. I enjoyed it so much I just didn't want it to end.

My book review rating for this book is definitely a 10/10

Until next time... Keep reading!!!

- Arthur KOKKINOS. �



Polishing brass alarm clocks salvaged from the 1880's Aarhus wreck discovered off Cape Moreton, QLD



The bell from the Yongala wreck dated1903

## **JUNE GUEST SPEAKER**

## MARCH 2021 GUEST SPEAKER DES WILLIAMS VSAG PAST PRESIDNT

Sadly, VSAG Past President, Max Synon, passed away several weeks ago. Max was a very active and keen member of the Club and, happily, through the VSAG network, he was able to speak and share some stories and memories with many of his mates while he was in palliative care.

As part of reflecting on Max's life, Des Williams kindly put up his hand to share some of the adventures and stories of what the Club got up to in the late-1970s-early 1980s.

One of Max's memorable exploints was his small, but crucial role in the raising of the Loch Ard anchor, ably reported by Tony Tipping in the 60th Anniversary VSAG magazine ....



**Des Williams** 



## **VSAGers Making a Difference**

Over the years VSAGers have been involved in many significant events.

#### The Raising of the Loch Ard Anchor

#### by Paul Tipping

If ever the VSAG was to make a contribution to the maritime heritage of the State of Victoria, the club's participation in the Loch Ard Centenary Commemoration in 1978 ensured that it did. The theme of the commemoration was to be known as "Settlers Under Sail" to mark the era of sailing ship emigration to Victoria. The Lach Ard tragedy, in which fifty two persons perished on 1 June, 1878 was the last occasion on which migrants were lost when a sailing ship failed to successfully negotiate the western entrance to Bass Strait.

When Peter Stone, Secretary of Scuba Divers Federation of Victoria, asked our Club Committee in January, 1978 if VSAG would be willing to provide manpower and boats to assist SDFV in locating and recovering one of the *Loch And* anchors from the wreck off Mutton Bird Island, we leapt at the offer. The Victorian Government, through Premier and Arts Minister Rupert ('Dick') Hamer, had appointed the construction magnate Sir John Holland to chair the Loch Ard Centenary Committee. In the absence of available personnel from the Flagstaff Maritime Village of Warrnambool at the time, Sir John approached Peter



Loch Ard, 1620 Tons. Built at Glasgow 1873. Twice dismasted on first voyage, and totally lost 1878 at Port Campbell, Victoria. Only 2 saved.

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Stone and through him the SDFV (as the head amateur 'peak body' in the diving community) to seek and recover a significant relic from the *Lach And* with the idea of having it available for public display at Port Campbell in time for the centenary of the loss of the vessel.

VSAG in 1978 was (as it still is) one of the most active clubs in this State. Little wonder that no fewer than 15 of the 22 personnel involved in the recovery mission belonged to our great club. And standing testament to the enduring fascination of our members with diving is that some thirty-eight years later, several of the VSAG participants remain active in the sport.

So, on the 10<sup>th</sup> March 1978, the VSAG contingent, led by club President John Goulding, assembled at Port Campbell. Joining our very own 'fabulous fifteen' next day were four very experienced wreck divers from Torquay Sub-Aqua Club. The 19 divers were under the command of Peter Stone who had brought in experienced salvage diver Len Brennan to fulfill the role of lift-master should we succeed in locating the relic.

As Saturday dawned, the palpable en-

rhusiasm of the divers was soon rempered by the reality of adverse weather conditions. Three and four metre swells were smashing against Mutton Bird Island where the werek is located. This situation did not bode well for our prospects. With matters looking even less promising at midday, most of the team left the bleakness of the caravan park for lunch at the town's hotel — where refuge from the elements was at least assured.

Such is the unpredictability of the coastal conditions in this part of the world, one of the group, having left



The only photo of the suspended anchor at the work site over the Loch Ard wreck. Photo: Paul Tipping.

the sanctuary of the bar for the hotel verandah for a calming cigarette and to check out the sea, soon returned inside with the news, "It's as flat out there as a nightman's hat!"

Well, maybe or maybe not, but a long, low and even swell was a bit better than the cauldron that had greeted the day. Even the local abalone diver, seated at his semi-permanent bar stool (and reputed to dive not more than once or twice a month) was acknowledging that these interlopers from the City might have a point to make about launching the boats! He'd earlier said

we were "crazy" and had convinced even us for a time that he might have had a point.

This was the 'window' we had waited for — and a dozen or more souls were heard to affirm their innocence of any infraction of the diver's 12-hour 'no alcohol' rule! It was already 3 o'clock in the afternoon and without the advantage of daylight saving. Quickly, four aluminium and fibre glass boats and one 'rubber ducky' inflatable craft were launched by means of the ample manpower available, with the heavier boats supported and pushed across soft sand by careful deployment of rollers. There was no such luxury of easy water access by a ramp and the boat launch winch on the wharf was our of bounds if you didn't have the required operator's 'ticket'.

By 5 o'clock, several pairs of divers had searched the ocean floor beneath Mutron Bird Island which is some ten kilometres distant from Port Campbell Harbour. Luckless in the attempt to locate a cluster of three or four kedging anchors which we knew to be on the wreck, a lone buoy marking part of the wreck site was the best that could be achieved in order to set the scene for the resumption of work next day — as always, 'weather permitting!' All boats were relaunched on the Sunday, 12<sup>th</sup> March. Still, 2–3 metre swells, while relatively calm for this coastline, were not conducive to good visibility which, with an overcast sky, languished at some 2 metres. There was little chance that the day's main action at a depth of 25 metres could be recorded on film even if we could dive.

Within a very short time after arriving over the wreck site, Torquay divers, Wayne Osborne and Graham Stephens, had located the clump of anchors. They managed to buoy one of the specimens. Peter Stone, assisted by two VSAG divers, descended with Len Brennan's carefully prepared lifting hag. Using steel cabling and shackles, they carefully secured the bag to the anchor. Brennan commenced to inflate the bag with sufficient exhaust air from a regulator for the bag to clear the seabed. By rotation, Stone and Brennan, followed by a succession of VSAG divers, plied the bag with air expelled from a number of cylinders that were ferried, from the compression station operated by a VSAG 'shore crew' in the car park on top of Loch Ard Gorge, down steep steps to the beach. The tanks were then taken by dive boats through the gorge entrance to the work site.



Flotation bag holding anchor shortly after surfacing at Mutton Bird Island. Photo Paul Tipping.



Anchor's first appearance in 100 years - Twilight at Port Campbell jetty in March 1978. Photo Paul Tipping.

