

October / December 2022

OZDIVER

AUSTRALIA'S PREMIER DIVE MAGAZINE

CAVE DIVERS

CLIMATE
CHANGEWHALE
SHARKSRED SEA
WRECKSPALAU
THE ISLAND
OF DREAMS

SAUDI ARABIA

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Summer is finally here and all of us are feeling the heat. Not only is the temperature heating up but this is also the busiest time of the year, if you are part of the diving industry.

The last couple of months have been very busy for me for one reason. A new year with a new adventure.

Really happy that the borders are open and I can go and explore the world again and see what the underworld has to offer.

This magazine is full of interesting stories and articles. With marine and ocean facts and we travel all around the world. We look at how to take


better photos and if you can't, how to edit it so it will look better.

Like every other magazine this one is full of articles for the beginner diver to the more technical diver. If you want to publish your articles or photos in OZDiver magazine do not hesitate to contact me.

I hope that you enjoy this edition and May you have a happy new year filled with fun dives.

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Johan Boshoff

But seek first the kingdom of God and His righteousness and... 

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CONTENTS

Regulars

3 - Editor's Deco

4 - The Team

Letters

7 - Dive Log

Dive the Continent

9 - OZ News

15 - Shelly Beach

Weird and Wonders

31 - Scorpion Fish

33 - Climate Change

37 - Saving Sharks Before
it is too Late - Part II

Dive the World

41 - Global News

45 - Palau

63 - Saudi Arabia

Dive Med

75 - Delayed Evacuation

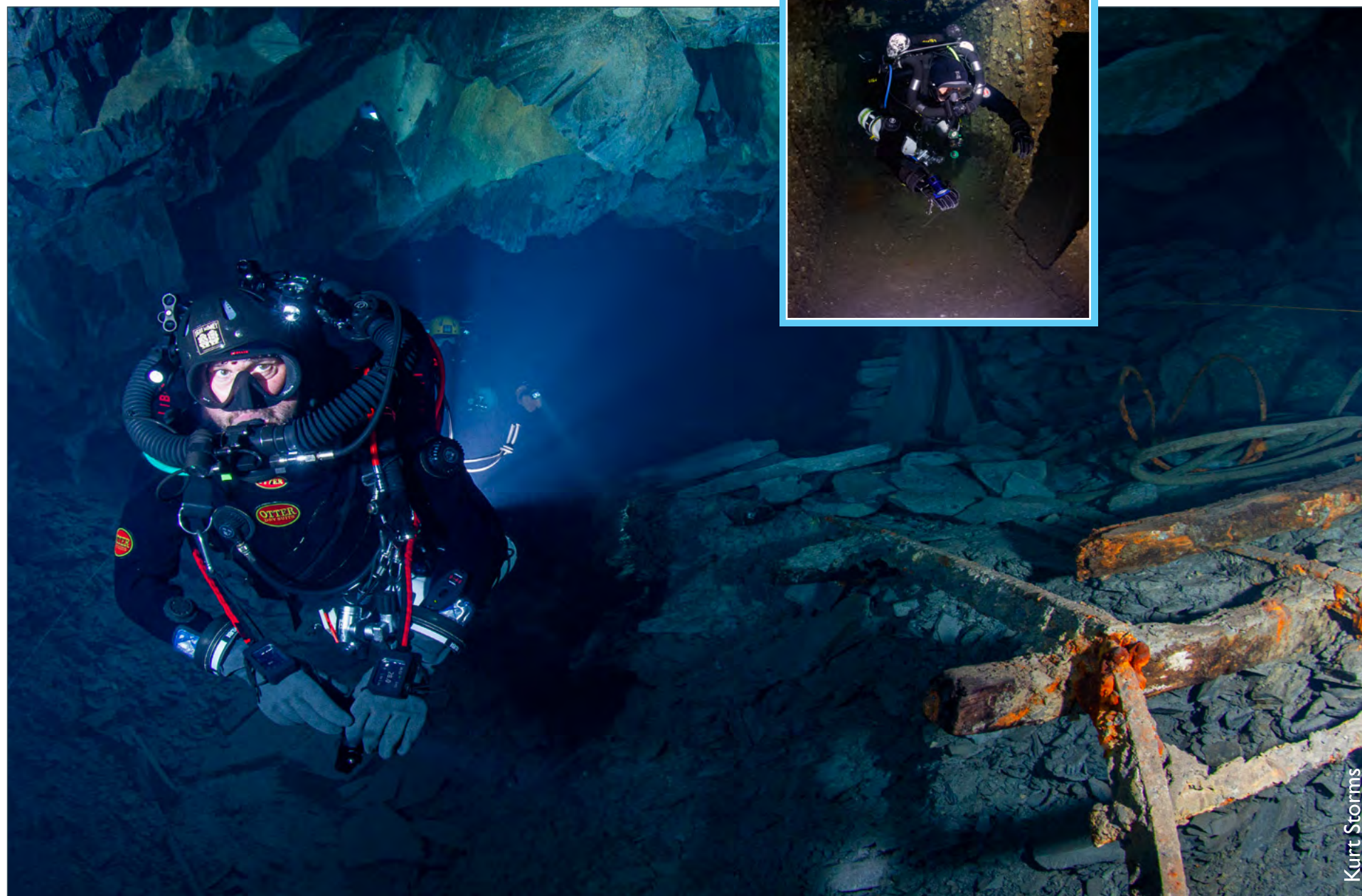
Exploration

79 - Red Sea Wrecks



COVER PHOTO

Kurt Storms



Kurt Storms

Through the Lens

91 - Photo School

93 - Photographer
Graham Willis

Giant Stride

109 - Whale Shark
Expedition

121 - Wakatobi

Technically Speaking

127 - Trapped Diver

131 - Tech Instructors

Instructor Diaries

135 - Sharks & Scuba

Gear Talk

137 - Scuba Gear Care

143 - Gear & Book
Reviews

Safety Stop

148 - Funnies

Dive Operators

149 - Listings

Shelly Beach- Pg 15



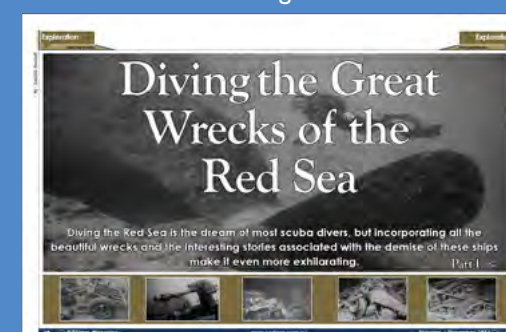
Palau - Pg 45



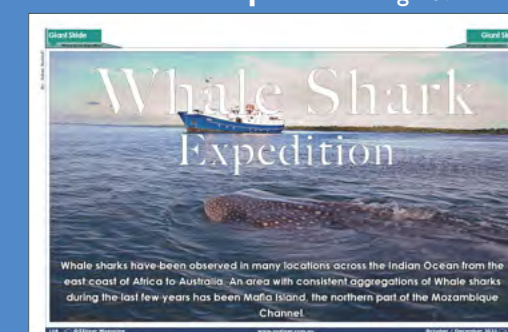
Saudi Arabia - Pg 63



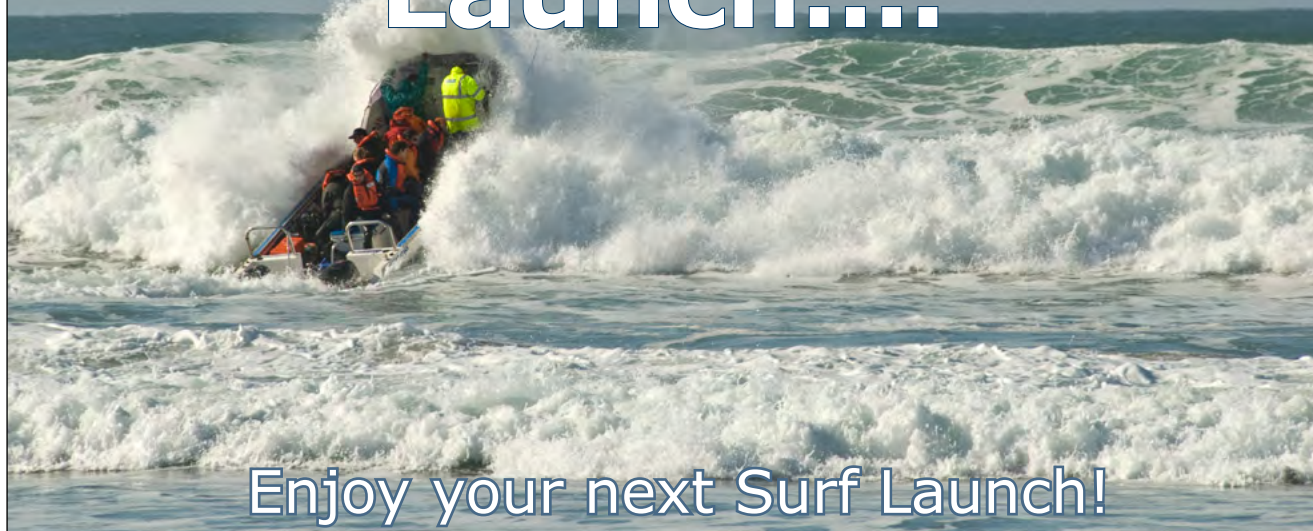
Red Sea Wrecks - Pg 79



Whale Shark Expedition - Pg 109



30 ways to know that you did a Proper Surf Launch....



Enjoy your next Surf Launch!

1. When you get a fast ascent rate warning during the launch on your dive computer.
2. When your dive computer actually logged a dive on back line.
3. When the other boat brings the rest of the divers to you that you lost.
4. When the skipper has to change petrol during the launch.
5. When your dive computer locks you out because you missed a safety stop.
6. When your life jacket sits like a cape on you after the launch.
7. When the skipper puts on a mask and snorkel for the launch.
8. When you were issued with spare-air before the launch... and used it!
9. When you had a full aerial shot of your boat.
10. When you had to equalize early and often.
11. When the water no longer goes out the back but over the sides.
12. When you can't do the dive because your kit disappeared.
13. When you can actually taste neoprene.
14. When your butt cheeks ended up playing about a 40% role in you staying on the boat.
15. When you lose your booties during the launch.
16. When the skipper ducks behind the console a couple of times.
17. When the skipper has to do a head count after the launch.
18. When the skipper asks a paramedic

to be on stand by on the beach.

19. When the skipper confirms your DAN number before the launch.

20. When you saw more fish during the launch than on the dive.

21. When the console ended up between the engines.

22. When everything starts moving very slowly like in the Matrix.

23. When the skipper needs to take a compass bearing on the back line.

24. When you hear a crack and see the motors disappear...


25. When you have managed to sprain your ankle because of a bootstrap.

26. When the people on the beach get a clear view of the props.

27. When the skipper can say nothing but, "Eish."

28. When all you can hear after a big punch is the skipper shouting from behind, "You can do it!"


29. When you have to first wash the sand out your suit before the dive.

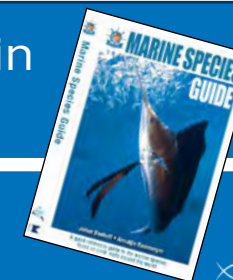
30. When you end up with a ripped off pontoon handle in your hand. 



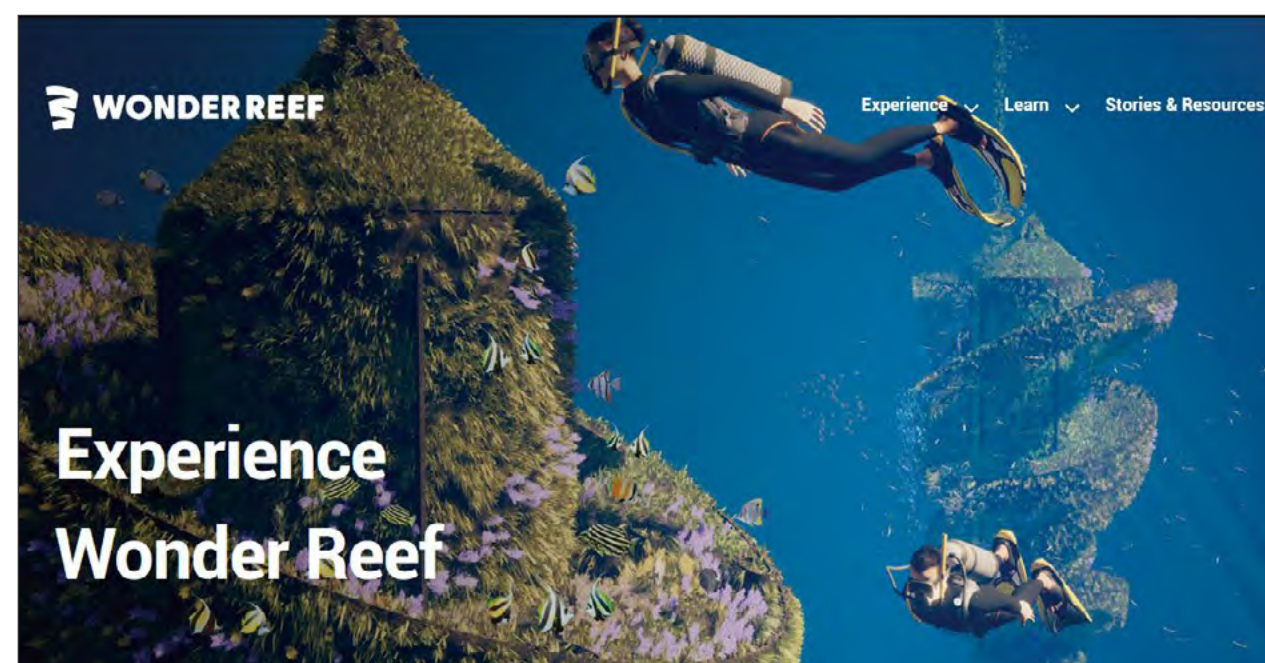
WIN

Send your letter to us and win a Marine Life Species Guide

Here is a chance to be heard! If you have anything that you would like to share with OZDiver Magazine and other divers, send an email to Log Book at info@ozdiver.com.au. Remember that letters have more impact when they are short and sweet. We have the right to edit and shorten letters. In every issue, the winning letter will receive a Marine Life Species Guide. 



OZ NEWS



Wonder Reef officially open for business

The Gold Coast's newest attraction Wonder Reef has been officially opened with an underwater ribbon cutting by Mayor Tom Tate and Deputy Premier Steven Miles.

The world-class \$5 million dive attraction for experienced divers is an innovative fusion of art, science and engineering design and has attracted hundreds of different marine life species in just a few short months.

Mayor Tom Tate said the experience was out of this world and he can see why this project has divers from all corners of the globe excited.

"It is just an amazing experience – the marine life is as good as what you'll see at any other dive site. The coral is thriving, and the sculptures are just mesmerising," Mayor Tate said.

"Renewing our tourism products and attractions is vital if we want to keep our title as Australia's tourism capital – and believe me this is something special."

"This unique site is already attracting global publicity and Destination GC is leveraging that publicity with a campaign to draw in more tourists who will want to experience Wonder Reef."

The project is a joint initiative between City of Gold Coast and the Queensland Government.

Deputy Premier and Minister for State Development, Infrastructure, Local Government and Planning Steven Miles said the \$2.5 million in funding comes from the Queensland Government's \$25 million Growing Tourism Infrastructure Fund.

"Queensland's diving spots are up there with the best in the world," Mr Miles said.

"I've seen this spectacular dive site firsthand, and the world is in for a treat when it officially opens.

"I want to thank the Gold Coast City Council for working with the Queensland Government on this project."

Tourism Minister Stirling Hinchliffe said the Queensland Government is focused on helping tourism destinations to build back better after Covid-19.

"The Palaszczuk Government has backed the Gold Coast's vision of joining the world's bucket list of top dive experiences with a \$2.5 million investment in



Wonder Reef," Mr Hinchliffe said.

"As a new visitor experience on the Gold Coast, Wonder Reef's delivery is perfectly timed for rebuilding international tourism to Queensland."

Member for Gaven and Environment Minister Meaghan Scanlon said Wonder Reef was a wonderful addition to Gold Coast tourism.

"Wonder Reef builds on our trademark for innovative tourism experiences that make the Gold Coast Australia's favourite holiday destination," Ms Scanlon said. "This opens up an entirely new world of Gold Coast experiences that confirms our city's place on Queensland's global diving map."

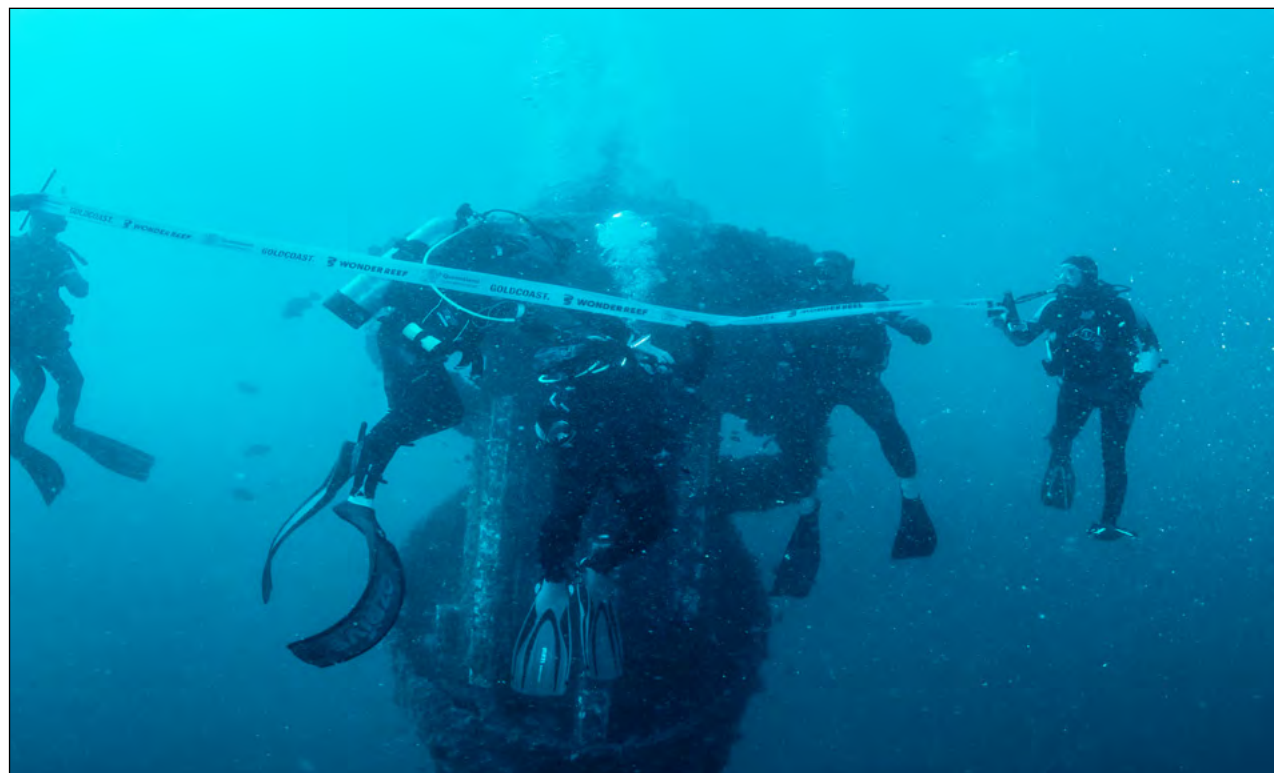
The reef consists of nine giant buoyant reef sculptures which have become home to hundreds of different marine life species in recent months including lobsters, octopus, tropical fish, turtles, and giant gropers.

Coral was planted at the site in late 2021 and has created a colourful experience on the reef where locals and tourists can dive to a depth of 30 metres – all within a 10-minute boat trip from the Gold Coast Seaway.

Wonder Reef has been created with the natural environment in mind and will inspire a greater appreciation of the environment as it evolves into a significant new marine habitat.

Regular dive tours will be operated by Gold Coast Dive Adventures and Queensland Scuba Diving and experienced divers with their own boat and dive equipment are able to book a public mooring.