During the operation, VSAG divers detected movement in the lifting tackle. With many divers reaching their 'no decompression' limits (exacerbated by their exertions) in an age before dive computers, the necessary adjustment was made by two of the Torquay divers. Finally, as acknowledged by Peter Stone in a contemporary report to the Centenary Committee prepared after the recovery action, "...two groups of VSAG divers, using four 72 cubic foot tanks, filled the bag to maximum capacity under their own supervision."

"Damn it", the thing would not budge! And the lift capacity of the now fully inflated bag was close to two tonnes. Yet the anchor was believed to be less than one half that weight. In fact, the two flukes and the anchor ring were so heavily encrusted that the anchor at three points was effectively 'concreted' to other anchors in the cluster and to the seabed itself.

One of the Torquay crew, quick to see a possible solution in the rapidly encroaching late afternoon light, put his marine radio to good use. As luck would have it, a call transmitted from the water on the CB wavelength requesting that "a crowbar be brought urgendy to Loch Ard Gorge" was intercepted by a passing motorist. After some initial misgivings, the motorist (who had suspected a hoax or 'crank' call) nevertheless reported the call to Port Campbell police whose duty officer at the time was Senior Constable Terry Hayden, a local diver who was armed with knowledge of the lift operation. SC Hayden acted immediately by bringing a crowbar to the gorge where it was picked up by our tender boat and handed to VSAG's Max Synon. One other diver joined Max in a return mission to the seabed. Extraordinarily, with minimal number of blows with the crowbar, the anchor was dislodged!

Max recalls that he had not dived that day until he descended with a diver he believed was a cameraman from one of the television networks: "He pointed to where I had to put the crowbar... I gave it a nudge and a bit of leverage, while keeping well back from the anchor. It didn't take much to free it?"

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Some SDFV team members with 'their' anchor. VSAG members David Moore and Paul Tipping with Peter Stone and members of Torquay Scuba Club. Photo courtesy Peter Stone.

After almost one hundred years on the seabed, the relic and the flotation bag rocketed to the surface in a matter of a few seconds, travelling at such speed that the entire eight foot bag flew out of the water in a sea of foam formed by the escaping air bubbles before settling in the light swell under the weight of the prized anchor.

Acting quickly, a buoy line from the Torquay boat was attached to the drifting bag and anchor. The trailing line slackened and became fouled on the boat's propeller. Peter Stone entered the water from Brennan's inflatable and retrieved the remnants of the buoy line which they had cut in order to allow the Torquay boat to retreat from the turbulence at the foot of the island. He swam to Barry Truscott's boat to which he passed the line allowing the inflatable bag to be towed.

The 'comedy of errors' (aka 'near disasters') continued when a crayfish buoyline managed to foul the anchor bag. Adding to the mayhem, other divers were on the surface armed with cameras making determined but futile efforts to photograph the submerged anchor all to no avail due to the murk. Finally, local crayfisherman Bill Morris, on hand with his boat *Joylem*, tethered the bag once Stone and two Torquay codivers had disentangled the line from the craypot line.

By now, the afternoon was well advanced. The activities of the divers had also managed to attract a crowd of some several hundred onlookers to the cliff top. The late afternoon air was ruptured by some loud cheers from the throng once the *Joylew* towed the bag to sea. Apparently, many of them were drawn to the scene by the police siren when the vital crowbar was rushed to the gorge.

By the time the flotilla of craft reached Port Campbell, a crowd that we estimated at around five hundred had assembled on the wharf and environs. Although coordinator Stone had expected the anchor would remain in the water next to the wharf, the anchor was winched from the sea "for a quick look before returning her to the seabed." Another cheer went up.

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Lesley Tipping and Don Charlwood with recovered anchor. Photo: Paul Tipping.

Everyone was pleased to see that the anchor was in perfect condition.

The anchor itself was not to be the only memento of an exciting weekend's activity. On the Monday, the VSAG camp received a friendly visit from the police who had helped out on Sunday. Their playful enquiry about the fate of their crowbar was net with the response "...it's still in Max Synon's boat". Max offered to pay the thirteen dollars the police wanted for it — and at time of writing it's still on display in his Melbourne suburban garage.

A fortnight later, on Easter Saturday, 25<sup>th</sup> March 1978, the anchor was retrieved from the harbour at Port Campbell and displayed before another large crowd. A number of dignitaries were on hand for the ceremony, including Sir John Holland and members of his Centenary Committee. One committeeman, Don Charlwood, the historian and an authority on the Lach And, and a former wartime navigator and peacetime air traffic controller, regaled many with his stories of the Lach Ard disaster and other maritime mishaps



Paul Tipping with anchor at Port Campbell Tourist Information Centre.

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The last moments of the Loch Ard - an artist's impression.

along this Shipwreck Coast. In a direct link with the rescue of the two survivors of the wreck, the nonagenarian son of William Till, the fourteen year old farmhand who located survivor Tom Pearce near the gorge that bears the name of that tragic ship, was sharing recollections of his father's tales of his incredible find a hundred years earlier.

What became of the raised anchor? Promptly after the Easter ceremony, the relic was placed in the custody of the expert conservators at Flagstaff Hill Maritime Village in Warnambool. After the necessary 'cleaning' (believed to have included the process known as electro-osmosis), over a period totalling eighteen months, fittingly, the anchor was returned to Port Campbell. It has for some years been displayed on a wall at the town Information Centre at the rear of the Port Campbell caravan park.

Shortly before Christmas 1978, several members of the VSAG, resplendent in business attire, attended the Scate Government offices in Spring Street, Melbourne as guests of the Arts Ministry. At the reception, they shared experiences with the Premier and other dignitaries and accepted the generous praise lavished upon them and their other SDFV colleagues for the significant part they had played in the centenary commemoration of a bygone era... the era of sailing ship immigration to Victoria as epitomised by the worst maritime disaster in our State.

And so it is that the VSAG can take justifiable pride in the significant part it played in an event that lives on through the *Loch And* anchor: the very anchor which greets hundreds of pilgrims and tourists from all over the world to the growing Port Campbell township in every week of every year.



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# **JUNE GUEST SPEAKER**

## JUNE 2021 GUEST SPEAKER MARK RYAN SOUTHERN OCEAN EXPLORATION



Mark Ryan joined our VSAG June General meeting via zoom, to provide his detailed account on Southern Ocean Exploration's finding of the SS Alert on 27th June, 2007.

SS Alert was a steamship that sank off Cape Schanck, Victoria, Australia on 28 December 1893.[1

After SS Alert sank, the ship laid for 113 years on the ocean floor until being rediscovered in June 2007 by a team from Southern Ocean Exploration.



SS Alert: built in 1877 by Robert Duncan & Co of Port Glasgow, Scotland for Huddart Parker and wrecked off Jubilee Point, Victoria, Australia in 1893.

Courtesy State Library of Victoria

General Characteristics

screw.

| Туре:  | Steamship        |
|--|------------------|
| Tonnage:   | 243 tons         |
| Length:  | 169 ft (52m)     |
| Beam:  | 9ft 10in (5.94m) |
| Depth:   | 9ft 10in (3m)    |
| Propulsion: Rankin & Blackmore compound steam engine, 90nhp, 1 |                  |

## San Remo Channel

Shore Diving Phillip Island during a Pandemic Part 4 San Remo Channel. A Pictorial Essay. By Peter Mosse

This is the last in a series on shore diving Phillip Island and my explorations during the lockdown phase of the pandemic.

Every time you travel out in a boat to dive off Cape Woolamai, or the Pinnacles or George Kermode, you pass over this amazing dive site. I had for a long time heard about the deep hole in the channel and I had passed over it literally hundreds of times and never really stopped to investigate. I had occasionally dropped divers there before from a boat on the way back in from diving "out the front" of the island but hadn't explored it for myself and it seemed to be accessible from the shore. And the pandemic lockdown was a perfect time to do just that!

### San Remo Channel

## (Depth range 12-24 m)

The dive requires competent compass work. It is **not** a dive for novice divers. You need to know how to use and trust a compass. Your buoyancy control must be excellent and you do need to be relatively fit, particularly if you leave your exit a bit late and the tide has turned and the current has set.

You can dive the channel at high water slack and low water slack. For divers new to this area I recommend low water slack simply because you will have a bit more time, typically around 40-45 minutes, compared with high water slack where you will be lucky to get 30-35 minutes. Also at high water slack, the current races back out over the shallow sand bank area as you exit and it can be quite a hard swim before you get back to shore.

It is possible to start from different points but I prefer to start from the pier for low water slack dives and from the beach for high slack dives. Of course you can dive it from a boat but it is so much easier as a shore dive. The chart shown below is available from navionics.com and by clicking on Chart Viewer you can set a start point and target point and obtain the true compass bearing. But remember that when the tide is running, however slow, your path over ground will not be the actual compass bearing (but rather a vector of the balance between the bearing being swum and the effect of the current). Failure to allow for this may result in you ending up somewhere you don't want to be and coming to the surface to look is dangerous, particularly in boating season!



Starting time can be problematical. Watch the tide very carefully. This can be particularly difficult if the wind is disturbing the surface but just watch for the gradual disappearance of the turbulence patterns in the channel and around the bridge pylons.

*Low Tide Slack*. Enter the jetty area and swim to the outer arm of the jetty. Set your bearing and head out using the compass (see the black arrow in the chart above). Swim out until the bottom starts to drop away. Sometimes it seems to be a very long way, but it will drop. Then just follow what takes your interest. Remember the tide is still going out a little. As soon as the change of tide is detected start the return on your reciprocal bearing. But allow for the ever increasing current in setting you return bearing.

#### High Tide Slack

Enter the water from the beach below Davis Point (see the purple arrow in the chart above). Swim out in the general direction of the port channel marker (see the red i in the chart above). It can be a bit disconcerting in summer months with boats whizzing by overhead even though it is quite deep enough (14m-20m) for safety. The quiet of winter is by far the best time.

Beware, that in the deep channel it can be difficult to detect the change of tide early and you may find that when you come up over the wall that the current is running much faster than you would have liked and again you may have a nervous exit. So check drifting algae regularly, drop some sand and watch, or just go up to the top of the wall to check.

So far from my exploration, there seem to be two distinct types of benthic communities along the channel wall, the first dominated by gorgonians, bryozoans and hydroids, the second is dominated by jewel anenomes.





And the jewel anenomes are spectacular (see also the March April edition of Fathoms)



#### And of course there are plenty of nudibranchs, if you are lucky!



This is one of the best dive sites I know of. You can't always guarantee good visibility but it never fails to reward the diver and underwater photographer. And I have only dived the side of the channel nearest the jetty. There must be a similar wall on the other side of the channel! And if the tides fall at dawn or dusk, grab the opportunity. You will see things



you won't see at other times like the gorgonian polyps fully extended to the point that it looks like the fans are covered in snow as shown in one of the photographs above.

- Peter Mosse. 🛠

# **SNIPPETS**

### **CAPE PATTERSON**

11th March 2021

We took the opportunity of excellent sea conditions to spend a couple of nights at Peter Galvin's place in Inverloch. On Thursday we put Stroker in and headed to Cape Paterson.

On board were Peter Galvin, Rowan Salger, David Geekie and myself.

As usual with Stroker, the focus was on finding Crayfish but Dave and I did our best to find something to photograph.

We did find some nice reef and at the end of our first dive came across a group of sleeping Port Jackson sharks.

Peter and Rowan grabbed a couple of good sized Crayfish and everyone went home happy with a good days diving.





#### **CAVE WALL**

#### 7th March 2021

As a boat skipper, you really do appreciate the chance to dive the slack on the wall. Often we are the one's who drop our divers in for slack and end up with a drift dive. This was the second of three consecutive days of slack water wall dives for me, thanks to a non-diving skipper on our boat. This spot is called (by VSAG at least) Cave Wall and it's part of the Lonsdale Wall closer to the Heads.

As you can see in these pictures it's another truely spectacular spot. Seriously, there is hardly an inch of the wall that isn't covered in growth, it's amazing.

This was a big day for the club with 4 boats out.

Diving today were:

On Barcrusher - David Politakis, Jeremy Van Der Beek and Ian Scholey

On Dire Straights - David Geekie, Matthijs Smith, Mike Mosseveld and Christine Reynolds

On Mistress - Angus Stuart-Adams, Walter Medenbach and Brian Heatherich

On Carmine - Peter Campisano, Carole Campisano, Steve Dawson and Melissa Schubert



#### **GOLDEN ARCH**

#### 7th March 2021

For our second dive of the day we headed out through the heads to Golden Arch. Matthjis Smith and I started our dive around the Arch before heading off to explore the area. We found some great ledges as we headed off in the general direction of Lonsdale Arches.. Again there were heaps of fish around and we saw a good number of Crayfish all of which were out of reach. As we were sending up an SMB, we were joined by Mike Mosseveld who had better luck and had a decent sized Cray in the bag.