Bookings are now available for dives from Wednesday 8 June 2022 at wonderreef.com.au 



DAN Travelers Medical Guide Now Available

Divers Alert Network® has published the latest edition of its Travelers Medical Guide. Created to help divers, boaters, and adventure travelers recognize and manage various travel-related illnesses and injuries, this digital guide explains common symptoms, illnesses, and treatments in an easy-to-understand manner.

"DAN members are active explorers, and they know that traveling the world requires knowledge and preparation," said DAN president and CEO Bill Ziefle.

"This new edition of the Travelers Medical Guide was designed to help our members stay safe wherever they go." A benefit of DAN membership, the guide provides general information as well as targeted advice for specific travel situations. With topics ranging from packing tips to instructions for conducting an on-site neurological examination, the guide is intended to help people prevent, recognize, and manage travel-related illnesses and injuries.

Drawing on DAN's decades of experience managing emergencies, the Travelers Medical Guide is packed with information of practical interest to divers and travelers. Review it before you depart, and bookmark the most relevant sections for easy access. A glossary and a list of acronyms and abbreviations appear at the back of the guide for quick reference. Whether you're planning a trip, expanding your knowledge, or facing a challenging situation in a remote area, DAN's Travelers Medical Guide can help.

Download the guide or join DAN today. 



Dive Schools / Operators / Organisers / Instructors

Do you have any interesting, newsworthy info to share with the dive industry? If so, we would like to invite you to send us your OZ News section for possible inclusion in the magazine (please note that inclusion is FREE of charge).

Here's what we need:

- Newsworthy stories (promotional material will not be accepted)
- Word limit: 100 words
- Text prepared in a Word document
- Accompanying high-resolution image(s) are welcome (please supply caption and image credit)

Please send to info@ozdiver.com.au 

Solomon Is. Diving



Photo by: Matt Smith

SOLOMON ISLANDS BORDERS ARE NOW OPEN!

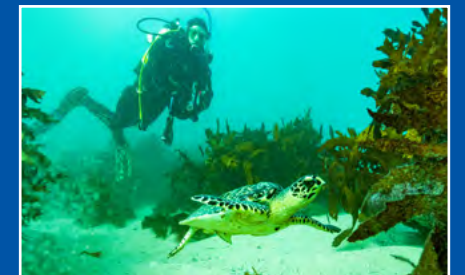
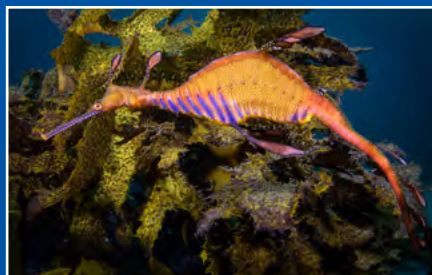
Come visit the many Dive sites scattered
throughout our 998 Islands.

Solomon Is. Good to Go!

visitsolomons.com.sb

Shelly Beach

Shelly Beach sits at the eastern end of Cabbage Tree Bay a short 1 Km walk down the coastal path from Manly Surf Club, on Sydney's Northern beaches.



It is a reasonably small beach that attracts more than its fair share of locals and tourists during the summer months....in fact most weekends.

It is a lovely sandy beach which gently slopes into Cabbage Tree Bay and offers protected swimming and snorkelling for the whole family...as well as a couple of motorbikes.

The Bay is an Aquatic Reserve and sits at the end of the Manly – Shelly Beach Eco-sculpture walk. It is a flat, easy walk down from the hubbub of the Manly Corso and tracks the shoreline.

All up there are 11 sculptures reflecting some part of the local marine environment from Little Penguins and Weedy Sea Dragons to Helen Leete's sculpture of sun worshipping bathers.

You will walk past Fairy Bower with its

café, just in case you can't manage the 1 Km walk without a coffee, and amble by the triangular 1929 Fairy Bower pool.

When you get to Shelly Beach you can stop for another coffee at the extremely well frequented Boathouse...or take the cheaper alternative of a water fountain. The Beach is a bit of a jewel really...and that is before you even get in the water.

There are toilet and changing facilities which are well used by the beach goers, paddle boarders, surf skiers, divers, snorkellers and the daily influx of the Bold and the Beautiful!

The Bold and the Beautiful are a dedicated bunch and 7am every morning...come rain or shine...the set out to swim the 750m from Manly Surf Club to Shelly Beach.

If you are unaware of this and arrive at



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7:15 for an early morning dive you could well wonder what on earth is going on as anything up to 150 swimmers thrash their way towards the beach!

It is an interesting sight and if it is winter and you are sensibly sporting a dry suit for your dive it is easy to feel like a bit of a wimp, given their lack of wetsuits!

So why this interest in Shelly Beach? I am told it is the only west facing beach on the East Coast of Australia.

I have no way of knowing if that is true ...but it is certainly one of very few if this is not the case.

As a result, it is a very protected beach and for the divers it is rare not to be able to get in the water and enjoy a swell and current free dive.

Because of that reliability there are not too many divers on the North Shore of Sydney who have not completed some component of their training at Shelly Beach. I can think of at least five dive

shops that use Shelly Beach for their training.

This can mean that from time to time it is a bit of a sub aquatic bun fight...if you don't pick your timing.

Parking is going to be tricky at any time after 7am in summer, as well as pricey, so get there early or head in for a dusk/night dive to avoid the crowds.

Apart from the protected nature of the site it is also a 'No Take' Aquatic Reserve and has been so since 2002.

The area has been afforded some kind of protection since 1993 but the fish life has really benefitted from 20 years of full protection.

According to the Department of Primary Industries the reserve covers approximately 20 hectares from the southern end of Manly Beach to the Shelly Beach Headland.

Within in its waters more than 160 species of fish have been recorded and



the Eastern Australian Current (EAC) brings in some more exotic visitors from time to time.

As well as the fish there have been over 50 species of invertebrates recorded in the reserve and it is also one of the sites for 'Operation Crayweed', trying to reseed some of the lost Crayweed forests.

Before you visit the site, you can check it out in our book 'Dive Spots of NSW' on page 165.

If you don't have your copy yet you can pick one up at your local dive shop or online at <https://ozdiver.com.au/product/new-south-wales-the-dive-snorkelling-spots-of-new-south-wales/>

The map above is reproduced with the kind permission of Marco Borderi. It can be accessed at <https://www.viz.net.au/sydneys-shore-dive-sites/cabbage-tree-bay>

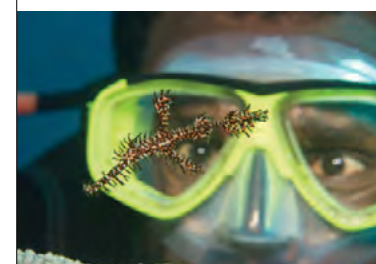
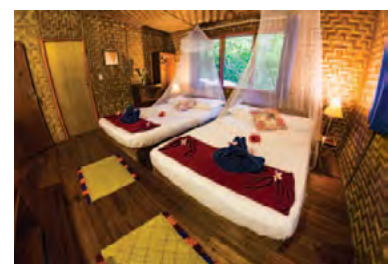
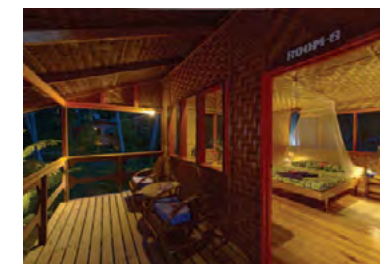
There are a couple of different dives you can do out of Shelly Beach and despite being part of the same bay they are quite different dives.

Firstly, lets dive along the northern edge which hooks round the edge of the headland and heads out to 'Weedyland' to the north. To start with the navigation could not be simpler.

You keep the rocks to your right and the sand to your left! Doing this will see you creep down to around 8 metres before the rock shelves start to head North.

As you start to shift from due west to north keep an eye out for that motorbike mentioned earlier. It sits in 7-8 m of water and about 10 metres South of the rock/sand line.

There is actually a second motorbike just around the corner which is somewhat less recognizable as a motorbike. What bike it is, how it got



Picture a small private island, with white sandy beaches, tall palm trees, beautiful tropical gardens, traditionally-built, comfortable bungalows, magnificent sunsets and fine food.

Surrounding this little hideaway are some of the most healthy & colourful reefs and best fish life this planet has to offer...

there and why it is there is anybody's guess. Someone knows of course... but not knowing why this bike is in the middle of nowhere is part of the fun.

On this dive you are bound to bump into the bay's ever inquisitive Eastern Blue Groper. They are normally very friendly and get up close and personal.

You are also likely to find Spotted Wobbegongs lurking under rocks as well as the odd Giant Cuttlefish (depending on the time of year). Other common sightings are Juvenile Dusky Whaler sharks, the occasional Grey Nurse, the odd Turtle (although they are normally on the other side) and Port Jackson sharks.

Rock Cales, Stingarees, Hulafish, Sergeant Bakers, Eastern Red Scorpionfish, Snakeskin Wrasse, Yellow finned Leatherjackets, Red Morwongs, Eastern Fiddle Rays and a whole range of other fish are also very common.

If you come out of the water not having seen more than 20 types of fish...you

are not looking.

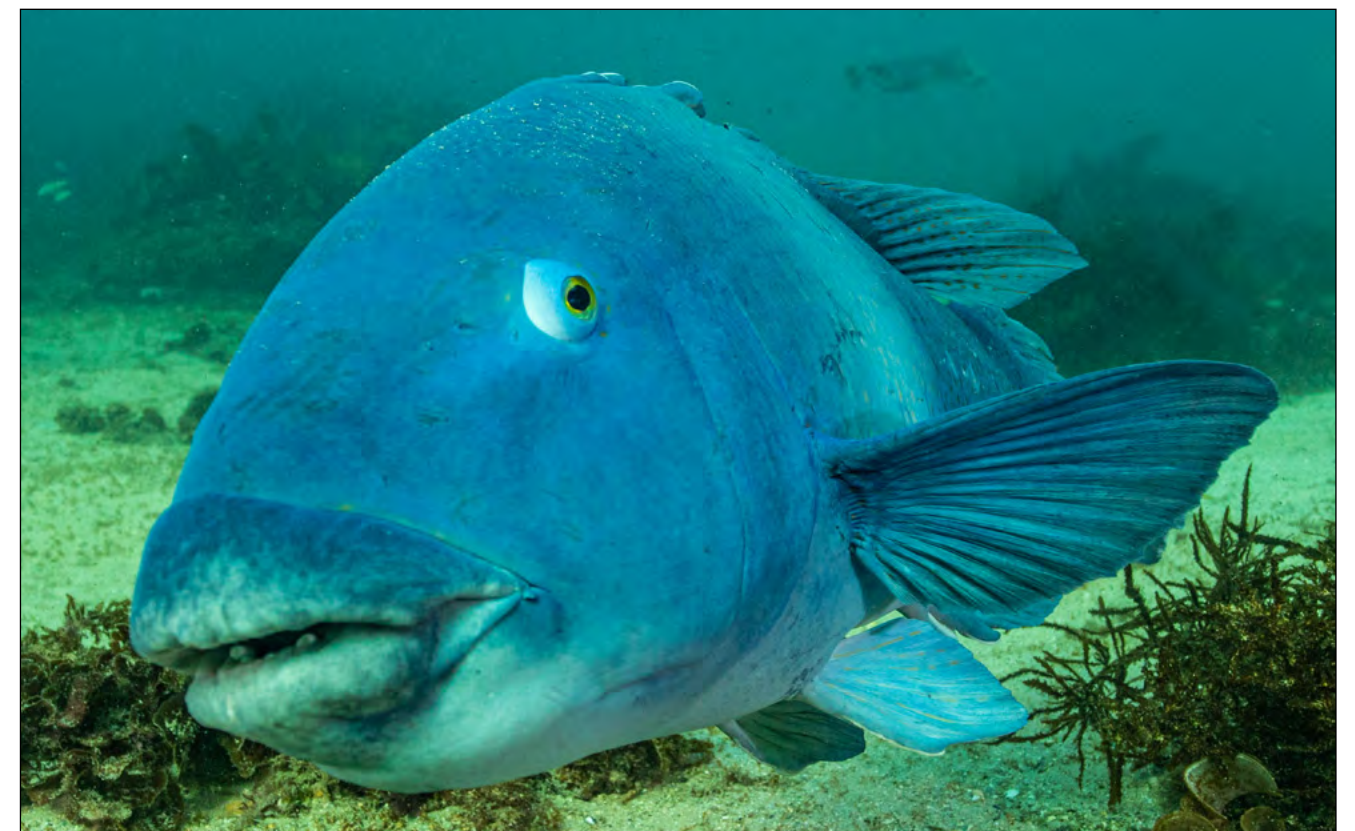
As a 'reward' this dive ends up in around 14m of water in 'Weedyland' where, with some judicious searching, you might find some Weedy Seadragons.

Keep an eye on your air if you are out here because many divers get to this point and find they are close to needing to turn around.

The second dive on the Southern edge of the bay again starts out with as simple a navigation as you can get.

Walk down the boat ramp for an easy entrance, snorkel out to be parallel with the warning notice to boats about swimmers and pop down in 3-4 metres of water.

Then keep the rocks/weed on your left and the sand on your right. On this dive, even when you head round to Fairy Bower and along toward the Surf Club you will be pushed to get anything over 8 metres...so you can easily have a nice long dive.



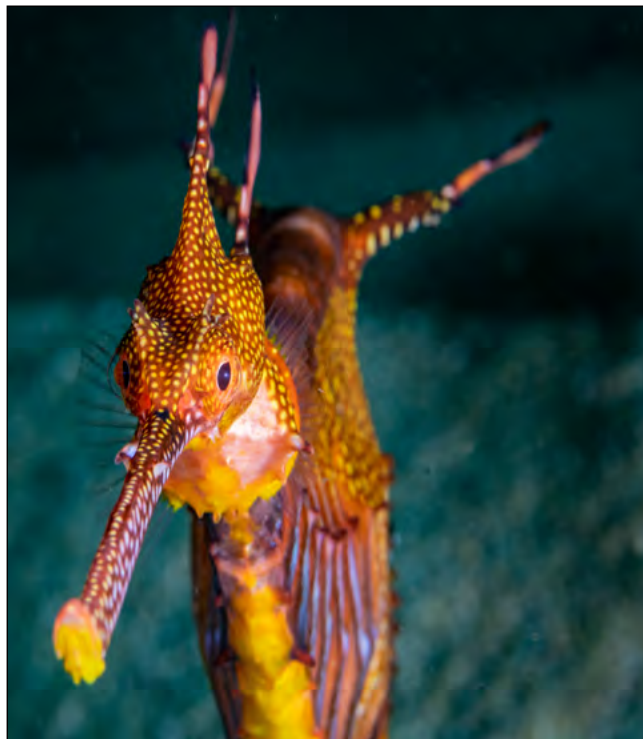
There is a motorbike on this side of the bay as well and Marco's map might help you find it. This side is where the Green Turtles tend to hang out, munching on some of the sponges, weed and sea grass.

Wobbegongs are also in evidence and Giant Cuttlefish have a favourite couple of crevasses to hang out in.

Schools of Old wives and Longfin Pike are a certainty on this side, and you are more likely to pick up the odd Cownose Ray parked on the bottom. There are Hulafish aplenty as well as Stingarees, Eastern Fiddler Rays, Eastern Red Scorpionfish, Estuary Catfish, Pygmy Leatherjackets and intermittently a visiting Grey Nurse Shark. You also tend to spot more Flathead on this side and some of them can be pretty big.

There is also a channel where the juvenile Dusky Whalers tend to patrol back and forth.

As you meander along you will come to a spot where the rocks turn a corner and head South towards Fairy Bower and if you continue following them along you come to some nice gullies to swim



through in quite a different landscape. If you are ok with your navigation head back across the weed beds to the beach rather than tracking along the sand line and you will see some different things.

You really can't get too lost here...it is one of the great things about this site. The Bay, like any dive spot, has its seasons. In March 2021 it was Jellyfish open season where the bay was full of Comb Jellyfish.

They hung around for about 5-6 days whilst they were gratefully eaten by the shoals of Blackfish and resident Turtles.

August and September tend to be the time that the Port Jackson and Horn sharks are in breeding. The Dusky Whalers hang around from January to May before heading off into deeper waters.

The Turtles are less prevalent in summer but with 19 different turtles being recorded at Cabbage Tree Bay you never know your luck.

Fewers of Cownose Rays are spotted from time to time but there does not appear to be any seasonality to their visits...you just have to be lucky...and to date I have not been.

Fairy Penguins put in an appearance between February and April...but they are small and fast and you would have to be lucky to see them.

Before you head in for a dive check out the visibility and any recent species sightings on the Sydney Viz Facebook site at <https://www.facebook.com/groups/sydviz>

In a nutshell Cabbage Tree Bay is a really vibrant dive site that you should get down to.

It is great for all levels of diver and snorkeller given it is protected from the elements, very accessible depth and uncomplicated navigation.

Oh, and it has motorbikes as well! 





tdisdi.com/pfi



DITCH THE GEAR
and discover a new way to explore

Scorpionfish & Stonefish?



How do you tell these two similar fish apart?

The scorpion fish family (scorpaenidae) is huge. It includes the lionfish, devilfish, paperfish, Indian walkman, false stonefish, stonefish and of course, the 50 varieties of scorpionfish found on our reefs.

Scorpionfish eggs are fertilised internally, but they are laid before they hatch, and once hatched the young scorpionfishes fend for themselves. Initially juveniles are pelagic, floating wherever the current takes them.

Preyed on by sharks and pelagic predators, many of them do not survive to adulthood. Those that do survive become masters of camouflage and readily take on the colouring and texture of their surroundings.

The raggy and small scale scorpionfish are the most common varieties found at Sodwana. They have long bodies,

well-developed pectoral fins and shed sand and debris. They have the most astonishing golden eyes with iridescent whirls and tiny black threads.

Their eyes are close together and bulge outward from a bony forehead, and they will raise their dorsal spines if they perceive an attack.

Their dorsal spines are venomous and can inflict a nasty wound. They secrete a protein poison which can be broken down either with acid or with heat. If you get stung, the closest hot acid is usually your dive buddy's pee. It works...

The humpback scorpionfish is sometimes mistaken for a stonefish as it does not shed sand or debris, and sometimes looks just like a stony part of the reef. However, the giveaway is its elongated shape and the near-together eyes set in the top of the bony forehead.

It is a fascinating predator – it lies in wait, completely concealed by sand and debris until a fish swims within range. It then uses its powerful tail to project itself upwards, the huge mouth opens and the fish disappears. It swallows water with his prey which it later expels through its gills.

Stonefish are rarely spotted. They have an almost square body, a disproportionately large head and wide apart eyes set in a depressed and flattened forehead.

Their skin is leathery and warty and they do not have scales. Mainly found on reefs with rocky bottoms and sandy covers. They have very large, colourful pectoral fins which they flash if threatened or disturbed.

The stonefish is almost always completely covered in sand, making them nearly impossible to spot. It relies entirely on its natural camouflage to hunt and they wait until the

unsuspecting prey has landed on them before opening their enormous mouth and sucking it down. Stonefish are fairly safe from predators, as they are so difficult to see. A poor swimmer, they relies on this to survive.

The stonefish is also the most venomous fish in the sea. If a person steps on a stonefish barefoot, the fish will inject deadly venom through its raised dorsal spines. The foot pressure squeezes out the toxin hidden in glands beneath the dorsal spines, and it spreads rapidly through the victim's system.

The pain is intolerable and death within an hour of contact is likely without immediate treatment with anti-venom or very hot water.

How to tell the difference? A good rule of thumb for distinguishing between a scorpionfish and a stonefish is...

if you see it, it's a scorpionfish, if you don't it's probably a stonefish. ◀





As Scuba divers, it should concern us greatly that coral reefs all over the world are in the process of dying. This is due to a phenomenon known as "bleaching". This is when corals begin to lose their natural colours as shades of green, brown, purple and yellow turn a ghostly white – the result is that the corals look as though they've been bleached.

Most coral polyps contain millions of tiny algae within their tissue, called zooxanthellae. As they're plants, these algae photosynthesize and produce food that is used by the coral polyps. Most corals are wholly dependant on the algae, deriving 80 percent of their nutrition from them.

The loss of colour is the result of the coral expelling their zooxanthellae, a phenomenon believed to be triggered by a marked and prolonged increase

in water temperature. At high temperatures, the zooxanthellae produce excess energy that can lead to a build-up of toxins in the coral polyp, and to avoid being poisoned, the algae are expelled.