### PARADISE WALL

8th March 2021

Monday saw another wonderful day of diving with conditions near perfect.

We had 3 boats on the water:

On Carmine- Peter Campisano, Carole Campisano, Matthijs Smith and Ian Scholey

On Dire Straights - David Geekie, Mike Mosseveld, Melissa Schubert and Steve Dawson

On Mistress - Angus Stuart-Adams, Walter Medenbach and Brian Heatherich

Our first dive of the day was a slack water dive on Paradise Wall. I jumped in first to move the shot line to the edge of the wall and the rest of the buddy pairs followed behind. The shot finished up on a magnificent spot with some fantastic caves down deeper. This has to be one of the best spots on the wall. An absolutely top notch dive on territory no deeper than 31.2m. The fishlife was very good with large numbers of Bluedevils about. With the second se





## CHINAMAN'S HAT

#### 26th March 2021

Matthijs Smith and I joined a special #Redboats Photographic trip on Friday. First stop was Chinaman's Hat for some time with the Seals. These guys know how to have fun and we spent a happy hour in their company. Tricky little buggers to photograph, though.







### PARTY POINT

#### 26th January, 2021

Jeremy Van Der Beek and I booked on with #Redboats hoping to dive HMAS Goorangai on Australia Day. Sadly shipping movements ruled that out. As it's in the shipping channel that was always a risk. Instead we made a last minute switch of boats and went to Party Point. This spot is on the Lonsdale Wall and drops from 18m down to 60m. With singles only we kept it shallow and bottomed out at 25m. We found some excellent territory and as usual when in the marine park we found a nice Crayfish and had to leave it alone.

Plenty of Blue Devils around as well. All up a very nice dive on a spot I would recommend.





### LONDSDALE ARCHES

#### 28th February 2021

While most of the club were out diving Phillip Island yesterday, Chris Porter and I were diving locally. We would have joined other members at Phillip Island, had we not already booked on with Redboats. Sadly our intended dive on the Piggot was cancelled due to a lack of numbers. We had a very average dive on Lonsdale Arches before a much better dive on Devil's Drop Off. I gave the camera to Chris and he managed a couple of really nice pics, even making my trim look reasonably passable. We are in the process of refreshing on skills at the moment, as we build up to the nitty gritty of our Normoxic Trimix course. The crap vis and horrible surge on Lonsdale Arches proving perfect conditions for a challenging set of drills.

**DEVILS' DROP OFF** 

#### 28th February 2021

This is the seond dive for Chris Porter and I. This spot is on the Lonsdale Wall close to the heads. The top of the wall is in 18m and it cascades down from there in a series of ledges and overhangs. I didn't think it was great in the shallower part but as we headed down deeper it was very nice. There are some excellent ledges and plenty of colour. It's named Devil's Drop Off for the numerous Blue devilfish and there were plenty about. There were also plenty of Long-snouted boarfish.

We bottomed out at 43m before slowly working our way back up, running for 56 minutes. After the horrible conditions on Lonsdale Arches this was a big step on and a great dive.

- Ian Scholey. �







#### BLAIRGOWRIE

#### 24th March 2021

Popped down to Blairgowrie yesterday for a midweek dive. Despite the rain the vis was excellent and I had the place all to myself. I was in the water for 3 hours 40 minutes and didn't get deeper than 3.1m. Most of this stuff was found in a relatively small area. It's great to see such a great variety of life. The one thing that eluded me was the Bronze Whaler which I'd seen video of there earlier in the day.



## SEA SLUG CENSUS DIVE, BLAIRGOWRIE

#### 5th March 2021

With a busy weekend of boat diving planned, I wanted to try and squeeze in a Sea Slug census dive as well. So I headed down to Blairgowrie yesterday and went hunting. I was in the water for 3 hours 27 minutes and managed to find 16, possibly 17 species. After a dip in Nudibranch numbers there recently, there seems to be an improvement in numbers just at the right time.

I also seem to be finding lots of Velvetfish at the moment and yesterday I found four individuals all within a couple of metres of each other.

Something has definitely got the taste for the pink Phyllodesmium serratum Nudibranch - it's getting harder to find one that hasn't been nibbled.









### **SCHNAPPER POINT**

11th June 2021

I found surprisingly good conditions at Mornington yesterday with the visibility very good given the storms midweek.

I decided to take a swim around Schnapper Point and exited at the pier.

There wasn't a huge variety of things but what was there was in good numbers. Especially noticeable were the Green Oxynoe viridis and Yellow Noumea closeorum of which I saw half a dozen of each. After a nice couple of hours I surfaced to find Keith Dawson and Peter Beaumont down at the pier so had good company for my post dive coffee. Given the 25km restriction it looks like I will be back there again tomorrow and I'm too not disappointed with that. Nice dive.







#### **FLINDERS**

#### 21st June 2021

Lulled into a false sense of security by an excellent dive last time I went there, I ditched the peninsula and headed to Flinders on Monday. I should have known better - it was just horrible. The weed is piled up 3 foot deep on the beach and the vis was just about nil. I had to use my compass to stay under the pier as I couldn't even see the pylons until I bumped into them.

It was really hard work and unless I got the camera right onto things it was impossible. I found a few things with a lot of patience. I don't know who was more surprised but I bumped right into a large ray at one point. Note to self - stick to the peninsula for a while. Still never mind, still better than working.



## COVID-19

## Detection of COVID-19 in Sewage

Many people would be aware that COVID-19 has been detected in sewage throughout Melbourne and regional Victoria. The information is being used by health officials and epidemiologists to track the virus in our state and indeed throughout Australia.

The testing of sewage for viruses is not new. One of the earliest examples of this was poliovirus, and to this day poliovirus is tested in sewage in many countries around the world, including Australia, to help provide early warning of the re-emergence of the virus. Other common viruses, such as the one that is the most common cause of gastroenteritis Australia. in 'norovirus', causing what is often termed 'winter vomiting disease', has also been tested for in this way.

Sewage is also tested for other indicators. For example testing for narcotics as part of the National Wastewater Drug Monitoring Program run by the Australian Criminal Intelligence Commission has been carried out since 2016. The program tests for both legal and illegal drugs to keep track on levels of use. Testing is also carried out for antibiotic resistant microorganisms. Testing for heavy metals such as lead, arsenic, mercury or cyanide can be used to track illegal dumping into sewer systems.

There are now approximately 1,000 samples per week being collected from around Australia and NZ that are being tested for COVID-19. There are similar projects underway in many other countries.

### What Is a Virus?

Viruses aren't strictly 'alive'. They are simply packages that transport genetic information from one living cell to another. Once the virus manages to infect a cell, the genetic material from the virus instructs that cell to make many copies of the virus. Those copies of the virus are then shed where they can go on to infect other cells, and so the cycle continues. The multiplication process means that a single virus infecting one cell in a person's body can ultimately result in millions or billions of viruses being shed within just days to weeks. These viruses can then go on to infect other people.

Most viruses are so small that they can't be seen even with a light microscope but require use of an electron microscope. An electron microscope image of COVID-19 is shown in Figure 1. The image shows the 'spikes' that allow the virus to attach to and enter cells to begin the infection process.



Figure 1. Electron microscope image of COVID-19.

There kinds are many of coronaviruses, including those that cause the common cold, and they have been studied for a long time. The spikes on coronaviruses were thought to look like the 'corona' of rays seen around the sun, hence it got the name coronavirus ('corona' being Latin for 'crown'). These spikes sit within a membrane envelope that surrounds the internal contents of the virus which includes the RNA genes (Figure 2). Like many viruses, the coronaviruses have genes made up of ribonucleic acid (RNA) rather than the more familiar deoxyribonucleic acid (DNA) genes.



Figure 2. Coronavirus image and cross-sectional view of the virus showing the RNA coiled inside and the

## How Does COVID-19 Get Into Sewage?

People that are infected typically 'shed' the virus from their mouth, nose and throat during the early stages of infection (first few days to weeks) and then gradually move to shed the virus via their faeces later on (sometimes for several months). Therefore, the virus gets into the sewer when infected people shed the virus into basins, showers, toilets, swimming pools and spas or when washing contaminated clothes or nappies in their laundry.

Activities that can pass the virus into the sewerage system include things such as:

- brushing teeth
- rinsing the mouth into the sink
- nasal cleansing
- sneezing, coughing or breathing whilst in the bath or shower or into the sink

- laundering clothes
- using tissues to capture coughs or blow noses and putting them into the toilet
- using the toilet.
- Sewage Testing

The process of testing sewage for COVID-19 involves three steps:

1. Collecting raw sewage samples from the sewerage system most typically at a sewage treatment plant. The most common sampling method involves use of autosamplers at that take samples every hour or so and store the



Figure 3. A refrigerated autosampler sampling inflow to a sewage treatment plant.

samples in a refrigerator (Figure 3).

- 2. The virus very quickly becomes inactive, or non-infectious, in sewage. After that it quickly breaks down to the point where it is no longer detectable. In fact, the testing doesn't even try to detect the infectious virus as it loses its ability to infect so rapidly. Instead the test detects the genetic (RNA) remnants of the virus. But even those genetic remnants break down so fast in sewage that only raw sewage is worth testing.
- 3. The samples need to be collected within a day or two of a person shedding viruses into the sewer otherwise the material is likely to be too degraded to be worth testing. The samples must be kept cold all the way to the testing laboratory.
- Extracting and concentrating the viral genetic material from the sewage.
- Testing for the presence and quantities of the target viral genetic fragments.

The final part of the test is essentially the same as the test used for nose and throat swabs. The test involves use of what is called 'polymerase chain reaction', or PCR. The PCR process detects a tiny amount of the viral RNA and then make lots and lots of copies so it is then easy to detect it using other methods and then quantify it. Testing is quite tricky because there are many substances in sewage that interfere with the test.

The results of the test are then provided to the decision-makers involved in COVID control. The results are often hard to interpret and need careful analysis. Sometimes only low levels of the virus are found and often the results are just isolated detections making it hard to know if the result is just a person passing through the community or a person residing there.

#### **Future Directions**

The testing of sewage, (which is variously termed

'sewage surveillance','environmental surveillance','wastewater surveillance' and'wastewater-based epidemiology'),

is growing in scope and is set to continue into the future, both for COVID-19 and for many other microorganisms and chemical substances.

This is an edited version of a paper published in WaterWorks by Dr Dan Dan well-known Deere. is a Australian Water Industry consultant. of Permission the editor of WaterWorks. Peter Mosse is acknowledged. 🛠

# **Rock Lobster Tagging Program**

**Tagging of recreationally caught rock lobsters commenced on 1 July 2017** Tags are free and can be ordered online or collected from selected Victorian Government Offices.

http://agriculture.vic.gov.au/fisheries/recreational-fishing/tagging-of-recreationallycaught-rock-lobsters

To Create an account, Order/Report/Transfer tags please visit:

https://lobstertag.agriculture.vic.gov.au



# **Save the Rays**

## **REPORT ILLEGAL FISHING ACTIVITY**

https://vfa.vic.gov.au/recreational-fishing/ray-protection-fishing-rules

You can report illegal fishing activity to 13 3474.

## **Ray protection fishing rules**

We are making changes to ray, skate and guitarfish fishing rules.

These new rules commence on Tuesday 7 November 2017.

The new rules:

- Prohibit the take or possession of sting rays, skates or guitarfish greater than 1.5 metres in width;
- Reduce the combined daily bag limit for rays, skates and guitarfish from 5 to 1, which are smaller than 1.5 metres in width;
- Prohibit the take of these species within 400m of any pier, jetty, wharf or breakwater;
- 4. Require these species to be landed whole so they can be measured by Fisheries Officers.

An education and awareness program will be conducted to educate fishers about these new rules.







Coastguard have an excellent app that allows you to register your boat trip with them and allows them to track you, using the GPS in your phone.

How it works:

You register your trip, together with your latest return time. If you go an hour past this, without notifying them, the wheels are set in motion to find you. Firstly, they will try and ring you or your nominated contacts and then, go from there.

Great tool for extra safety. Details can be found on the coastguard website:

www.coastguard.com.au/SafeTrx



Better Boating Victoria has been working with boating asset managers to remove all fees and make it cheaper and easier for all people to get out on the water.

To find a free boat ramp please visit this link

https://betterboating.vic.gov.au/

# DJARY DAJES

The Poor Knights, New Zealand-November 2021

Philippines & Palau—TBA 2022



The destination for next year's club overseas trip is Dumaguete in the Philippines. This will be a great trip to bring the family along, as there is plenty for them to do while we are out diving.

If anyone is interested please contact me for a booking form at:

President@vsag.org.au

While we are in the Philippines, it seems silly not to take the opportunity to extend the trip in Palau. Koror is just a 2 hour flight from Manila and has some of the best diving anywhere.