Without their essential energy producers, the corals begin to die and are soon grown over by algae, preventing new coral larvae from settling.

The coral skeletons are weakened by the algae and are soon broken up by underwater storms - reducing a beautiful healthy reef to a heap of coral rubble!

Fortunately, due to lower average temperatures at present, the reefs off our coast only experience relatively minor bleaching each year, with many of

the bleached colonies recovering as the water cools. The Seychelles, Maldives, Madagascar and East Africa are not as fortunate, though, with up to 95 percent of their corals dying in some areas.

This is a result of a particularly bad bleaching event that happened in 1998.

Over the last century, the average global sea temperature has risen by 1C and could rise by a further 2C in the next 50 years.

Ironically, there is a chance that the reefs off our coast may even improve for a while, as the increasing water temperatures could encourage tropical coral communities to establish in areas that were too cold in the past.

Rising sea temperatures, though, will result in rising sea levels as polar ice caps melt.

To survive this, the corals will have to keep pace with the rising sea levels and stay at a depth where there is sufficient light penetration for photosynthesis to

take place. What causes these increases in sea temperature? Carbon dioxide is a colourless and odourless gas that makes up about only 3 parts per 1000 in our atmosphere.

It's one of the Greenhouse gases that play a critical role in maintaining the balance necessary for life to exist on the planet.

The Greenhouse gases allow radiation from the sun to pass through the atmosphere unchecked, as most of the radiation is of a short wavelength.

This radiation then heats the earth's surface, which then releases heat. The heat is of a much longer wavelength and is blocked by the gases in the atmosphere.

They are re-radiated back to earth, trapping the heat near the earth's surface and warming our world.

Read more about this climate change and what you can do about it in the next issue. [▶](#)



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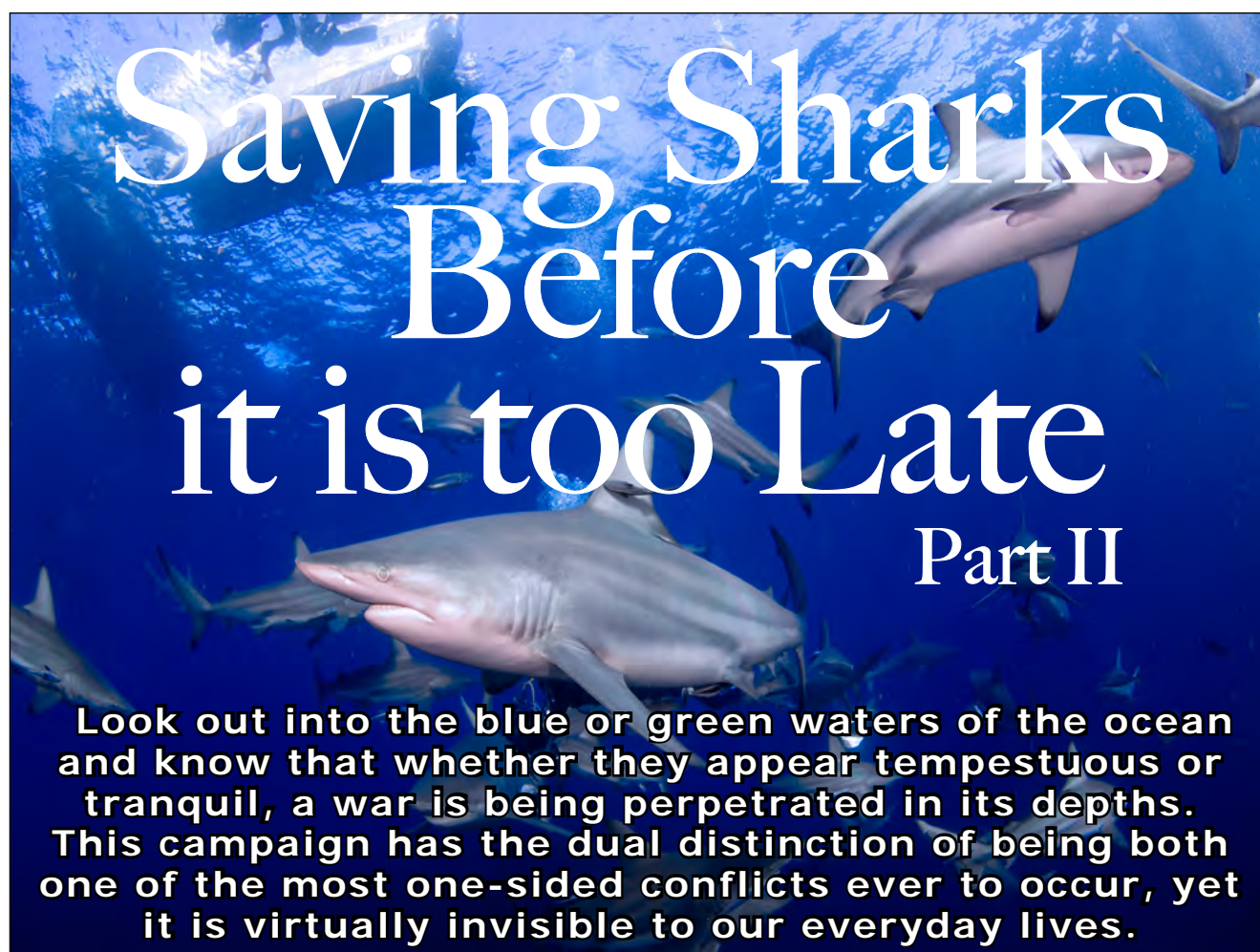
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Look out into the blue or green waters of the ocean and know that whether they appear tempestuous or tranquil, a war is being perpetrated in its depths. This campaign has the dual distinction of being both one of the most one-sided conflicts ever to occur, yet it is virtually invisible to our everyday lives.

The battle I speak of is the systematic eradication of sharks from our oceans by the practices of modern day fishing. Sharks still inspire fear in most people despite almost three decades passing since Jaws first hit the theatres. On average, only five or six people die from shark attacks every year, while it is estimated that at current rates of harvest, humans are killing just over 100 million sharks per year – that's 100 000 000.

Primitive sharks first appeared hundreds of years ago, and their sinuous forms have slipped through the blue while the terrestrial environment witnessed the rise

and fall of the dinosaurs and the eventual rise of humankind. Their longevity is a testament to their success as a well evolved and adapted group of organisms. They have proliferated into every marine environment available, from warm tropical lagoons, to the icy depths of the deep, and they are even found below the polar ice caps.

For millennia sharks have reigned supreme as the top predators in marine ecosystems, serving to regulate and control the entirety of the ocean's ecosystems. However, the ocean has a new supreme predator, one that is not a natural part of the marine ecosystem and, as a result, hunts indiscriminately and unsustainably.

We have become the enemy of sharks, and by default, the entire ocean. Oceans need to have sharks to maintain healthy ecosystems, yet after eons of mastery by sharks, the waves are empty.

The solution

To effectively defend sharks from slaughter, their biology and behaviour need to be known and incorporated into any conservation plan. This is a bit of a stumbling block, as our knowledge of them is highly incomplete, with even basic life history parameters remaining blank spaces on a fact sheet.

Right now, more initiative, effort and funding needs to be devoted to the study of sharks and their roles in the marine ecosystem. If we can truly comprehend the processes occurring in the oceans, then we can set a baseline to measure the extents of the effects of the deletion of sharks from the oceans.

Many groups are already working towards this goal, including The Shark Research Institute (SRI – www.sharks.org) based in the United States. SRI has started a multinational study of several shark species to help fill in the gaps. Biologists use direct observation, tagging and telemetry to determine shark population size, structure and movement patterns.

Additionally, SRI played a part in a major shark conservation victory – the placement of Whale and Basking sharks on Appendix II of the CITES (Convention on International Trade of Endangered Species) treaty. SRI attempts to get people involved in shark conservation by running shark expeditions to several locations across the globe.

Participants can help a shark researcher to gather data and be truly involved in the process of saving sharks. The average diver can help researchers in new and exciting ways. A great example is the online database dedicated to archiving Whale shark identification based on their spot patterns (which are as unique as human fingerprints).

Now any diver with a camera can help research efforts by taking a photograph of the side of a Whale shark and uploading it to Ecocean at www.ecocean.com. As a reward for uploading a Whale shark picture, Ecocean keep you up to date on the status of your Whale shark via email. Once the image is spot mapped and added to the database you will be informed whether you have sighted a shark already in the database or added a new individual. Thereafter, if there are additional sightings of the same Whale shark, you will again be notified by email of the date and location

of 'your' Whale shark.

There are many further ways to contribute to saving sharks. The most important way is to boycott shark fin soup and restaurants that serve it. Putting pressure on those restaurants to remove the soup from the menu can be successful.

Due to a multitude of voices on an anti-soup petition, Disneyland Hong Kong subsequently removed shark fin soup from its offerings. Public outcry has also eliminated the sale of shark fins through the popular auction website, Ebay. Nevertheless, these victories must only be seen as a start. Endangered species status and legislative protection of sharks must continue to be championed. Funding for scientific research is becoming harder to secure and private donations keep many projects alive.

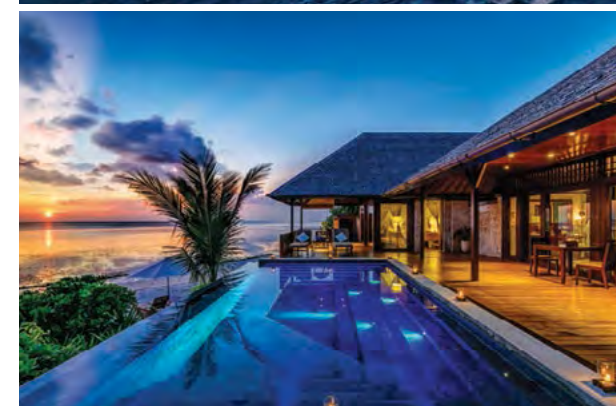
Simply changing public perceptions of sharks could pay massive conservation dividends. The negative media image of the shark as a bloodthirsty killer needs to be buried once and for all and replaced with a more enlightened view as an elegant expression of evolution distilled into a graceful package of power and purpose.

Stopping the war on sharks will not be easy, but armed with additional knowledge and public support it can be accomplished. The contingent to champion sharks is relatively small, but zealous and determined by the importance of their cause. The word is getting out and the support for sharks is growing, but we are in a race against time, and time is running short. ■





"We are thrilled to be returning in a few months! The reef systems here are the most unspoiled we have seen in our travels around the world and the resort is paradise. We can't wait to see all our friends at Wakatobi." ~ Robert and Barbara Hay



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GLOBAL NEWS

IT'S POSSIBLE AGAIN... SPOIL YOURSELF THIS WINTER!

If you haven't done so yet, you have missed out on some of the most beautiful and rich-in-nature areas of Indonesia: North Sulawesi.

North Sulawesi has a surface area of approximately 13,892 km² and is surrounded by many islands. Bunaken island being one of the most famous ones, located in Bunaken National Park.

Nature rules in this Indonesian province, with an abundantly rich sea, rain forests, rice fields, mountains, volcanoes, rivers and waterfalls. For anyone who loves tranquillity and nature, this is the place to be. For divers and non-divers alike this area has fantastic opportunities, both on land and underwater.

Explore the area by making tours to see the famous Black-crested macaque



monkey and the Tarsier, or visit the highlands and stroll through picturesque villages.

Due to its huge diversity of underwater life, this area is considered as one of the top locations in the world. Besides the geographical location this is due to the prevailing currents and the differences in underwater topography:

Bunaken National Park's famous walls drop down to 200 meters, and are completely covered with corals, sponges and impressive sea fans. Along these walls you dive with impressive schools of reef fish, many turtles, reef sharks in the somewhat deeper area and all the small critters you can imagine, hidden against the wall.

In the south side of the park the bottom slopes down gently and is covered with seagrass and strewn with small coral formations. This is the perfect place to spot frogfish, moray eels, a variety of octopuses, shells and fire urchins.

Travelling north along the magnificent coastline, with many dive sites of its own, there is an opportunity to dive around the first cluster of islands that are part of the 'Ring of Fire', a string of active volcanoes extending northwards. Between impressive volcanic rock formations, you can't help but be amazed by the colourful soft coral gardens there. The water movement makes these kinds of dives a bit more challenging, but believe me, it's worth it. Baby sharks, huge schools of fish and the giant frogfish are just a few of many different creatures you can encounter.

At the other side of the North Sulawesi peninsula you can visit yet another unique and famous area: the Lembeh strait, made famous by the many photographers and videographers making their prize-winning shots there. The place is also frequently visited by the BBC, National Geographic and the World Wildlife Fund, among others.

The Lembeh Strait is not famous for its underwater scenery, as its most famous dive sites consist of barren black sand areas, in most instances strewn with debris. But, the sharp eyes of the dive guides bring you to the most incredible critters, unique to the area. To mention just a few: the hairy frogfish, the mimic octopus, the Lembeh sea dragon, The weirdest crabs you have ever seen and all the small symbiotic critters travelling with them.

Getting to North Sulawesi is easy again. After over 2 years of being locked up, the borders are now open and a free visa-on-arrival has been reinstated. From East Australia, the most convenient flight is via Singapore, straight to the Sam Ratulangi International Airport in Manado by connecting to Scoot Airlines. From Western Australia, the easiest flight would be via Jakarta, connecting to one of the many direct flights to Manado. A short 30-45 minutes later takes you to one of the two Thalassa Dive Resorts, either Manado or in Lembeh.

At the time of writing this article there are no restrictions anymore: no



required quarantine and no testing on arrival for everyone that can show at least 3 vaccinations and a negative test upon departure.

So, where to go? At Thalassa Dive Resorts, we operate two resorts on either side of the peninsula, each with a completely different feel to it. Immerse yourself in a small, lush forest at Thalassa Dive & Wellbeing Resort Manado. Go for a swim in the chlorine-free pool and experience an Ubud-style vacation right here in Manado. We offer 2 villas, each with 2 separate-to-book bedrooms, and 5 bungalows. All are fully furnished and equipped with western bathrooms, AC, minibar and coffee and tea making facilities.

Diving takes place in Bunaken National Park and beyond, as well as the Bangka Archipelago in the North. Our dive boats depart from the jetty of Bahowo village, a mere 5 minutes away from the resort.

Thalassa Dive Resort Lembeh is located in a quiet cove surrounded by palm trees, with a pool side overlooking the sea. Here, we offer 9 spacious bungalows with a western bathroom and 3 single deluxe rooms. Located in the middle of the island, makes this is a very convenient place to explore the fantastically weird underwater nature of the Lembeh Strait.

Both resorts offer a welcome drink upon arrival, full board, unlimited free drinking water, local coffee and tea all through the day as well as drinks and snacks on board the dive boats.

Explore North Sulawesi this winter period and make use of our 'after Covid' soft opening offer. Drop us an email at info@thalassamanado.com and visit our website at www.thalassamanado.com.

We are ready to welcome you at Thalassa Dive Resorts Indonesia, the place where guests leave as friends! 🇮🇩



DAN Publishes Safety Tips Guide for Dive Operators

Divers Alert Network® has published a guide to help dive professionals and business owners manage the hazards associated with dive operations. This digital guide covers various aspects of dive businesses — including training pools, retail areas, fill stations, and dive boats — and presents practical strategies for mitigating risk in all of them.

This video introduction provides an overview of the guide.

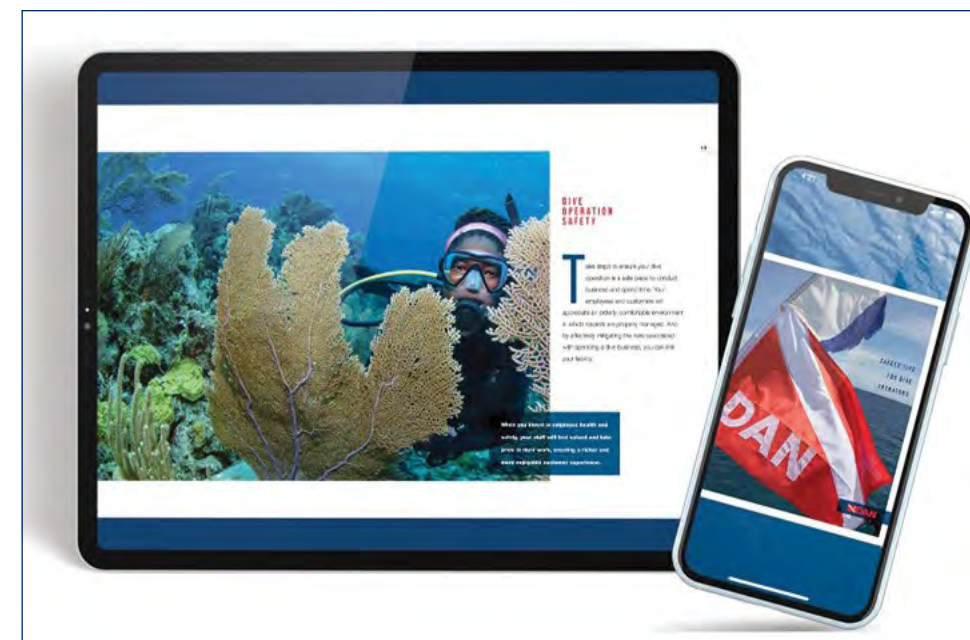
Use DAN's Safety Tips for Dive Operators to help you:

- Ensure a safe working environment for your staff
- Conduct systematic reviews of your operations
- Comply with industry standards
- Prevent the spread of infectious diseases
- Promote customer satisfaction
- Enhance your emergency preparedness

"DAN has a long history of working with dive operators to promote safety," said DAN president and CEO Bill Ziefle. "Dive professionals are the lifeblood of this industry, and they're the ones who instill safety consciousness in new divers. We've created this guide not only for their students' and divers' well-being, but also for their own."

The tips and strategies outlined in Safety Tips for Dive Operators represent the most significant steps dive operators can take to promote safety and limit their liability."

Available in web and e-book formats, the guide can be downloaded for offline reading. Check it out today! 🇮🇩



Palau

The Island of Dreams

How many years have I been working as a journalist, seeing all the articles that divers send to me about traveling the world and diving my dream sites? How many times have I had to go through hundreds of photographs to only select a few for the article? How many times have I become insanely jealous about what passes over my desk? And believe me, everything that I had heard about this island was true and I experience much more than I had ever expected, both on land and underwater. This is a place that I want to see again and again. People say that Palau is one of the top 5 dive sites in the world. I totally agree.



In the western Pacific Ocean you will find a tropical archipelago where the hole emerges that is composed of about 350 islands and atolls that is called Palau. The largest island Babeldaob at 200km² while the smallest out crop is only 1m² and everywhere you look you see more and more little island scattered around the four main islands of Angaur, Babeldaob, Koror and Peleliu. Koror, a tourist friendly small town, is only 5km long and stretches over four islands connected by bridges and causeways. About two-thirds of the Palau population lives on Koror and this is where I was based for my entire.

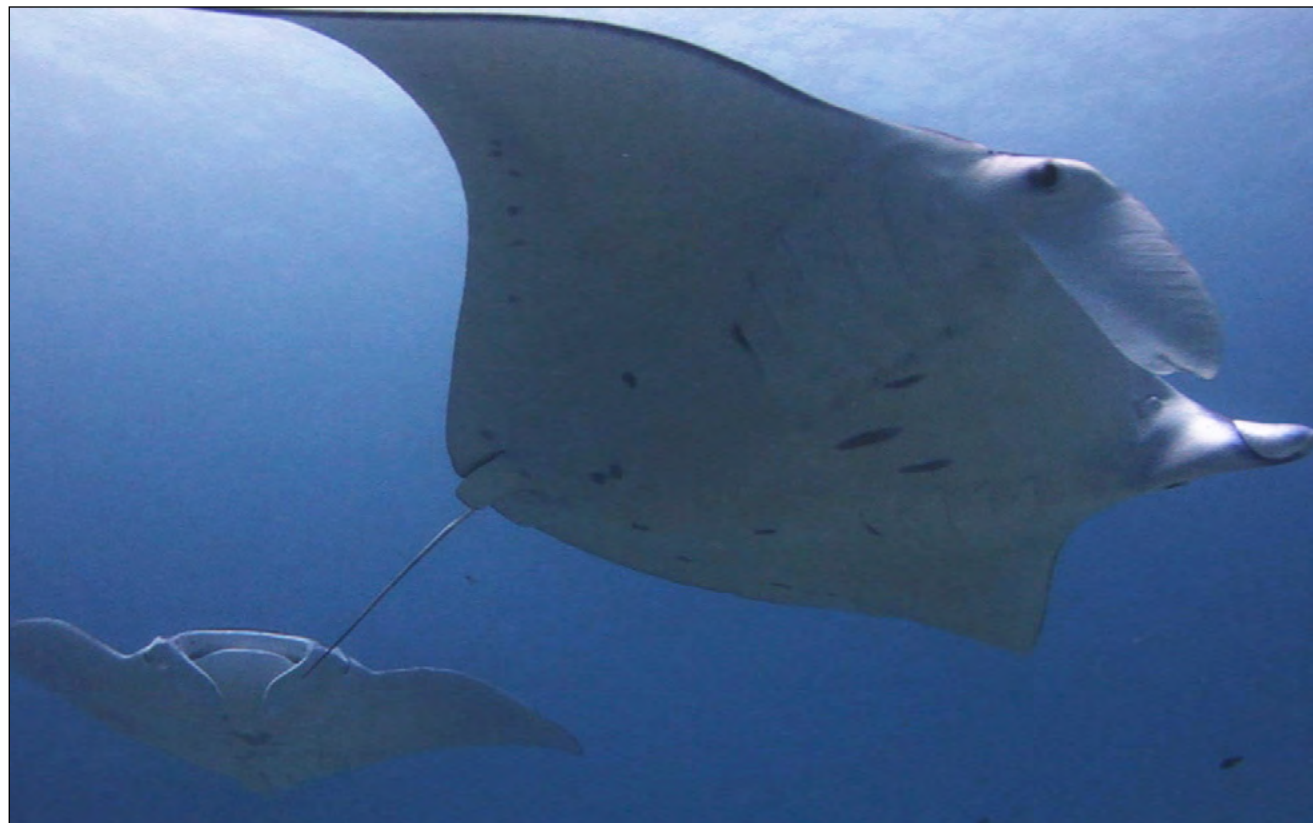
Palau has basically two types of land formations – the northern part was formed through volcanic rock while the southern islands are limestone which is still shaped every day by the ocean (the highest altitude on the islands is only 250m above sea level). About 600km south west you will find a remote group of six islands, known as the Southwest Islands. This is also part of the country and makes up the states of Hatohobei and Sonsorol – the islands of

Palau are thus part of the westernmost island group Micronesia. Nations in the Micronesia region include the U.S. Territory of Guam, the Commonwealth of the Northern Marianas, the Republic of the Marshall Islands, the Federated States of Micronesia (of which Yap is a state), and off course the Republic of Palau.

Palau's eastern shore drops off steeply about 50 kilometres offshore to the Marianas Trench which reaches a maximum depth of 11 000m (the deepest place in the world) while the western shore slopes gradually to depths of 5 500m about 400km to the west.

This magic archipelago is also known as 'The Black Islands' and has a really interesting history. Captain Henry Wilson of the English vessel 'Antelope' was shipwrecked on Palau's barrier reef near the island of Ulong in 1783.

After that the island was sold again and again to different countries before being taken over by a World War.



After the First World War the islands of Palau were granted to the Japanese and then during World War II after more than 2 000 Americans and 10 000 Japanese soldiers were killed in the Battle of Peleliu in 1944, it was taken by the United States. Palau saw heavy fighting during World War II, including massive aerial bombardments of the islands and remnants of the World War II are still seen on land and at the bottom of Palau's inner lagoons where you can still find a fleet of shipwrecks and plane wrecks as a testimony of the wars that passed through these islands.

After many years under the control of the United States you can still see today how big an influence the US has had on the country, even though it got its independent status in 1994 as the Republic of Palau. Today Palau doesn't even have its own currency and still uses the US dollar and most of the people there speak and understand English.

With 1 260 plant species, including 109

that are endemic, the tropical conditions attract over 142 bird species (16 of which are endemic, including the Palau owl, Palau ground dove and the Palau fantail). If you look closely you can also find two bat species, one of which is the Palauan fruit bat.

Marine bio-diversity here is out of this world and you can see that the people and the government care about the oceans, knowing that it provides a livelihood for many Palauans. The locals still, after many years, believe and stand by the traditional laws of the Bul. 'The Bul,' orally passed down by Palauan ancestors, is a traditional fish conservation method that bans fishing in certain designated areas during spawning season. The Palauans greatly respect their environment and their ancestors.

The government, in 2007, also decided that the whole of Palau should be a shark sanctuary. It was the first country that banned shark fishing in its waters and today, after many years, you can





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MAGIC ISLAND

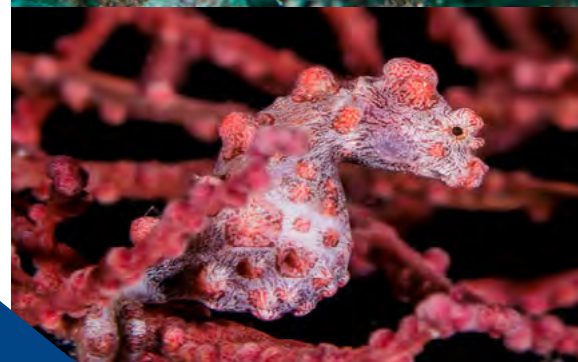
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see why this is one of the top five dive sites in the world. On every dive that I did here I saw a variety of sharks (grey reef, black-tip, white-tip and the occasional bull shark, leopard shark and hammerhead) along with thousands of corals and marine life. It was impossible to get bored on dives here, when everywhere you look you see something new and different, even if you dive the same site over and over again.

At Palau, the Pacific Ocean meets the Philippine Sea and the blood-warm waters of the Pacific push up from depths of over 10km from the ocean floor to create one of the richest zones of tropical marine bio-diversity that you will find anywhere in the world. The eco-systems found here include barrier reefs, sea grass beds, fringing reefs, mangrove forests and marine lakes.

The marine life includes over 1 300 species of fish, 700 corals and anemones, an abundance of large pelagic animals and over 700 species of corals. Palau was chosen by National

Geographic Society as the first Underwater Wonder of the World and was featured on Discovery Channels "Living Eden's" series as one of the world's last living 'Eden's'. Palau is home to one of the highest number of species not found anywhere else in the world and its marine habitats support a greater density of coral, fish and other invertebrates than any other place on earth. Seven of the nine species of giant 'Tridacna' clams (some were larger than me) are found in Palau along with the world's most remote population of dugongs.

And then on top of this, Palau was the headquarters of the Japanese command in Micronesia and was heavily fortified by the Japanese in the years leading up to WWII in the Pacific. Malakal Harbour was a major forward supply base for Japanese shipping. In 1944 the US dive-bomber strikes destroyed over 50 warships and airplanes of the Japanese Imperial Forces, making Palau's western lagoon their final resting place. Most of the wrecks are located within a few



minutes of the dive centre and remain in excellent condition for diving with an abundance of marine life that has made these artefacts their home.

On almost every dive you can see the big things such sharks, manta rays, big-eye tuna, eagle rays, bumphead parrotfish, Napoleon wrasses and turtles (hawksbill, loggerhead, green, olive Ridley and leatherbacks). You see so much that you often lose count during the dive.

Most of the dives here are wall dives that drop hundreds of metres into the abyss with unlimited visibility and you will commonly see schools of thousands of big-eye kingfish and barracudas. Thousands of reef fish will be found on the walls and the coral reef plateaus with the reefs looking like a big city with corals on top of corals.

On top of all of this there is a special dive where you can dive with the Nautilus, and of course, the biological wonder of Palau is Jellyfish Lake with millions of non stinging jellyfish chasing

the sun while you snorkel with them... but this deserves an article of its own in a later magazine.

A dive day diving

Guests are picked up by either by a bus or boat 8am depending on where you are staying. Even though I stayed across the road from the dive centre, they still insisted on picking me up and transferring me to the dive centre. The dive centre is the most modern facility that I have ever seen, comprising of everything that a diver would ever need, including a PADI five star National Geographic Centre with complete authorised Scubapro and Aqua Lung sales and service centre, a Digital Photo Centre offer rentals and download services, Underwater Videography Services, Hi-speed Internet access, and Bottom Time Bar & Grill, a cosy waterfront café overlooking the beautiful rock islands.

When you get there, everything is ready on their luxury speed boats for a day of diving. The boats are really comfortable



and spacious, but are also fast and fully equipped for safety with twin engines and a full canopy for sun protection for the trip to the dive site and back.

I was amazed at how well the divemasters know the ocean and what influences the sea, as all the diving here is done and decided due to a couple of factors.

The time of the dive, the weather conditions, tidal exchange, customer requests, and diver's skills and comfort levels are all factored in, and still they will know exactly where and when to dive.

The dive trip usually begins with a spectacular 45-minute speedboat ride through Palau's beautiful inner lagoon, gliding over turquoise blue glassy water. You travel through a labyrinth of rock islands, quickly realising that you are in paradise.

The dives are normally two-tank and

three-tank dives based on group preferences – diving doesn't get much easier than this.

Surface intervals between dives are either spent on beautiful rock island beaches or at amazing snorkel sites along the outer reefs, with time for lunch, snorkelling, island exploration, beachcombing or just relaxing under the sun or in the shade.

Sam's Tours supplied us with a fantastic local lunch everyday with unlimited water and soft drinks to drink on the boats.

Following the second or third dive, the return trip takes you through more of the stunning limestone forest formations with possible stops along the way to snorkel at Jellyfish Lake, Soft Coral Arch, Giant Clam Beach, or one of Palau's many beautiful marine lakes.

But again, it depends what the clients want to do.



TECH DIVING

A tight squeeze

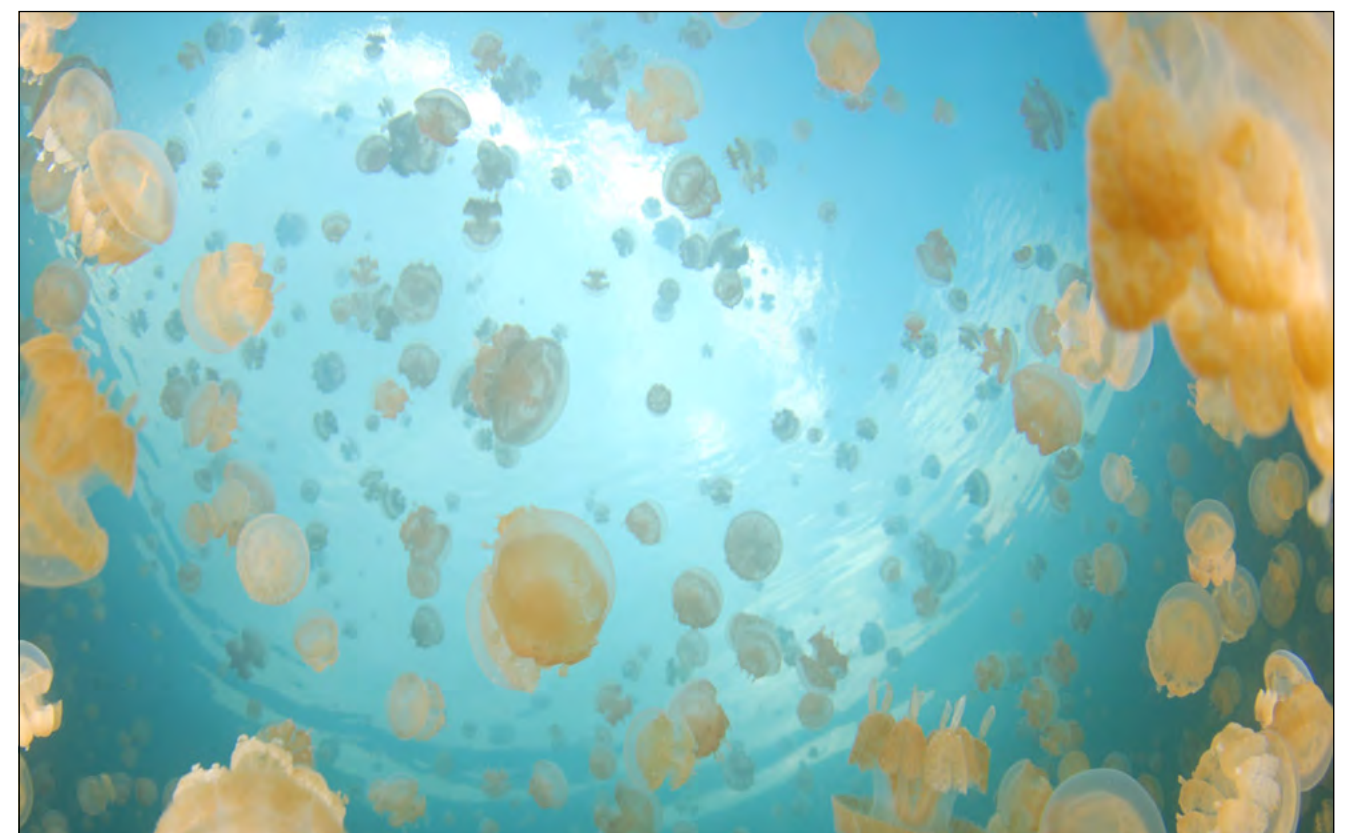


All the dive sites that I dived were spectacular with an abundance of things to see – there was never a dull moment under the water. Yet the one dive site that I really enjoyed was the German Channel.

Many years ago, the Germans were mining on the southern island of Angaur. The route proved too far around the islands, so they decided to blast and dredge a channel through the reef to make the trip shorter for the mining. Today the dive operators use this channel to get to the dive site while the mantas and other fish use this channel for feeding when the incoming tide brings in the nutrient and plankton rich current to the inner lagoon.

Here you can often see manta rays, schooling sharks, schooling jacks, barracudas, trevally, snappers and abundance of tropical fish. This was easily one of my top dives that I ever done.

Diving Palau was always a dream, but today it is a fantastic memory and I hope that I will be return to Palau again. As they say, "sit back, relax and leave the diving to us!" 🏊



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Saudi Arabia

Diving an unknown part of the Red Sea



That the Red Sea is a beautiful spot to dive is well known to most of divers. Divers from Europe fly to the Egyptian part of the Red Sea on a daily basis. Each day over and over again hundreds of dive boats sail off to discover the beautiful world of the Red Sea, but visions of over-crowded harbours and traffic jams with divers underwater almost spoils the fun.

As the Red Sea is much larger than only the Egyptian part we became curious to discover diving possibilities in other parts of the Red Sea. This time we flew a bit further south where we examined the diving possibilities in Saudi Arabia.

At first sight the main difference between diving in Egypt and Saudi Arabia seems to be the number of divers you will encounter in the water. In Egypt it is no exception that dozens of dive boats are on the same dive spot at the same time. That is something that will not happen to you in Saudi Arabia.

With only a limited number of liveaboard boats in the country there will be no

other divers at the same place. We were thus curious to discover whether the limited number of divers also meant that the life underwater was better in relation to Egypt.

Saudi Arabia is a strict Islamic country in the Middle East. The kingdom of Saudi Arabia is the largest country in the Arab peninsula. Thanks to its size it has borders with many countries: Jordan, Oman, Koeweit, Qatar, United Arab Emirates and Yemen. The country is lead by king Abdullah Bin Abdulaziz Al Saud and his family.

Although most people will envision desert when thinking about Saudi Arabia, it appears to be much more varied; there are forests, grasslands, mountain areas, and of course also the well-known desert. Thanks to the wealth of oil, Saudi has become a prosperous country.

Our attention though is on the coastline of Saudi Arabia, in particular the coastline of the Red Sea. The sea is well known to us from our trips to



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Egypt, but we were more than curious to meet the underwater life over there.

Traveling to Saudi Arabia requires a pre-arranged visa. We fly with Saudi Arabia airlines from Paris to Jeddah at the west coast of Saudi, and from Jeddah you can reach several different diving areas. You can leave from the harbour of Jeddah for a dive trip to Yanbu in the north, or there is also the possibility to drive a bit south and join a dive boat to the Farasan Banks from there.

For our first trip we decide to go to the Farasan Banks, which lies at the same height as the border of Sudan with Eritrea at the other side of the Red Sea. From the airport of Jeddah it is a three hour drive to the harbour where our liveaboard was. During the drive we only saw sand, big caramel plains lying before and behind us – it is almost a depressing sight.

At Farasan Banks the quiet azure ocean is varied with little white islands. The diving around the Farasan Banks mostly consists of real wall dives. At the east and the west of these islands and reefs the walls go into the depths for more than 500m. In the northern and southern areas of the Farasan Banks some shallower plateaus can be found – no wrecks have yet been discovered in this area.

Arriving at our first dive spot for the trip, Canyons, it immediately strikes us that we are the only boat to be found there. Where can you still find this? We remembered the situation where dozens of boats are together at the same dive spot in the Red Sea – this could be promising. And the first dive certainly was very special. Enormous coral gardens welcome us underwater, but we also find nudibranchs and other small animals such as gobies on sea whips.

A trip around Farasan takes you from the harbour of Al-Lith in the direction of Jebel Al-Lith and the islands of Malattu, Dohar, Marmar and Jadir. Besides beautiful dive spots this area has some nesting areas where birds and turtles find their breeding grounds.

At our second dive our dive guide was very enthusiastic at the briefing. We dived on Gorgonian Point, one of his favourite spots. Due to the name we assumed that we would find a lot of gorgonians at the site, but it would not be the first dive site where the name has nothing to do with what you actually find underwater. Each country has, for example, a Shark Point, where for years no sharks have been seen.

Yet this time the dive site really did live up to its name. At a depth of 30-40m we swam along a number of gorgonians – and these were not your normal gorgonians – the size of them was really amazing, the biggest we have ever seen; metres high and metres wide they decorated the reef. But it wasn't just their size which was special, but also the fact that they were entirely intact, which is unique.

Besides these gorgonians we also found a metre wide and long garden with bubble coral, and of course the well-known crabs and shrimps. At the end of the dive we encountered a grazing turtle and deep beneath us a shark passed by. But our first day's diving wasn't done yet – we still had to do a night dive. In this area it is difficult to find a protected anchor place for the night dive, and with a limited number of anchorages, the number of dive spots is also limited.

Fortunately there is always something nice to find during a night dive; shrimps hiding in small holes in the reef or scorpionfish lying down perfectly camouflaged. Under overhangs on the reef several fish tried to catch some sleep to prepare themselves for a new day. After the dive a nice dinner was served on the top deck – spiced fish, pasta and other delicacies under a clear sky filled with stars welcomed us on the first night.

The next day we stood again with full expectations on the back deck of the ship. What would this day bring for us? The first dive was at the south side of Malathu Island. Underwater we notice a splendid coral garden, and just like the day before we are surprised by the virginity of the underwater landscape.



Dive the World

Saudi Arabia

By: Fiona McIntosh

We, however, hardly get time to take a good look at these corals as a school of fish comes from far towards us, asking for closer inspection. As we come closer the scope of this school becomes even more impressive – it proves to be an enormous school of barracudas. Gracefully they swim around us.

On the fourth day of our trip we thought that we had seen most of the surprises over here. But while diving on dive sites like Ciopi Reef, Eagle Island, Danak Island and a number of other dive sites we saw things that we had never before seen.

We found black corals at several places; sometimes they were relatively small branches, but especially on Muddhar we saw enormous trees of black coral on the south side of the reef. With a length of at least 3m, these were the biggest chunks of black coral we had ever seen.

Apart from the black coral we encountered something else on these dive sites – on a number branches of black coral we noticed a brightly coloured mass. On closer inspection it proved be a type sponge, yet from a distance it looked like a slimy mass hanging down from the branches. We asked our dive guide about these sponges and it appears that these dripping sponges are so far only found in Saudi Arabia.

It is an endemic species only seen on the reefs of Farasan Banks. The colours of these dripping sponges were phenomenal – bright red pieces were varied with almost fluorescent yellow and white pieces of sponge.

Divers with a love of the small things will have more than enough to see in Saudi Arabia. Beautiful nudibranchs, such as as the white and black Halgerda willeyi and the brightly coloured Nembrotha magalocera decorate the reef.