If anyone is interested please contact me for a booking form at:

President@vsag.org.au




Join the Victorian Sub Aqua group on this memorable trip to the Philippines, with the option to extend further and dive Palau too! Diving in Dumaguete can take place on either the magnificent Marine Sanctuary of Apo Island or the amazing Dauin Coastline. Find walls densely covered with hard and soft corals, schooling fish, turtles and crystal clear waters. In contrast, the Dauin coastline is home to exquisitely rare macro critters. Spot wonderpus, hairy frogfish, mandarin fish performing their mating dances at dusk and the extremely rare clown frogfish.

# FLY

PHILIPPINE AIRLINES & CEBU PACIFIC Return Flights Melbourne to Dumaguete via Manila All airline taxes & fuel surcharges

# STAY & DIVE

### ATLANTIS DUMAGUETE RESORT

7 nights standard room twin share Breakfast daily Return airport transfers 10 dives per person Apo island day trip including 2 dives pp Oslob whale shark snorkel day trip Tanks, weights, airfills

## UPGRADE OPTION

Eat Sleep Dive package Includes all meals Unlimited diving Free nitrox Add \$900pp

> CONTACT VSAG FOR MORE INFORMATION ischoley@iinet.net.au | 0439 310 646 | vsag.org.au ALLWAYS DIVE EXPEDITIONS res@allwaysdive.com.au | 03 95316818 | allwaysdive.com.au

2022

Lic # 32311

# VICTORIAN SUB AQUA GROUP PALAU EXTENSION



Following on from diving Dumagute in the Philippines, come along with Victorian Sub Aqua Group to dive Palau! This destination offers some of the most diverse waters in the world. Its marine ecosystems include barrier and fringing reefs, lagoons, sea grass beds, marine lakes and mangrove forests. Palau's waters boast some of the world's best reefs and concentrations of the most spectacular marine life in the world. Inquisitive sharks, friendly dolphins, manta rays, tuna and barracuda – all are prolific in the rich Palau waters and every dive holds something new and breathtaking. There are dive sites to suit all levels of experience with the two best sites being 'Blue Corner' and 'Blue Holes''. These pristine habitats support some of the world's richest populations of marine life. With over 1,500 species of fish, pelagics, corals and a number of WWII wrecks. Palau should be on every diver's bucket list.

# FLY

PHILIPPINE AIRLINES Return Flights Manila to Koror All airline taxes & fuel surcharges

### **STAY & DIVE**

PALAU CENTRAL, KOROR 7 nights standard room twin share Breakfast daily Return airport transfers

#### SAM'S TOURS PALAU

8 dives per diver onc Tanks, weights and airfills Third residual air dive Chandelier Cave Jellyfish Lake snorkel stop Unlimited diving on Sam's macro wall FREE Sam's water bottle FREE nitrox for certified divers , Excludes : Dive permits including Jellyfish Lake \$100USD paid locally

2022

Lic # 3231

DIVES

### CONTACT VSAG FOR MORE INFORMATION ischoley@iinet.net.au | 0439 310 646 | vsag.org.au ALLWAYS DIVE EXPEDITIONS

res@allwaysdive.com.au | 03 95316818 | allwaysdive.com.au

# **VSAG Dive and Meeting Calendar TBA**

Diving with VSAG:

Each week the nominated Dive Captain will issue an email on or close to the Wednesday advising if there are any boats available and, if known, where the locations.

If you are interested in booking on one of the boats for a dive weekend, you should Email the Dive Captain ASAP after receiving the notification email with the following information:

Full Name;

Mobile Number;

**Emergency Contact Information;** 

Preferred boarding location (if different locations are offered e.g. Sorrento/ Queenscliff)

Date/Details of last dive; and

Gear configuration.

Available boat owners will be confirmed by email prior to the weekend.

Dive site(s) and dive day will be determined by the DC in consultation with the Boat Owners, depending on the forecasted conditions.

Dive sites may be adjusted on the day to suit divers and prevailing conditions.

The boat owner and /or one of the divers will prepare and forward a Fathoms Dive Report to: <u>editor@vsag.org.au</u>

You must confirm your intention to dive with the Dive Captain and the boat owner by 6:00pm the day prior to the dive.

Failure to confirm your intention to dive may result in the boat owner allocating your spot on the boat to a confirmed diver and placing your spot on the "standby diver list".

Additional Informationd:

<u>Tidal Stream Information for Port Phillip Bay Heads is location here:</u> <u>http://www.bom.gov.au/australia/tides/#!/vic-the-rip</u>

Rates in **RED** are the maximum forecast outgoing (ebb) tidal rate. Rates in **BLUE** are the maximum forecast incoming (flood) tidal rate Definitions

TBA – To Be Advised TBC – To Be Confirmed

VSAG Dive and Meeting Calendar TBA. Please note that the calendar is subject to change when circumstances require. – VSAG Committee.

# Websites for **Tidal Streams & Weather Conditions**

Peter Beaumont

Tidal Stream information for Port Phillip Bay Heads is located here:

http://www.bom.gov.au/australia/tides/#!/vic-the-rip

Port Phillip Bay winds and temperature information is located here:

http://www.bavwx.com.au/

Tide information for Cape Woolamai is located here:

http://tides.willyweather.com.au/vic/gippsland/cape-woolamai.html

# VSAG Dive Equipment Box - Update

VSAG has a private transient equipment box located at: The Scuba Doctor Shop, 1/49 Peninsula Avenue, Rye VIC 3941.

Equipment that is not in use by VSAG divers and boat owners can now be held in our black storage box.

It currently holds :

- 2 Oxy-Sok Oxygen Resuscitation Kits
  - 1 Oxygen Medical Tank
- 1 Oxygen Medical Kit
- 1 DAN First Aid Kit
  - 2 Scuba Tanks.