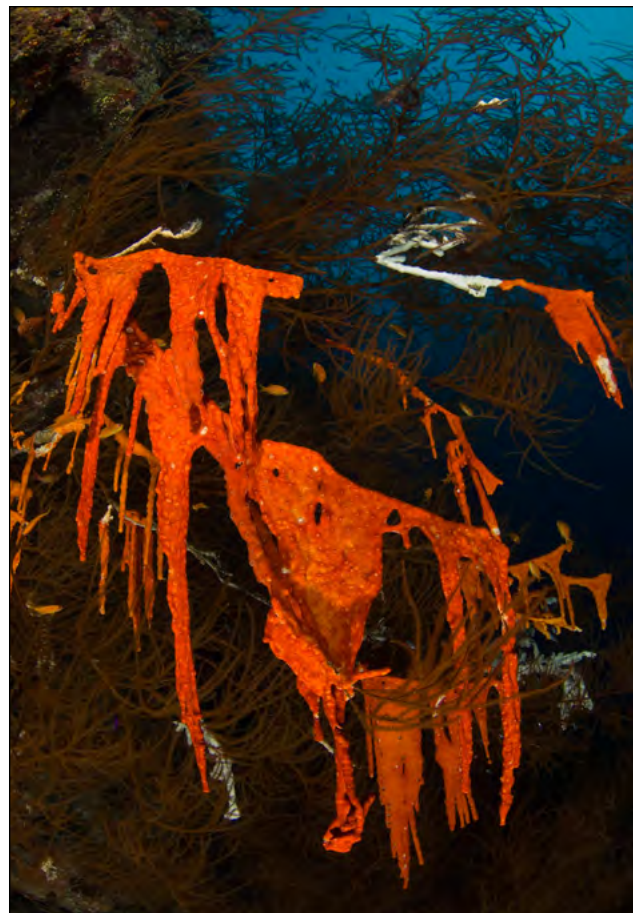
Small shrimps try to hide themselves in remote areas and on the many sea whips both shrimps and small gobies are found. On sandy pieces of the reef

you will be surprised by the variety of life found there, like small cuttlefish or symbiotic gobies.

In between dives there is the possibility to visit one of the very small islands. On these small islands you will meet no inhabitants; they are too small for that, and as a result, a lot of birds and salamanders have made these small islands their home or breeding grounds.

If you are unlucky not to have seen turtles during your diving you will certainly find proof on these islands that they occur in this area, including skeletons of dead turtles.

With our dive trip at Farasan almost coming to an end, it is time to do some exploration dives. As of the number of known dive sites is still relatively small we were asked to take a look at a new dive site to figure out whether it would be worthwhile going there. It is really



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exiting to have no more information about the site you are going to visit other than the depth of the reef. According to some local fishermen there might have been a wreck at the spot, yet on the given coordinates where they had dived before no wreck was found – we were going to explore the rest of the reef.

The start of our dive was just like every other in the area – we saw nice soft corals, black coral, gorgonians and other types of coral, while the small stuff was also very well represented. We were a bit disappointed though, as we had hoped to discover something new and become famous! At the end of the dive we decided take a look at the other side of a big rock, and what we found there was a splendid reward on this nevertheless already beautiful dive holiday. Behind the rocks lay the wreck of old a steam ship.

The propellor of the ship lay behind a large rock, the axe lying on top of the rock and on the other side of it



the steam turbine could be found. It is clear that the wreck had been here for many years as soft corals, sponges and thousands of glassfish have transformed the wreck into their home. This was an amazing end to this week of diving, as we were the ones to find the first wreck on the Farasan Banks.

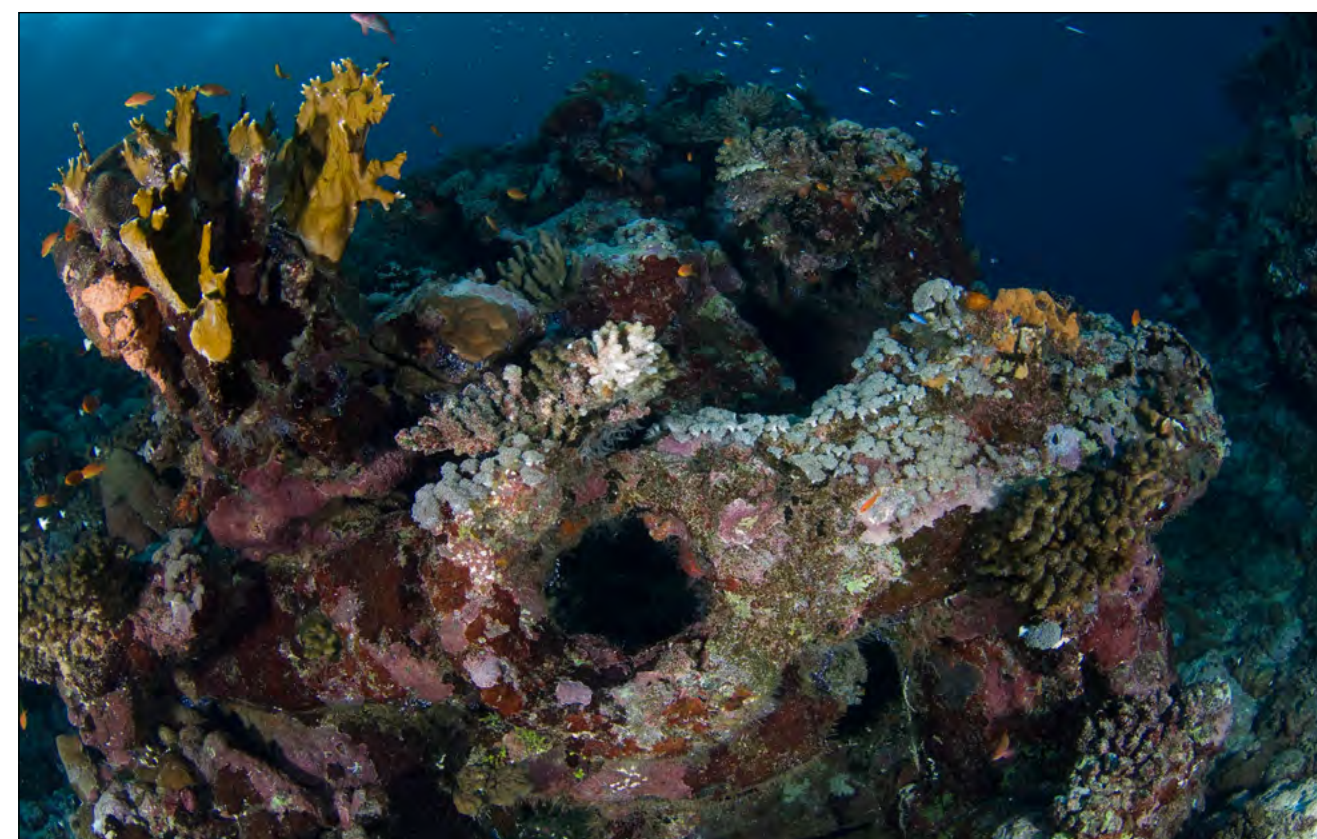
For our second trip in Saudi Arabia we decided to go to the Yanbu area in the north. This area lies at the highest point of the south border of Egypt and Sudan. The surroundings here are a bit different to what we had seen at the Farasan Banks.

Here, as far as we could see, were vast areas of azure blue water. Underwater we were treated to steep drop-offs and loads of wrecks. The vastness and the calmness is really a contrast to the life on shore with its numerous gas stations and big, bulky shopping malls.

For this trip we were able to use rebreathers. When arranged in advance with our tour operator, www.diveaway.be, it is possible to have enough oxygen on board for a rebreather. Again we were amazed by the steep drop-offs we encountered there. We hung for minutes besides the drop-off, enjoying the immense golden gorgonians. The pink coloured soft corals seem to be bigger there than we had ever seen before.

We encountered the mysteries of the ocean while discovering several wrecks on the bottom of the ocean. Corals have taken over the outside of the ship, trying to make a new home on the steel hull. Anchors lay at aimlessly on the bottom of the sea. On the larger wrecks we were able to explore the insides of the ships; descending into the core of one of the vessels we discovered how well preserved the engine room still was. The insides of wrecks are also a favourite hiding place for dozens of glassfish while the propellers of the ships always allows for beautiful photo opportunities.

While ascending after a dive here it is always wise to look into the blue or up to the surface, as when the water



is not too warm you have a change of encountering the big stuff, such as sharks, although enormous schools of barracuda's will be frequently seen here. Thousands of silvery barracuda's circled around our heads during one ascent, and it was almost as if we had entered into a fish soup.

After the diving there is always time to visit the old city of Jeddah. For Western women a visit to the city is a bit different. In this strongly Islamic country, all women have to adapt their clothing to the local uses and wearing an abbaya is mandatory. A head cover is not necessary but the long black dress is a must. Men also need to adapt; trousers are mandatory.

Different mosques in this part of the city are beautifully decorated by the minaret. The houses are not very well maintained, but the artistic handwork of the wooden balconies of the houses is amazing.

The local people of the old city of Jeddah proved to be very nice – everywhere you

go they welcome you, and of course, you are invited into their shops.

If you like fresh herbs, you certainly must pay a visit to the old city as several shops display their brightly coloured spices in their windows, and various quantities can be bought good prices.

And do you want to see the big cars? As Saudi Arabia seems to be a rich country, loads of enormous cars can be seen driving around the city. Pay a visit to one of the modern shopping malls and car dealers to marvel at the beautiful big cars over here.

After the trip we can look back on some surprisingly good travels. All the promises of untouched reefs, sharks and small life were realised. In the Yanbu area, loads of wrecks were visited and we never saw such big gorgonians in our lives.

For us it certainly will not be the last time that we pay a visit to Saudi's beautiful underwater world. 🇸🇦



Delayed Evacuation Almost Cost Diver Full Recovery



Time is of the essence in dive emergencies: If proper treatment is delayed for an extended period, a diver's chance of full recovery diminishes.

Complications can arise when travelling to remote destinations where accessing appropriate care requires hours-long boat rides or long road trips.

June and her partner were on a diving holiday in the South Pacific.

Although they planned their dive, they unexpectedly encountered strong downdraft currents that quickly pulled them and their guide down to 30 metres.

As they tried to stop their descent, they soon encountered an upward current that carried them to the surface. The dive lasted only three minutes.

The guide suggested they try again, and the trio dived for nearly an hour at 22 metres. They had a long surface interval and dived again to a maximum depth of 24 metres. They tried a third dive later in the day and faced strong currents again.

As June returned to the boat after the third dive, she immediately felt severe pain in her neck and shoulder — she knew something was very wrong.

June lost mobility in her left arm, hand, and fingers. She and her companions were concerned about decompression sickness (DCS) or a stroke.

They contacted DAN right away.

The on-call medic suggested that June be taken back to shore to the closest medical facility.

After a five-hour boat ride they reached the dock, and June and her partner got into a taxi for an hours-long trip through the pouring rain on winding roads. June's condition worsened; she lost feeling in both feet.

They arrived at the hospital very late only to discover that the hyperbaric physician was not on the premises. June's partner urged hospital staff to bring in the doctor and then called DAN again.

With painful joints and numbness in her arms and legs, June's condition was deteriorating when the doctor arrived at 2:30 a.m. The doctor said he could not administer hyperbaric treatment until the nurse arrived later in the morning.

But the phone call to DAN was enlightening: The medic advised that the chamber at the hospital they were at, had not complied with recommended upgrades.

Now that June had been examined by medical staff and they had ruled out serious, non-diving-related medical problems, DAN undertook a transfer of the couple to the closest appropriate hyperbaric chamber facility.

A few hours later the couple boarded an air ambulance and were evacuated to Auckland, New Zealand. After a four-and-a-half-hour flight, the couple arrived at the navy hospital close to midnight.

June was still suffering, and it had been 32 hours since the onset of her symptoms.

Doctors were worried that the delays in treatment could mean a long and

incomplete recovery, but they worked quickly to get June into a chamber. After just six hours, June could move her hands and arms slightly — a good sign.

Additional treatments kept helping, and June continued to improve, undergoing seven treatments in all.

A few weeks after the treatments, June still had problems with co-ordination, balance, and strength, but continued to work with a neurophysiologist who helped her regain confidence and independence.

"Never get in the water with a tank on your back without DAN coverage. DAN helped us get through the ordeal seamlessly:

They got a doctor on the line and continually called us back throughout the first night," said June.

"They helped us make decisions ... I am deeply grateful to be alive and moving normally.

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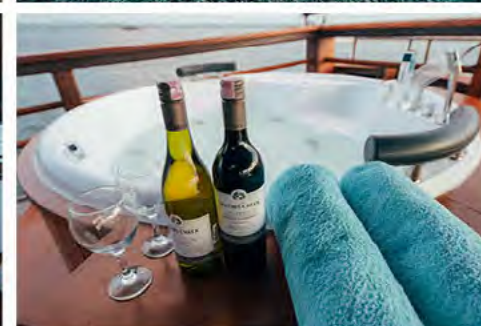




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Diving the Great Wrecks of the Red Sea

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Part I ∞



As you swim above and through the majestic ships which came to rest at the bottom of the Red Sea, you can only imagine the panic and woes of those onboard the sinking ships which are now encrusted with beautiful, colourful corals and tropical reef fish which complete the picture.

Instead of following the 'normal' Red Sea route, why not discover the treasures beneath the azure blue waters of Egypt's Red Sea?

Wrecks of the Red Sea

The Carnatic

Type of ship: Iron framed planked passenger steamer
Location: North side of Sha'ab Abu Nuhas Reef, the Straits of Goba
Date built: 1862
Length: 89,8m
Weight: 11,6m
Date wrecked: 14 September 1869
Date discovered: 15 October 1869
Port of origin: London, England
Destination: Bombay, India
What was the ship carrying? 34 passengers, 176 crew, cargo of cotton bales, copper sheeting, Royal Mail and £40 000 in specie destined for the Indian mint.
Average depth: 23m (starboard side)
Maximum depth: 27m (along the mast)
Access: Day or safari boat normally from Hurghada, occasionally from Sharm-El-Sheikh

At 10am on the morning of Sunday, September 12, 1869, the Carnatic sailed for Bombay. She was a sleek vessel with proud lines and, like many of the 'sail and steam' ships of the period, this vessel responded well to either form of power.

Captain Jones personally negotiated the long narrow confines of the hazardous Gulf of Suez and remained on the bridge to give his personal attention to every detail of navigating his vessel safely, supplementing his continual lack of sleep with copious amounts of coffee.

The night was clear, with a slight following breeze and a little land

haze – common in these parts. More importantly, the headlands and islands through which the Carnatic plotted her course were all visible.

At 1am, Shadwan Island was sighted dead ahead by the Second Officer. The Master altered course but eighteen minutes later, however, breakers were seen on the starboard bow. The helm was instantly put hard-a-starboard and the engines at full speed astern. Too late, the Carnatic struck Sha'ab Abu Nuhas Reef where she became firmly fixed.

Captain Jones, who was a level headed man and not one to overreact, inspected the condition of the ship and was satisfied that the pumps would handle the amount of water that was seeping into the ship and also decided that all passengers and crew should remain on board.

On the morning of the thirteenth, Captain Jones assessed the situation again, and although the ship was still leaking, ordered that a large amount of



cotton be dumped overboard to lighten the load hoping that the ship would float off the reef with the tide. Some of the passengers asked to be moved to Shadwan Island, but after taking into account the dangers of moving 210 people around dangerous coral reefs to a remote island, he refused their request.

He knew that the P&O Liner, Sumatra, was to pass by at any time on the way to Suez and expected to be rescued later that day.

He kept the passengers and crew aboard as if nothing had happened and so another day passed and the Sumatra did not come. He had not kept in mind how strong the coral reef was and how great the pressure of the water could be, so at 2am on the morning of the fourteenth, the level of water within the ship finally engulfed the boilers and suddenly they were without power and light.

Still Captain Jones didn't want the passengers to leave. By daybreak, still hoping the Sumatra would come, he



realised that all was lost and ordered the lifeboats to be lowered, and so by 11am the first passengers begin to disembark. Unfortunately by that time it was too late for some, as the ship broke in two taking five passengers and 26 crew with it.

As freed lifeboats floated on the ocean, struggling passengers helped each other to get into the boats and collecting items they might have needed on their way to Shadwan Island some three miles from the far side of Sha'ab Abu Nuhas Reef.

To shorten this journey, each of the seven lifeboats was pulled across the top of the reef until they were able to row the remaining distance.

It was after sunset when they arrived. Some of the cotton bales that washed onto the island provided warmth for the cold night and some of the cotton was carried to a high point and set alight.

One signal rocket was fired and at last the Sumatra came to their rescue.

Exploration

Red Sea Wrecks

By: Amilda Boshoff

Lloyd's immediately dispatched Captain Henry Grant to take charge of a recovery operation, which arrived on the scene on September 29 and immediately chased away some Arabic boats. Grant was heartened to find the Carnatic in quite shallow water at the bottom of a reef with some of her features still visible above the surface.

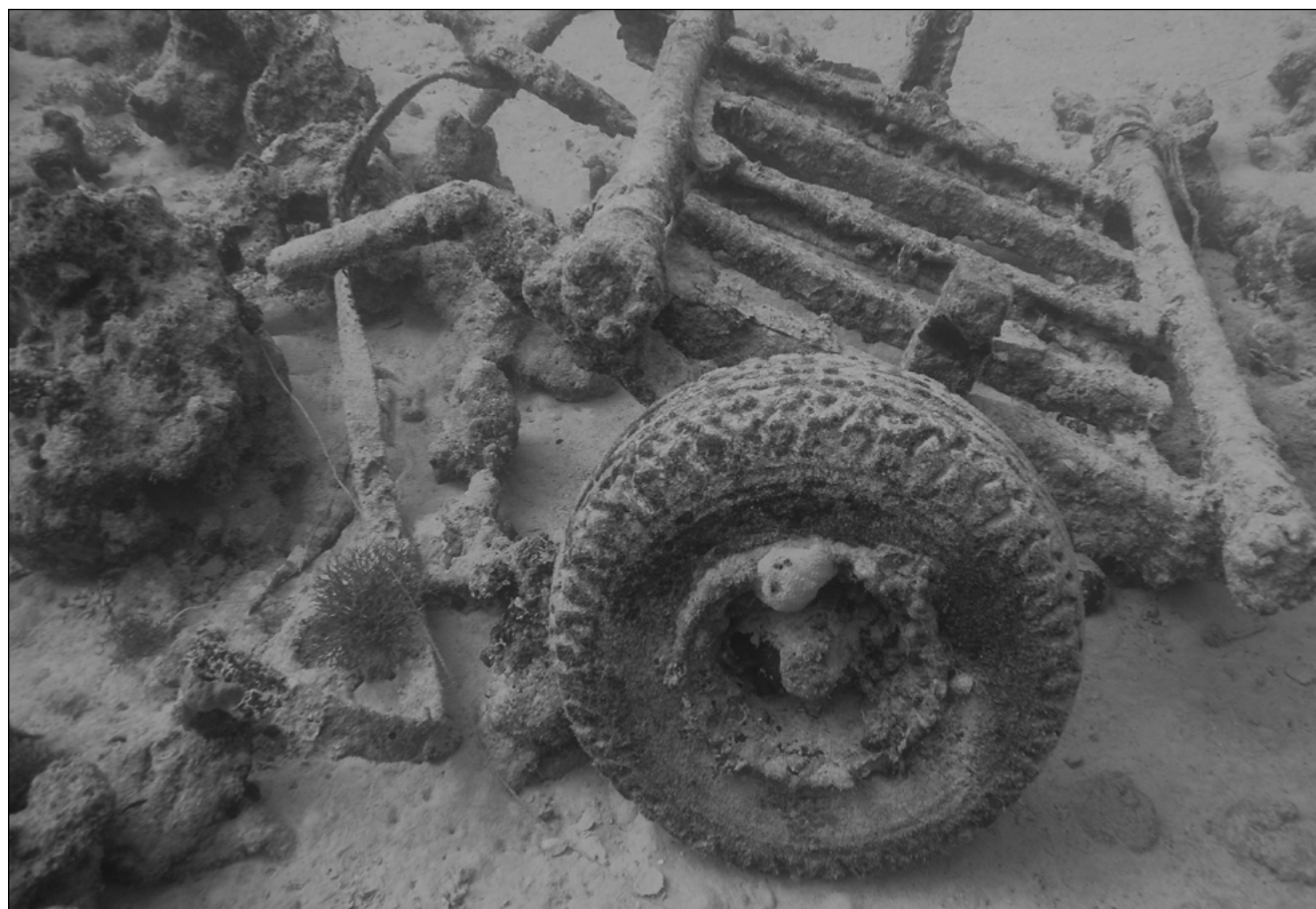
Working from the Salvage vessel, Tor, Grant had only one diver at his disposal, a guy named Stephen Saffrey from Whitstable. Adverse weather conditions delayed the first descent until October 15. The search began in the Mail Room where a body was first recovered.