**Better Boating Victoria** 

To find a free boat ramp please visit this link:

https://betterboating.vic.gov.au/

### Tidal Streams at the Heads — June 2021

**RED** italic times are slack water with EBB about to start (Flood Slack) which are the best diving conditions near the Heads. **BLUE** are Ebb Slack. Times have been adjusted for Daylight Savings

| Мау       | June          |        |               |        |        |        |
|-----------|---------------|--------|---------------|--------|--------|--------|
| MON 31    | TUE 1         | WED 2  | THU 3         | FRI 4  | SAT 5  | SUN 6  |
| 0:18      | 1:06          | 1:55   | 2:45          | 3:38   | 4:34   | 5:32   |
| 5:16      | 6:11          | 7:07   | 8:07          | 9:11   | 10:24  | 11:44  |
| 12:26     | 13:12         | 13:55  | 14:37         | 15:20  | 16:07  | 17:07  |
| 19:11     | 19:53         | 20:35  | 21:14         | 21:55  | 22:36  | 23:18  |
| MON 7     | TUE 8         | WED 9  | THU 10        | FRI 11 | SAT 12 | SUN 13 |
| 6:28      | 0:02          | 0:47   | 1:32          | 2:16   | 2:59   | 3:42   |
| 13:04     | 7:20          | 8:07   | 8:49          | 9:29   | 10:08  | 10:46  |
| 18:26     | 14:14         | 15:12  | 15:57         | 16:35  | 17:11  | 17:44  |
|           | 19:49         | 20:55  | 21:47         | 22:30  | 23:08  | 23:43  |
| MON 14    | TUE 15        | WED 16 | THU 17        | FRI 18 | SAT 19 | SUN 20 |
| 4:23      | 0:17          | 0:51   | 1:26          | 2:03   | 2:44   | 3:31   |
| 11:23     | 5:03          | 5:43   | 6:26          | 7:14   | 8:10   | 9:18   |
| 18:18     | 11:59         | 12:34  | 13:09         | 13:47  | 14:26  | 15:11  |
|           | 18:51         | 19:23  | 19:54         | 20:25  | 20:57  | 21:31  |
| MON 21    | <b>TUE 22</b> | WED 23 | <b>THU 24</b> | FRI 25 | SAT 26 | SUN 27 |
| 4:25      | 5:25          | 6:29   | 7:33          | 0:56   | 2:01   | 3:04   |
| 10:35     | 12:01         | 13:26  | 14:41         | 8:35   | 9:33   | 10:29  |
| 16:05     | 17:13         | 18:38  | 20:05         | 15:43  | 16:37  | 17:25  |
| 22:11     | 22:58         | 23:54  |               | 21:19  | 22:20  | 23:15  |
| April May |               |        |               |        |        |        |
| MON 28    | TUE 29        | WED 30 | THU 1         | FRI 2  | SAT 3  | SUN 4  |
| 4:06      | 0:06          | 0:55   | 1:43          | 2:30   | 3:16   | 4:02   |
| 11:21     | 5:06          | 6:05   | 7:03          | 8:01   | 9:00   | 10:04  |
| 18:09     | 12:09         | 12:53  | 13:33         | 14:12  | 14:49  | 15:31  |
|           | 18:50         | 19:28  | 20:04         | 20:37  | 21:10  | 21:42  |

### Tidal Streams at the Heads — July 2021

**RED** italic times are slack water with EBB about to start (Flood Slack) which are the best diving conditions near the Heads. **BLUE** are Ebb Slack. Times have been adjusted for Daylight Savings

| June   |        |        | July   |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|
| MON 28 | TUE 29 | WED 30 | THU 1  | FRI 2  | SAT 3  | SUN 4  |
| 4:06   | 0:06   | 0:55   | 1:43   | 2:30   | 3:16   | 4:02   |
| 11:21  | 5:06   | 6:05   | 7:03   | 8:01   | 9:00   | 10:04  |
| 18:09  | 12:09  | 12:53  | 13:33  | 14:12  | 14:49  | 15:31  |
|        | 18:50  | 19:28  | 20:04  | 20:37  | 21:10  | 21:42  |
| MON 5  | TUE 6  | WED 7  | THU 8  | FRI 9  | SAT 10 | SUN 11 |
| 4:48   | 5:36   | 6:25   | 7:16   | 0:28   | 1:23   | 2:18   |
| 11:12  | 12:23  | 13:33  | 14:36  | 8:05   | 8:54   | 9:39   |
| 16:19  | 17:21  | 18:41  | 20:04  | 15:28  | 16:12  | 16:50  |
| 22:16  | 22:54  | 23:37  |        | 21:09  | 22:00  | 22:43  |
| MON 12 | TUE 13 | WED 14 | THU 15 | FRI 16 | SAT 17 | SUN 18 |
| 3:11   | 4:01   | 4:48   | 0:33   | 1:09   | 1:48   | 2:29   |
| 10:22  | 11:03  | 11:41  | 5:36   | 6:25   | 7:18   | 8:16   |
| 17:24  | 17:56  | 18:26  | 12:19  | 12:56  | 13:34  | 14:13  |
| 23:21  | 23:57  |        | 18:55  | 19:23  | 19:51  | 20:21  |
| MON 19 | TUE 20 | WED 21 | THU 22 | FRI 23 | SAT 24 | SUN 25 |
| 3:15   | 4:05   | 5:01   | 6:03   | 7:09   | 0:29   | 1:44   |
| 9:19   | 10:30  | 11:48  | 13:09  | 14:24  | 8:15   | 9:19   |
| 14:55  | 15:43  | 16:43  | 18:01  | 19:34  | 15:27  | 16:20  |
| 20:53  | 21:32  | 22:19  | 23:18  |        | 20:59  | 22:06  |
| July   |        |        |        |        |        | August |
| MON 26 | TUE 27 | WED 28 | THU 29 | FRI 30 | SAT 31 | SUN 1  |
| 2:56   | 4:03   | 5:05   | 0:40   | 1:22   | 2:03   | 2:41   |
| 10:16  | 11:08  | 11:54  | 6:01   | 6:55   | 7:46   | 8:36   |
| 17:06  | 17:46  | 18:22  | 12:35  | 13:12  | 13:46  | 14:20  |
| 23:02  | 23:53  |        | 18:55  | 19:26  | 19:54  | 20:22  |