Mail bags were sent to the surface and pocket watches removed from the safe. In the meantime, local Bedouin free divers had recovered over 700 sheets of fine-grade copper also destined for India's Mint. The task was completed on November 8 and official reports record that the entire cargo was recovered.

The most implausible part of this entire shipwreck is that although the ship went to the bottom in two separate halves, they fell together on the seabed, just as they might have done had the ship gone down as one piece. Today the Carnatic lies at the base of the reef and parallel to it. She is on her port side with the bows facing east. Most of the structure today is corroded and covered by beautiful, multicoloured soft corals.

The dive exploration starts from the stern which is home to a big propeller with three blades. You continue along the deck to reach the bridge and the engine room situated at a depth of 25m. The boiler and propulsion machinery lies on the seabed next to the two masts.

The holds are easily accessible and host dense schools of Glassfish which are best observed in the early morning hours when sunlight filters through the distinctive square portholes. The bow, with its unmistakable elegant



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and tapered lines, rests on the reef at a depth of 16m. A gigantic umbrella-shaped Acropora is situated in the centre section of the wreck and a huge Malabar grouper often rests under its branches. Groupers, trevallies and lionfish swarm around the wreck whose structure has become home for hard corals, sponges and numerous soft corals.

Also be on the look out for Scorpionfish camouflaged on the wreck. It is relative easy diving but be sure to dive only on calm days. Be careful of sharp pieces and preferably dive in the morning with good sunlight. Having dived the wreck of the Carnatic, spare a thought for those who lost their lives there...

The Thistlegorm

Type of ship: Steam freighter
Location: North east of Shag Rock, Sha'ab Ali
Date built: 1940
Length: 126,5m
Weight: 4 898 tons
Date wrecked: 5-6 October 1941
Date discovered: February 1956 by Jacques Cousteau

Port of origin: Glasgow, Scotland
Destination: Tobruk, Libya
What was the ship carrying? Land mines, shells, ammunition, weapons, Bedford trucks, armoured cars, Bren carriers, BSA motorcycles, trailers, vehicle spares, aircraft and aircraft parts, radios, rubber thigh-boots, medicines
Average depth: 15m
Maximum depth: 30m
Access: Day or safari boat from Sharm-El-Sheikh or Hurghada

The Thistlegorm, the Gaelic name meaning 'blue thistle', was a British transport ship belonging to the Albyn Line shipping company. Because of her classification as an 'Armed Freighter', the skipper, Captain William Ellis, had an additional team of nine Royal Navy personnel to man the anti-aircraft guns onboard. With her construction being partly funded by the British government, she was destined for 'war' duties from the moment she was launched.

On June 2, 1941 Captain Ellis eased his ship out of Glasgow. The cargo was destined for the British 8th Army



stationed in Egypt and Cyrenaica (Libya), but as German forces controlled the Mediterranean, circumnavigating Africa, stopping at Cape Town for refueling and passing through the Suez Canal to reach the port of Alexandria was considered the safer route.

On the night of October 5, after being anchored at a safe haven for two weeks waiting to get word to pass through the Suez Canal, two German Heinkel bombers, coming from their base in Crete, sighted and attacked the ship. (They were actually searching for the Queen Mary that was carrying 1 200 British troops). The Thistlegorm was hit by two bombs on hold no. 4 where the ammunitions depot, among other things, was situated.

The explosion was very violent and tore the ship in two and the locomotives were catapulted into the air, sinking to the seabed about 30m away. The Thistlegorm sank abruptly in an upright position on a flat, sandy seabed 30m deep at 1:30am on October 6, 1941. The Captain and his crew were saved by the

nearby HMS Carlisle vessel, but nine men lost their lives during the attack. There are numerous ways to explore the Thistlegorm and you will need more than one dive to really capture the essence of this unofficial wartime grave. Exploration of the ship is usually done in two phases: the first dive is a general tour of the wreck resting in its north west-south east position; the second dive includes penetration of the holds.

On a third dive time can be spent exploring the locomotives, the anti-aircraft guns and the propeller near the seabed. There are still numerous things to see in the holds of the Thistlegorm, most covered in marine growth but still very recognisable.

For instance, on the starboard side of hold no. 2 one can gently swim above the vehicles, where there is plenty of room to explore and inspect the various lorries, trailers, motorcycles and other items as you journey below the bridge and pass through hold no. 3. Here you will find small arms – weapons of various calibers in packs of six or eight concreted





DEPTH	TIME
33.0	3:42
TANK	NST
240	42

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together as a single entity. Emerging into the daylight, you are confronted by the devastation that surrounded the sinking. Ammunition boxes form a large pile of fairly uniform debris, on top of which is an upturned tracked Bren Carrier. Pointing towards the stern is the broken drive shaft and some 20m further on is what remains of the stern.


Looking just below you will find a number of very large shells which were once destined for a British Capital Ship. The two deck-mounted guns are still in place and are best viewed from below where they make excellent silhouettes against the distant surface.

I believe that it is the dream of every scuba diver to visit the Thistlegorm once in their life time – it is almost like a journey to Mecca. The Thistlegorm is not only one of the most famous wrecks in the world and one of the major tourist attractions in Egypt – it generates more money than the Pyramids at Giza – it is above all an extraordinary historic

relic of WW2. Diving the Thistlegorm is definitely a dive for the advanced diver, seeing as there is usually a current present that can be very strong. Bottom time is short due to the depth and sometimes visibility can be poor.

It is best to dive the Thistlegorm early in the morning, just after sunrise because then, together with the beautiful wreck, one can see Dogtooth tunas on the hunt, Groupers, Black-tip sharks, Jacks, Trevallys and Barracuda.

Other reef fish to be seen are Anemone fish, Batfish, Butterflyfish, Surgeonfish, Crocodilefish, Soldierfish and the beautiful Goldbar angelfish. Numerous Goldies also colour the ship with their lively dances.

Please note that ascents and descents must be done using the mooring lines of the diving boat. Start your ascent with 80 bar, carry a torch with you, be careful when visiting the inner structures and do not take anything from the wreck. 

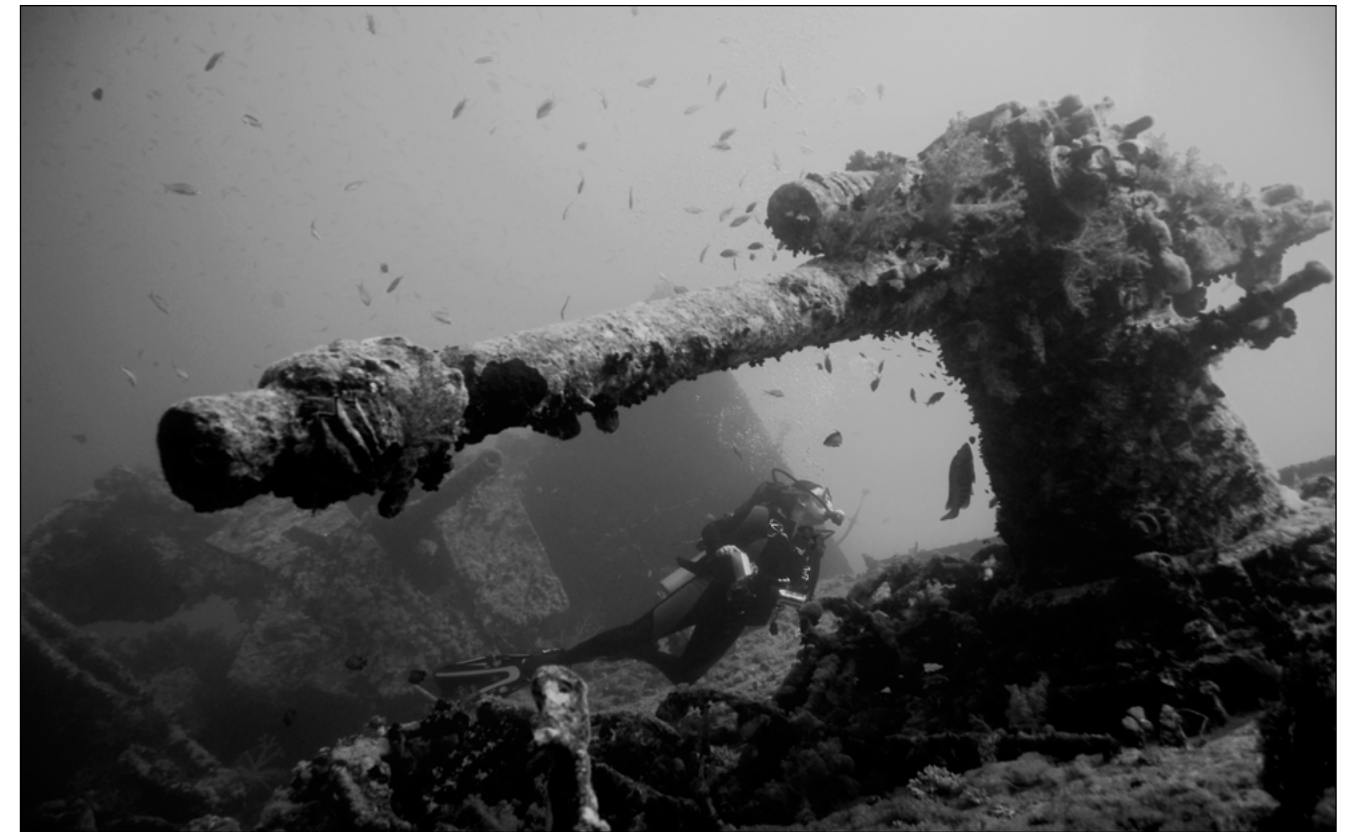
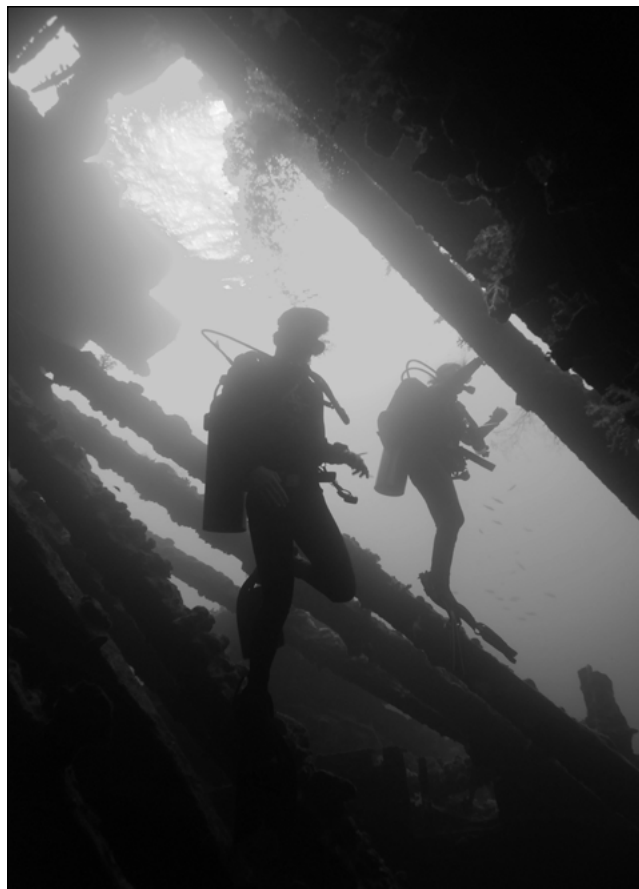


Photo School

Filling the Frame

When taking picture, get closer to your subject; if you think you are close enough, get ever closer.

There are a number of simple rules you can follow to enhance your photography, filling the frame is one of the most effective and simple techniques.

Often the subject loses impact or is lost in the detail, leaving some doubt as to what the intended target was.

When taking pictures, you tend to focus on the subject so much that you feel as if you are closer than what you really are. It is only when looking at your



printed picture or on your PC that you realise you could have been closer.

Filling the frame

By getting closer to your subject, you are filling the frame and cutting out unnecessary detail which may cause your viewers eye to wander.

This is easier to do in normal photography as opposed to underwater photography due to the drag and subjects which may be moving faster than you.

If, however, you manage to get closer, the amount of water between you and your subject is reduced, an added benefit of this technique underwater.

Start wide and work your way closer. If you can get really close, consider adjusting your camera to macro to capture the detail of your subject.

Unless you are cropping your photograph slightly with editing software to align a subject or focus point to the rule of thirds, cropping to enlarge a subject may result in a grainy effect. Rather use a zoom lens to pull the subject closer if you can.

Another mistake people make is thinking that they need to include the entire body of the subject.

It is generally the rule not to cut off parts of the object, but by breaking this rule, you can create interesting pictures.

For example, filling the frame with the body of a fish and focusing the eye on one of the focal points will create an attractive abstract picture with captivating results.


So does filling the frame overrule the rule of thirds? It is important to remember that a number of techniques can be combined when taking pictures.

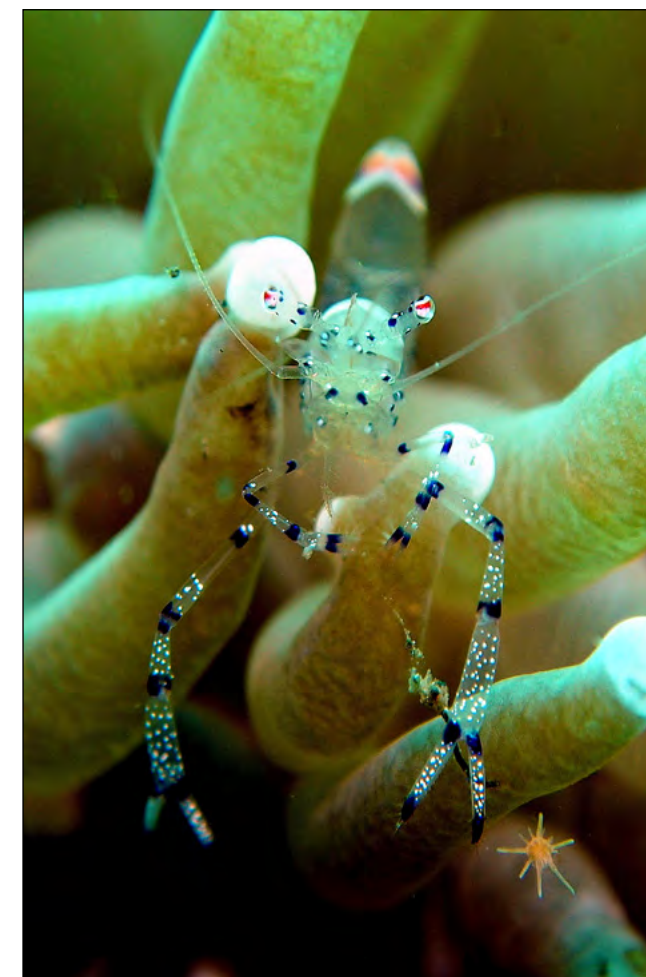
The rules can also be broken but generally the rule of thirds combined with filling the frame by adding some negative space can create the most striking pictures of them all.

Negative space

Negative space refers to a part of the picture which does not contain any shapes or objects. This is normally just one colour. In underwater photography, this will typically be the blue, green or blackness of the water in the background. Negative space can also be created by blurring the background with a large aperture.

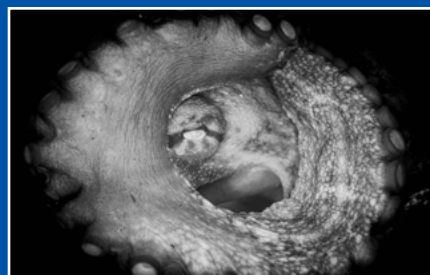
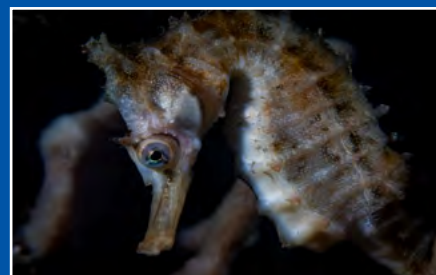
A large aperture will darken the background, blurring out unnecessary detail. Moving closer to your subject and filling the frame with negative space will definitely emphasize your subject.

Next time you are taking pictures, get closer to your subject and see the difference it makes. You will be surprised at how much a simple technique such as getting closer to your subject can greatly enhance your photography. 



Graham Willis

A journey through the Lens



Through the Lens

Photographer

It has been a slightly disjointed couple of years when it comes to diving...well life as a whole now you mention it.

Heading out of the country was not on the cards until mid-way through this year and in fact I have just come back from the Philippines, with a few photos to show for it in this spread.

What the lack of travel meant was getting some of those more local destinations covered...which is a good thing. Wolf Rock was a new spot as was Whyalla for the Cuttlefish aggregation, Port Lincoln for the Great Whites, Montague Island for some seals, Melbourne for the Spider Crabs aggregation, Mount Gambier for Kilsby Sinkhole and Ewens Ponds, Rapid Bay for the Leafy Seadragon and Maloolooaba to dive the ex-HMAS Brisbane.

Most of those dive spots have already featured in this magazine, or are about to, so I have only included a couple of photographs from those dive trips. Note to self, as you can see, there is plenty of good diving in Australia. Having said that it was very nice to get back into the 30-degree, clear water of the Philippines in August this year!

My camera equipment consists of a Canon 5DMkIV and two main lenses, the Canon 17-40mm f4 L series lens and the Canon 100mm f2.8 macro lens. I do also have a Canon 8-15mm f4 L series fisheye lens, but it does not get much of a run.

These are housed in a Nauticam housing with the relevant ports and on the macro port I have a Nauticam SMC-1 Super Macro Converter which is a wet lens.

The SMC-1 offers a 2.3x magnification and its sister, the SMC-2, offers a 4x magnification. I

find it hard enough to get the focus spot on with the SMC-1 so goodness knows how I would go with the 4x! The camera and housing have had a tough couple of years, so they have both gone off for a full service and to fix up a couple of minor faults.... no underwater rig for a couple of months!

I humbly offer four really basic tips to underwater photographers who might be starting out and working towards Tobias Friedrich's, David Doubilet's, Jill Heinherth's, Craig Parry's or Renee Capozzola's level of expertise.

- Get really comfortable with your diving (especially your buoyancy) before you try and add a camera to your kit.
- If you are new to your camera...get to know it on top of the water first. Taking photographs underwater is hard enough without having to learn your camera/strobes/video light on the fly.
- Don't rush getting your camera/rig ready. When you rush you make mistakes and forget things. The lens cap stays on in the housing, the camera does not have a card in it, the batteries are not charged, the 'O' rings have not been greased and so on. Like your buddy check have a camera checklist...and stick to it.
- When you think you are close to your subject...get closer. The less water between you and your lens the better the quality of the final photo.

Anyway, I hope you enjoy the range of photographs in this portfolio... because it is a range. Wide Angle, Macro, Black and White, Colour, Australian waters and Tropical waters.