### Tidal Streams at the Heads — August 2021

**RED** italic times are slack water with EBB about to start (Flood Slack) which are the best diving conditions near the Heads. **BLUE** are Ebb Slack. Times have been adjusted for Daylight Savings

| August |               |           |        |        |        |        |
|--------|---------------|-----------|--------|--------|--------|--------|
| MON 2  | TUE 3         | WED 4     | THU 5  | FRI 6  | SAT 7  | SUN 8  |
| 3:19   | 3:58          | 4:41      | 5:29   | 6:23   | 7:22   | 0:39   |
| 9:28   | 10:24         | 11:26     | 12:35  | 13:48  | 14:52  | 8:20   |
| 14:55  | 15:34         | 16:21     | 17:22  | 18:51  | 20:23  | 15:42  |
| 20:49  | 21:20         | 21:55     | 22:38  | 23:33  |        | 21:26  |
| MON 9  | TUE 10        | WED 11    | THU 12 | FRI 13 | SAT 14 | SUN 15 |
| 1:48   | 2:52          | 3:50      | 4:43   | 0:07   | 0:46   | 1:27   |
| 9:13   | 10:02         | 10:46     | 11:27  | 5:35   | 6:27   | 7:19   |
| 16:21  | 16:54         | 17:23     | 17:51  | 12:06  | 12:45  | 13:23  |
| 22:13  | 22:52         | 23:30     |        | 18:18  | 18:46  | 19:16  |
| MON 16 | TUE 17        | WED 18    | THU 19 | FRI 20 | SAT 21 | SUN 22 |
| 2:10   | 2:55          | 3:43      | 4:38   | 5:40   | 6:50   | 0:22   |
| 8:15   | 9:14          | 10:18     | 11:29  | 12:46  | 14:01  | 8:02   |
| 14:02  | 14:42         | 15:26     | 16:21  | 17:37  | 19:17  | 15:04  |
| 19:47  | 20:22         | 21:03     | 21:54  | 23:01  |        | 20:48  |
| MON 23 | <b>TUE 24</b> | WED 25    | THU 26 | FRI 27 | SAT 28 | SUN 29 |
| 1:46   | 3:03          | 4:09      | 5:05   | 0:14   | 0:51   | 1:25   |
| 9:09   | 10:07         | 10:56     | 11:39  | 5:55   | 6:41   | 7:23   |
| 15:55  | 16:37         | 17:13     | 17:46  | 12:16  | 12:50  | 13:22  |
| 21:54  | 22:48         | 23:33     |        | 18:15  | 18:41  | 19:07  |
| August |               | September |        |        |        |        |
| MON 30 | TUE 31        | WED 1     | THU 2  | FRI 3  | SAT 4  | SUN 5  |
| 1:58   | 2:32          | 3:07      | 3:47   | 4:33   | 5:28   | 6:33   |
| 8:05   | 8:47          | 9:34      | 10:27  | 11:31  | 12:45  | 13:57  |
| 13:53  | 14:24         | 14:57     | 15:35  | 16:24  | 17:39  | 19:28  |
| 19:33  | 20:01         | 20:32     | 21:07  | 21:51  | 22:50  |        |

### **Emergency Contact Information** Anywhere on water in Victoria Ch 16 or 88 should be your first choice using Mayday or Pan Pan

### VHF Channel 16 27 MHz AM Channel 88

Note: VSAG uses VHF CH 73 and 27 MHz CH 96 for routine communications. Check you are using the correct emergency channel.

VSAG Nautilus will be tuned to Ch 73 (Green button for routine comms) and Ch 16 (Red Button for distress comms)

### Speak slowly and clearly

| Mayday Call – for grave & imminent danger requiring immediate assistance  | <b>Urgency Call –</b> when the danger is not grave or imminent   |  |  |
|---|--|--|--|
| Distress Call:  | Urgency Call:  |  |  |
| Mayday, Mayday, Mayday  | Pan Pan, Pan Pan, Pan Pan  |  |  |
| This is: <u>"Boat call sign x3"</u><br>(Boat owners insert your call sign)  | All Ships, All Ships, All Ships (or the emergency service you want to con-<br>tact)  |  |  |
|   | This is: " <u>Boat call sign x3</u> "<br>(Boat owners insert your call sign)   |  |  |
| Distress message after contact  | Urgency message after contact  |  |  |
| made:   | made:  |  |  |
| made:<br>Mayday   | made:<br>Pan Pan   |  |  |
| made:<br>Mayday<br>"2 DIVE 4"   | made:<br>Pan Pan<br>"2 DIVE 4"   |  |  |
| made:<br>Mayday<br>"2 DIVE 4"<br>Give position-(see GPS for co-<br>ordinates), nature of the problem, num-<br>ber on board plus any other relevant<br>information         | made:<br>Pan Pan<br>"2 DIVE 4"<br>Give position-(see GPS for co-<br>ordinates), nature of the problem,<br>number on board plus any other rele-<br>vant information         |  |  |
| made:<br>Mayday<br>"2 DIVE 4"<br>Give position-(see GPS for co-<br>ordinates), nature of the problem, num-<br>ber on board plus any other relevant<br>information<br>Over | made:<br>Pan Pan<br>"2 DIVE 4"<br>Give position-(see GPS for co-<br>ordinates), nature of the problem,<br>number on board plus any other rele-<br>vant information<br>Over |  |  |

All passengers on a boat should be familiar with the use of marine radio(s) in case of emergency.

# **Emergency Contact Information**

# **Telephone contacts**

Police – Ambulance – Fire : 000

Dr John Roth (Mornington)

Water Police no longer use the 1800 088 200 number

The new 24/7 No is :03 9399 7500DAN International Emergency Hotline:+1-919-684-9111 (from mobile)<br/>0011 1 919684 9111 (from landline)State Emergency Service (VIC):132 500 (new number)Alfred Hospital Hyperbaric Unit:03 9076 2269Alfred Hospital switchboard:03 9076 2000

# **Mornington Peninsula Area**

| Diving Emergency Service:          | 1800 088 200                          |
|------------------------------------|---------------------------------------|
| Dr. John Roth:                     |                                       |
| Mornington Medical Group           | 03 5975 2633                          |
| Rosebud Hospital:                  |                                       |
| 1527 Nepean Hwy, Rosebud           | 03 5986 0666                          |
| Frankston Hospital:                |                                       |
| Hastings Road, Frankston           | 03 9784 7777                          |
| The Bays Hospital:                 |                                       |
| Main Street, Mornington            | 03 5975 2009                          |
| Southern Peninsula Rescue: (Sorrer | nto) 0417 038 944                     |
| Mornington Bay Rescue Service:     | 0419 233 999                          |
| *Coast Guard (Queenscliff)         | 03 5258 2222                          |
| *Coast Guard (Hastings)            | 03 5979 3322                          |
| *Coast Guard (Safety Beach)        | 03 5981 4443                          |
| *Coast Guard is not always manned  | & operates mainly during daylight hrs |
| Diving Doctors:                    |                                       |
| Dr Pamela Dagley (Eltham)          | 03 9439 2222 (VSAG member)            |
| Dr Vanessa Haller (Carrum Downs)   | 03 9782 6666                          |
| Dr Adrian Murrie (Sorrento)        | 03 5984 4322                          |
| Dr Guy Williams (Rosebud)          | 03 5981 1555                          |

03 5975 2633