See you in the water. 🐠

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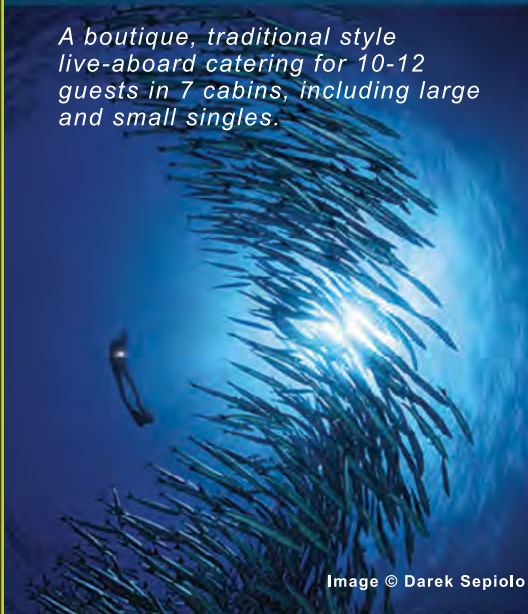


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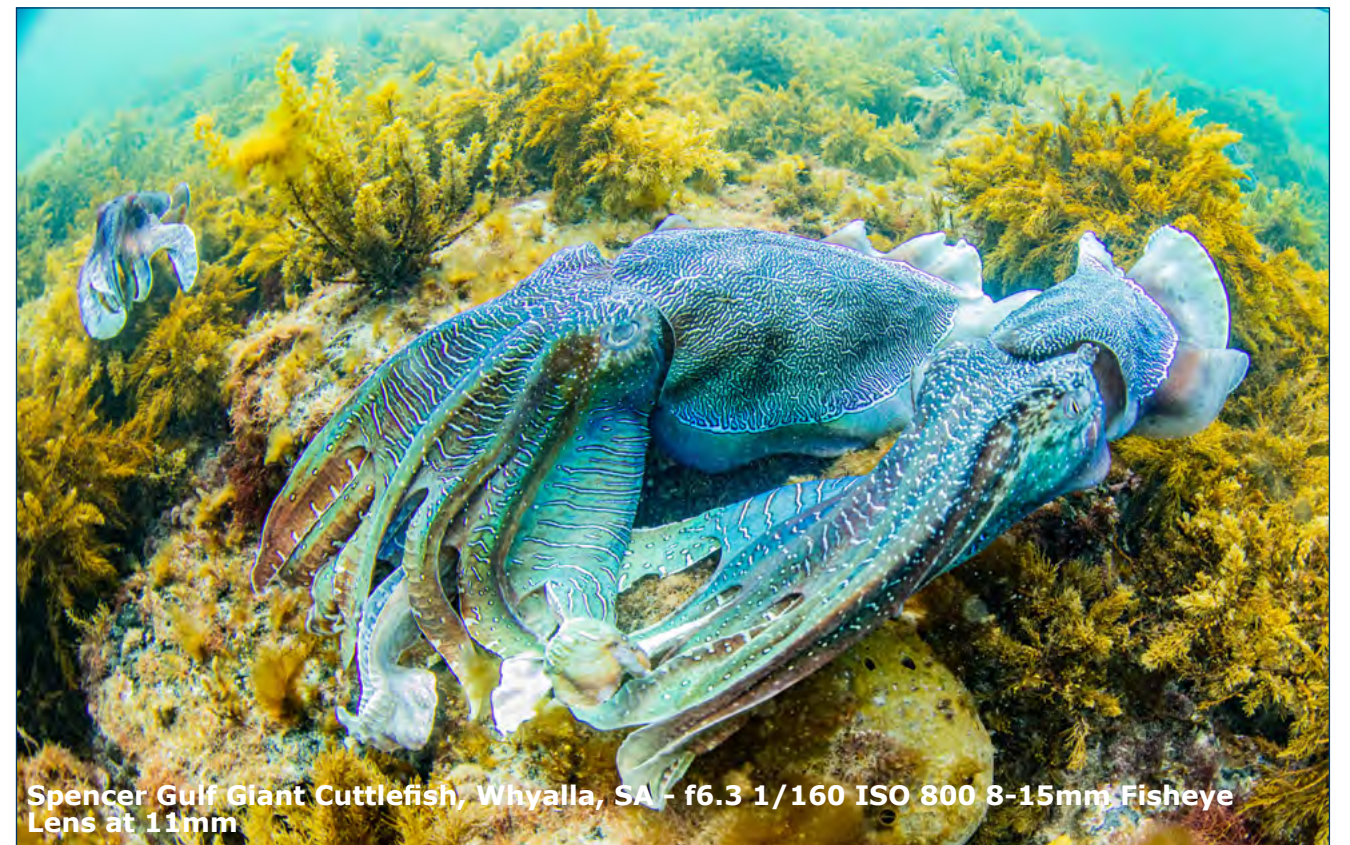
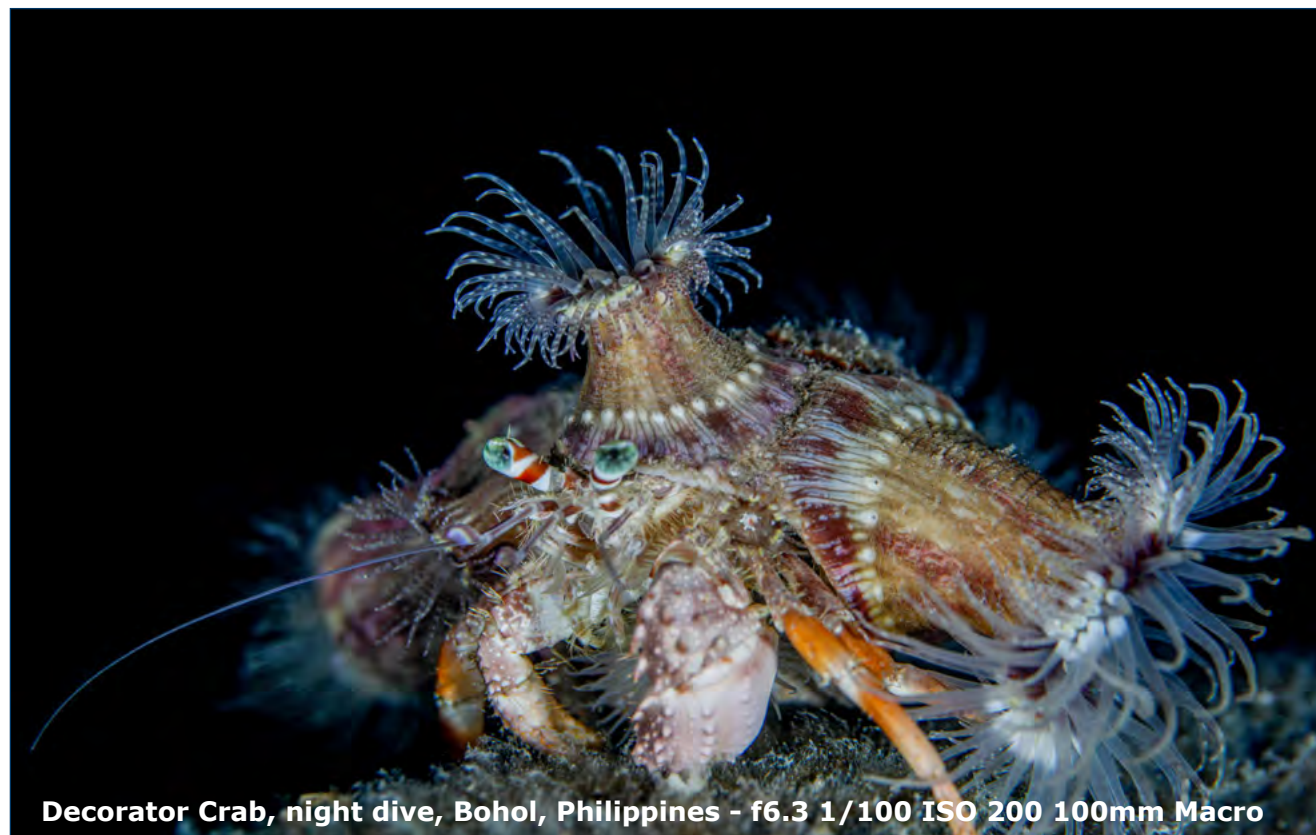
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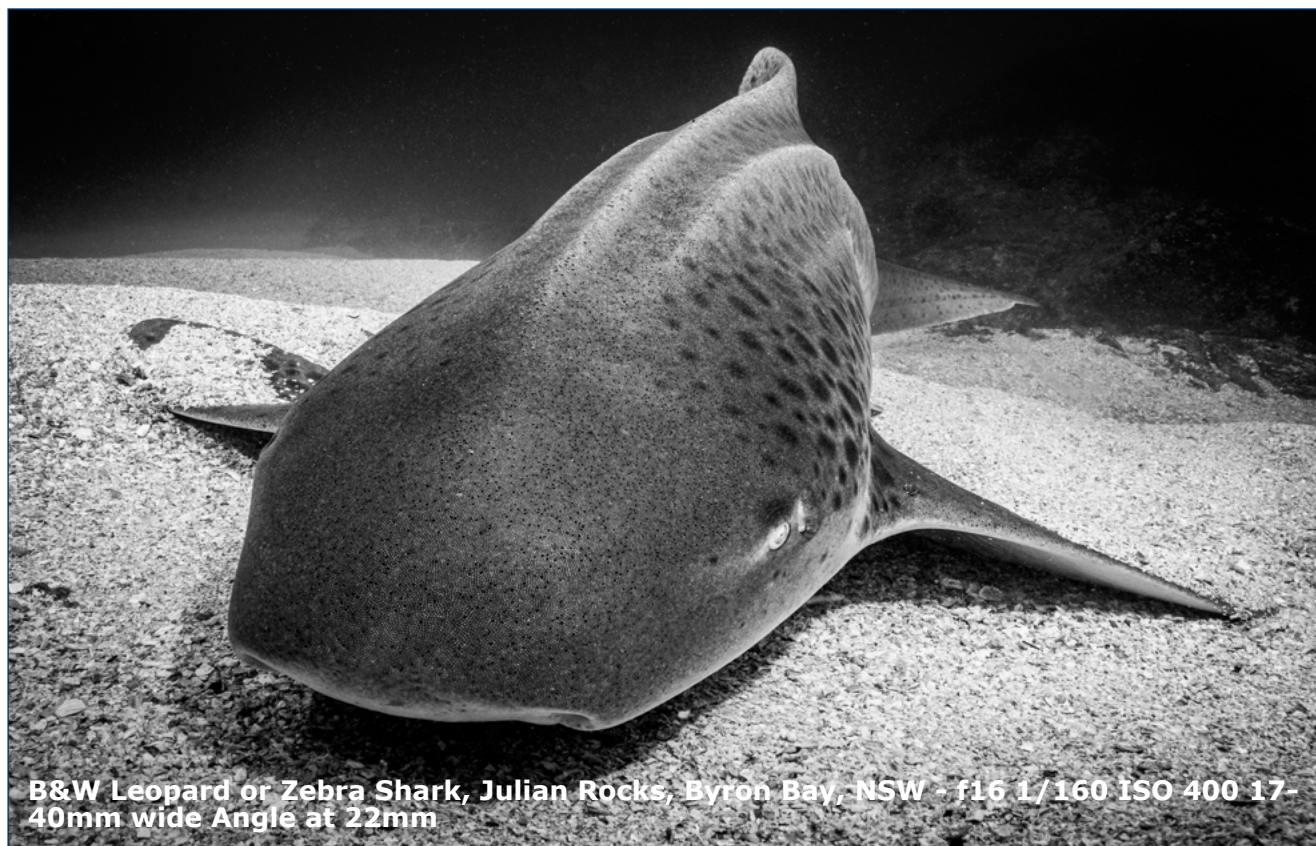
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SCAN FOR MORE INFO





B&W Leopard or Zebra Shark, Julian Rocks, Byron Bay, NSW - f16 1/160 ISO 400 17-40mm wide Angle at 22mm



B&W Feather Duster Worm, night dive, Bohol, Philippines - f 7.1 1/160 ISO 400 100mm Macro

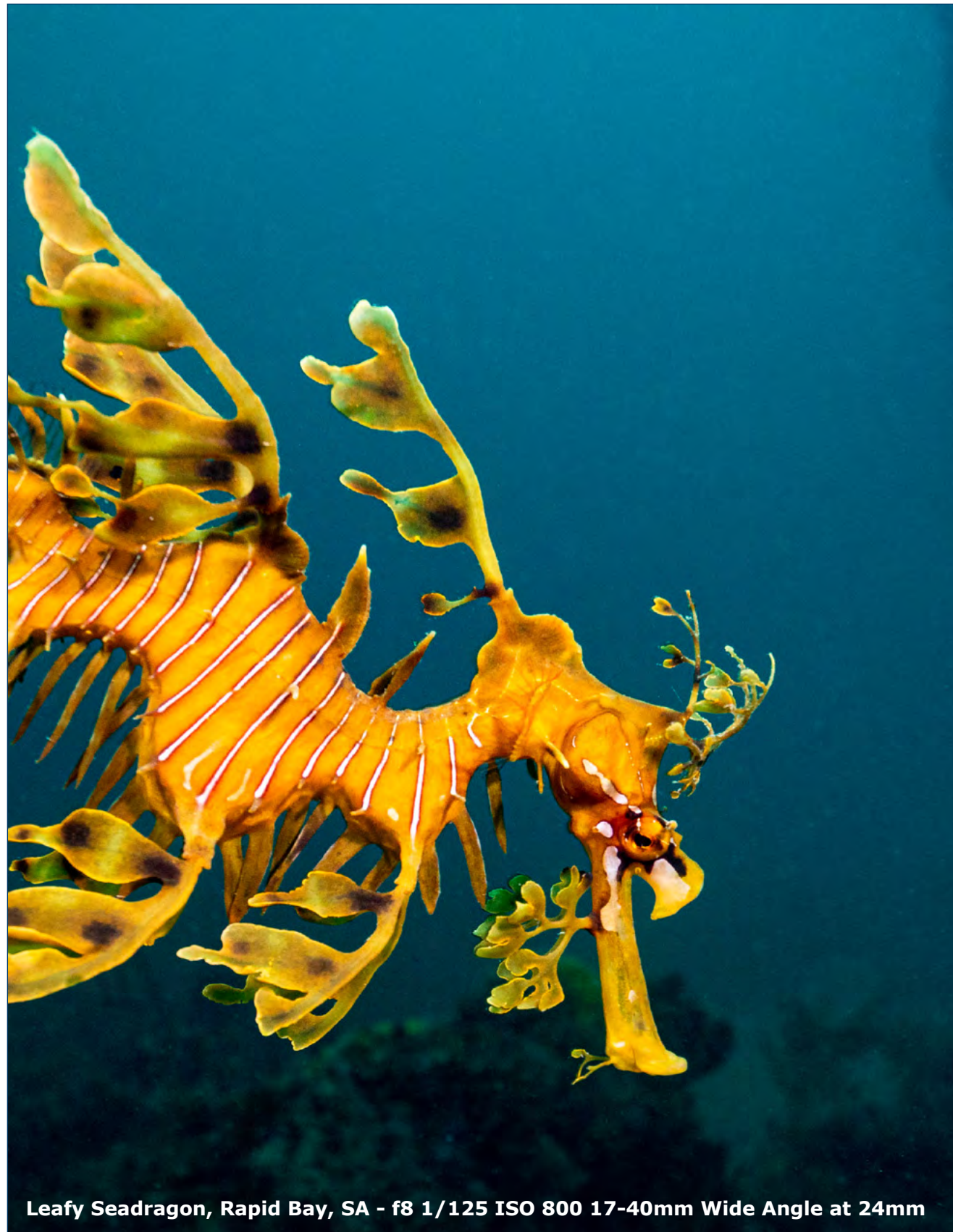
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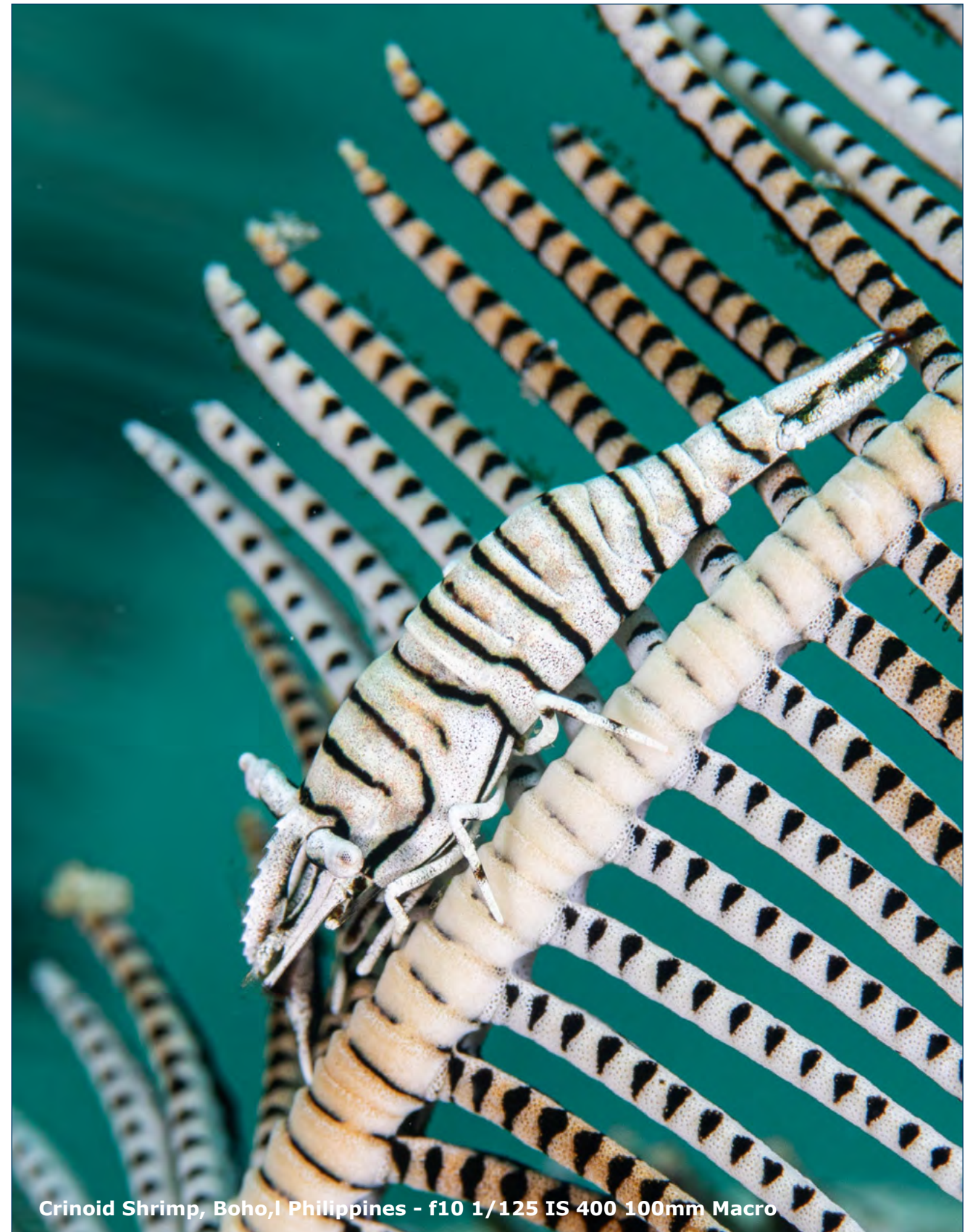


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Leafy Seadragon, Rapid Bay, SA - f8 1/125 ISO 800 17-40mm Wide Angle at 24mm



Crinoid Shrimp, Bohol, Philippines - f10 1/125 IS 400 100mm Macro



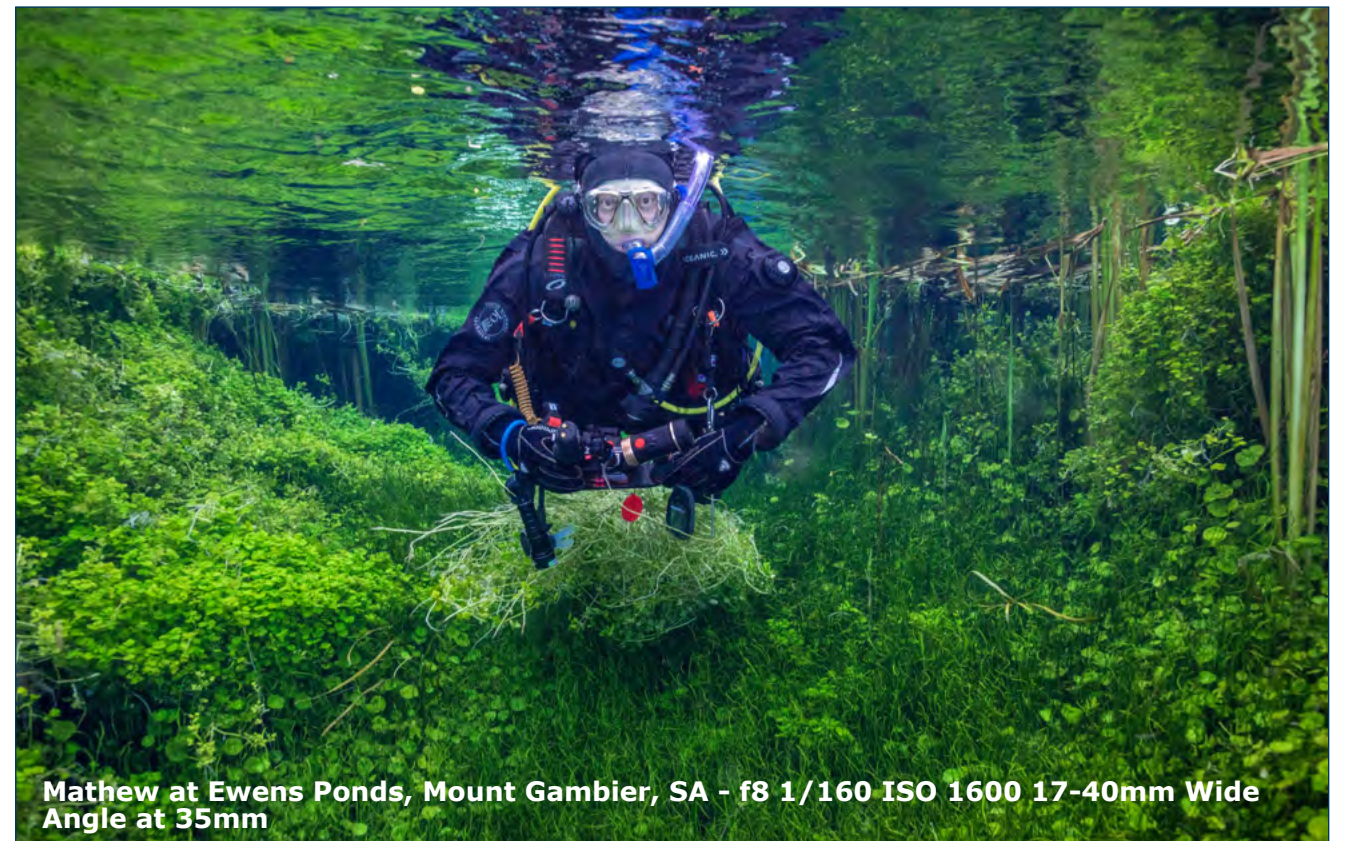
Peacock Mantis Shrimp, Bohol, Philippines - f7.1 1/160 Iso 400 100mm Macro



Banded Sea Krait, Bohol, Philippines - f7 1/160 ISO 400 100mm Macro



Dendodoris Gunnamatta, night dive, Clifton Gardens, Sydney, NSW - f7.1 1/125 ISO 400 100mm Macro



Mathew at Ewens Ponds, Mount Gambier, SA - f8 1/160 ISO 1600 17-40mm Wide Angle at 35mm

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Whale Shark Expedition

Whale sharks have been observed in many locations across the Indian Ocean from the east coast of Africa to Australia. An area with consistent aggregations of Whale sharks during the last few years has been Mafia Island, the northern part of the Mozambique Channel.

Being one of the seven most important currents of the ocean, the South Equatorial Current (SEC) strongly influences the whole eastern coast of Africa.

The SEC flows westward, just south of the equator until it reaches the coast of Tanzania.

There it divides, one part going south into the Mozambique Channel to form the Agulhas current, the other flowing northward to join the South Equatorial Counter Current.

The remarkable position of Tanzania, at the very point where these currents diverge, makes the Tanzanian coast and islands a gigantic reserve of food where we can observe movements of large pelagic fish.

According to Matthew Potenski, a

marine biologist from the Shark Research Institute (SRI) is probably one of the most famous and efficient non-profit scientific research organisations focused on research and conservation of sharks of the world.

SRI (www.sharks.org) works with the scientific community, individuals and organisations concerned about the health of our marine ecosystem, and marine resource users; subsistence fishermen, sport divers and the dive tourism industry, to correct misperceptions about sharks and stop the slaughter of millions of sharks annually.

The Company, in conjunction with the SRI, organises shark expeditions to monitor and tag Whale sharks in the northern part of the Mozambique Channel.



Giant Stride

Whale Shark Expedition

Potenski, the principal investigator, collects information by using high-performance underwater equipment.

Each volunteer, as a member of the expedition, takes part in this study, bringing their own knowledge, ideas and actions to the exciting adventure.

The successful tagging of Whale sharks on the expedition, as twenty-five ID tags were deployed. Additionally, eight PAT satellite tags were attached to the sharks.

Furthermore a number of the sharks that had previously been tagged returned to the area.

The tags are a bright yellow with a unique number to identify the shark. Some of the sharks are also fitted with PAT Satellite tags which release in two, eight or twelve months, and which send information to a satellite.



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A summary of information garnered from the satellite tagging can contain the depth and temperature where the shark was and the estimated movement of the shark during the time that the tag was attached.

Over 500 images of Whale sharks were taken during the research in Tanzania.

All these images were then cropped, straightened and added to the photo-identification database where they are then 'mapped'.

In order to accomplish this you have to set static or comparable anchor points in all the photographs to provide scale and spatial reference to a two dimensional matrix.

For Whale sharks, the area that is mapped is directly behind the gill slits. The last gill slit is used as

the first two points as the top and bottom edges serve as anchors.

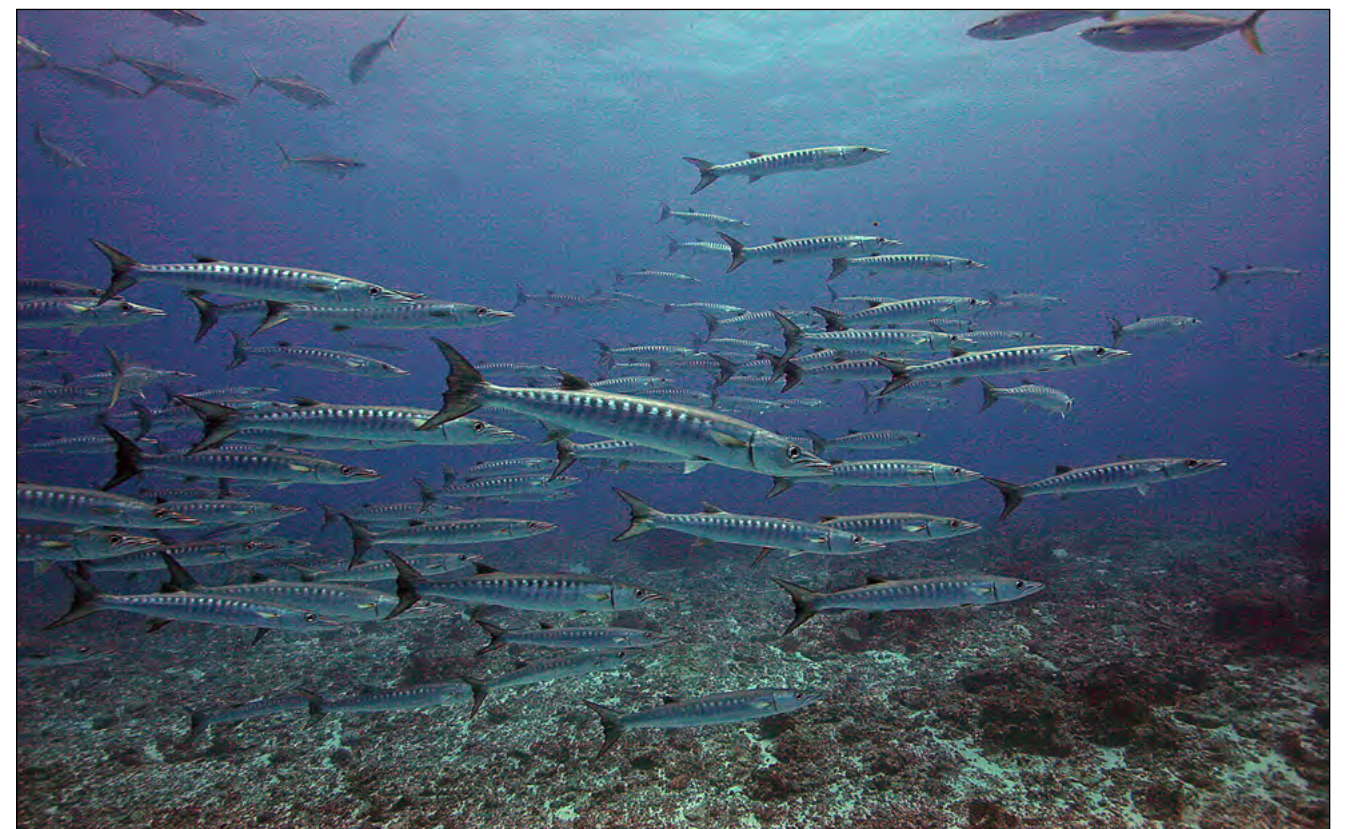
Once all this is completed the photograph is added to the database, making the identification of specific Whale sharks easier.

Matthew Potenski concludes The tagging efforts were very successful when conditions were favourable.

The Whale sharks in this area were easy to work with and the methodologies employed gathered the data as desired.

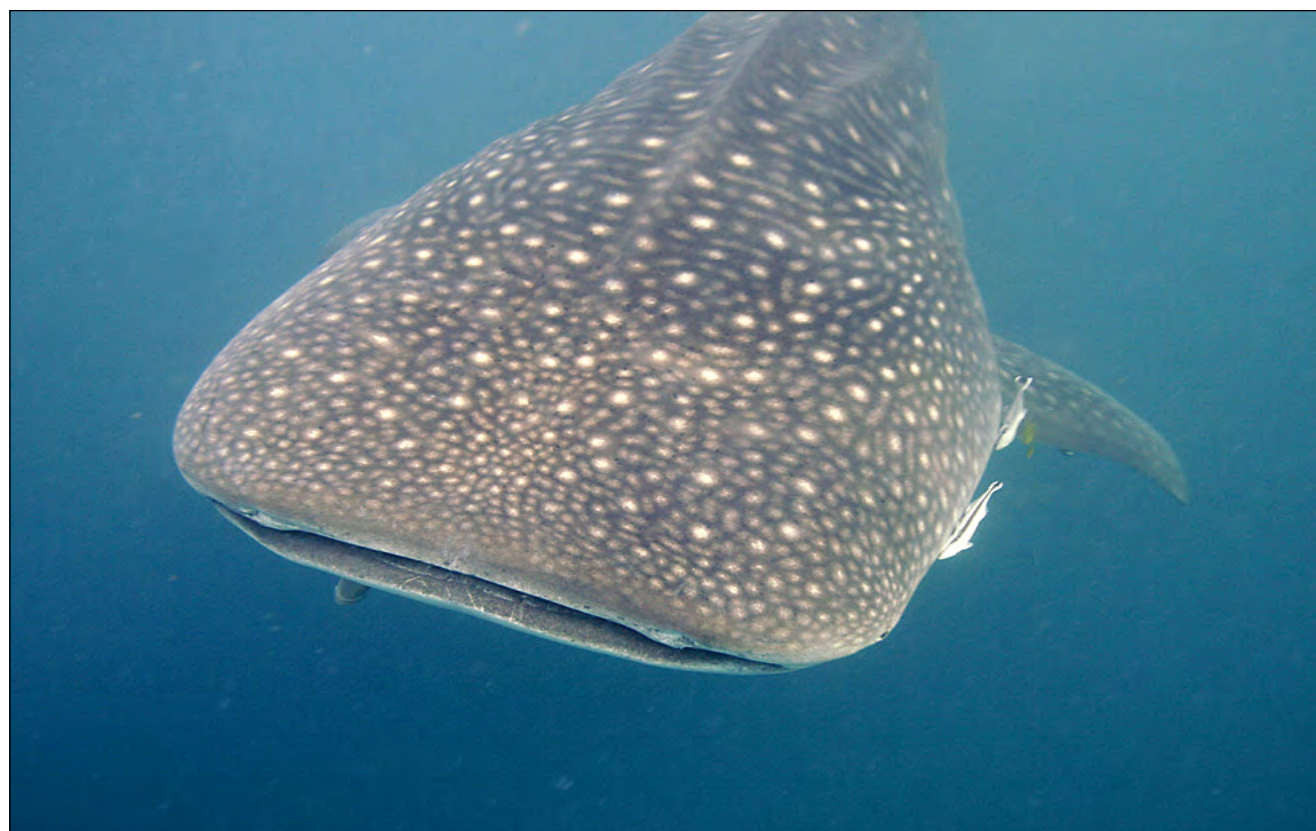
The sub-optimal conditions that were caused by the weather during the middle period of the study were indicated to be an anomaly.

All results point to continued application and resultant success for year two of the project.



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Whale Shark Expedition



Additional data analysis will be necessary for two facets of this project. More data will be input as the PAT tags pop-off and transmit their archived data. The data will need to be compared between all individuals and any patterns discerned.

Reassessment of tag programming parameters may be looked at and adjustments for subsequent tags made (such as a finer scale constant depth pop-off mechanism or similar revisions).

Additional, fine-scale movements may be looked at via acoustic telemetry in the area to determine diurnal activity patterns around Mafia Island.

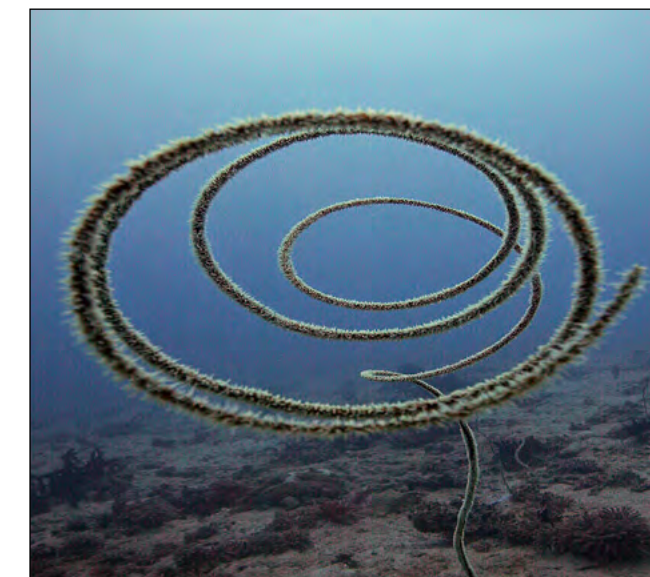
The photo-identification database will continue to grow as all images can be digitally processed, formatted for the libraries,

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Whale Shark Expedition

subjected to spot-mapping and algorithm conversion, and submitted for addition to the overall database.

I will continue working with image databases to compare Whale sharks of Tanzania with the entire Indian Ocean basin. ▀





As the winds of international tourism slowly fill our sail and rescue us from the doldrums of the past two years. We look to the future and hopefully to your return to our north-western Bali shores.

Each new month brings with it more airlines adding more flights. Quarantine requirements are gone for those who chose to be vaccinated. PCR tests are no longer required, and 72 countries are now eligible for visas on arrival. Now is the time to return.

So come me hearties and join our global fraternity of Sea Rovers Brethren, book your Bali Adventure today. Small groups, personal service and cutthroat deals await.

We'd also like to take this opportunity to once again say, thank you. Thank you to all the Sea Rovers Brethren who have helped and continue to help in our efforts to support our crew through what continue to be difficult times.

The Captain, Commodore and Crew, thank you.



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Menjangan Island, Bali

Wakatobi

"When you go to other dive destinations, you realize how lucky you were to have visited Wakatobi."

~ Richard Holstein, July 2022

10 Reasons to Love Wakatobi Resort

Wakatobi Resort is one of the most celebrated dive destinations on the planet, often referred to as a "dream vacation." But what exactly are the things that keep Wakatobi at the top of so many divers' holiday wish list? Here are 10 reasons why divers, snorkelers and vacationers love Wakatobi.

1. A DESTINATION THAT IS EASY TO REACH

Wakatobi sits on a small island in a remote part of Indonesia. But unlike many out-of-the-way destinations, getting to the resort won't require several small aircraft flights, inter-island ferries and taxi rides. Instead, arriving guests are met by the resort's concierge team when they arrive at the Bali Airport.

From that moment on, the Wakatobi staff will take care of every detail of ongoing travel, including coordinating transfers to hotels and scheduling things like dinner reservations, island tours and procuring last-minute replacements for forgotten or lost items.

This allows guests to rest and refresh overnight or spend a few days enjoying Bali prior to boarding a direct mid-morning guest flight to Wakatobi's own airstrip. Guests wait for this flight in a private lounge, and on arrival at the resort they can relax over lunch and plan an afternoon dive while the staff delivers bags a resort Bungalow or Villa, and

takes scuba and snorkeling gear to the dive center where it is made ready for use.

2. A WARM AND ACCOMMODATING STAFF

Wakatobi guests often comment on the exceptional level of service they enjoy, and on the warmth of the welcome they receive. Guests are greeted by name and cared for like a favorite relative come to visit. Wakatobi's staff takes pride in not only meeting but anticipating guest needs, and in going above and beyond expectations.

This is true of everyone from the housekeeping staff to the dive boat crews, dive guides and the restaurant servers and chefs, who learn your individual culinary preferences, and are always willing to fulfill special meal requests.

3. PRISTINE AND PROTECTED REEFS

Wakatobi attracts divers from around the world with the promise of experiencing some of the world's finest coral reefs. The resort is located in the heart of the Coral Triangle, a region known for having the planet's highest level of marine biodiversity. These underwater riches are preserved and protected in near-pristine condition within a private marine preserve funded and managed by Wakatobi.

To ensure the continued health of these reefs, the Wakatobi staff takes proactive protective measures such as reef patrols and the



installation of boat moorings to avoid anchor damage. In addition, a portion of the resort's revenue is shared with area villages and local fishermen in exchange for honoring numerous "no take" fish sanctuaries.

4. THE WORLD'S BEST SHORE DIVE

Wakatobi's House Reef has been named as the world's best shore dive. Some 80 meters from shore, a shallow, coral-encrusted shelf transitions into a series of steep slopes and walls that plummet beyond the range of scuba.

The face of this drop-off is covered in an impressive collection of hard and soft corals and large sponges. Schooling fish patrol the edge, and a menagerie of marine life lurks among the corals and finds shelter in crevices and overhangs. Inshore of the reef edge is a large area of shallow patch reefs and grass beds that become prime hunting grounds for an even more diverse range of small and unique marine life subjects. This expansive site extends for far more than a kilometer to either side of the resort's central jetty.

It is available to divers and snorkelers day and night, and there is a taxi boat service to ferry guests to more distant portions of the House Reef so they can comfortably drift along the wall back to the resort jetty.



5. THERE IS A DIVERSITY OF DIVING EXPERIENCES

Wakatobi provides a wide range of underwater experiences. Divers can spend relaxing hours on shallow reefs, explore sheltered bays, or drop on coral-covered pinnacles that attract large schools of fish. Reefs that begin within 1 meter of the surface drop to depths of more than 100 meters, creating opportunities for long multi-level profiles, and providing extended-range divers with new opportunities for deep exploration.

There are regular night dives, including fluorescent diving, and the resort is considering to soon add a blackwater dive experience. The unique geologic formation known as Blade is within range of the resort's day boats, and the dive yacht Pelagian carries guests on one-week excursions through the Wakatobi archipelago, and into the bays of south Buton Island for world-class muck diving.

6. BIG BOATS THAT ARE BUILT FOR PASSENGER COMFORT

Wakatobi's fleet of custom-built and locally made dive boats are built for comfort and stability. Each boat in the fleet measures around 22 meters and is fitted with a full-length roof for shelter. Though capable of carrying more than 24 passengers, these

boats typically are limited to a maximum of 16, and more often host 12 or fewer divers and snorkelers to ensure each passenger has ample personal space and storage areas.

All dive/snorkel boats offer a full-sized bathroom and freshwater shower (complete with beautiful Wakatobi hair products) at deck level, and water entries and exits take place at the middle of the boat, far away from engine exhaust. For guests seeking the ultimate in personal service and diving freedom, Wakatobi offers private all-day charters, giving individual divers or small groups the opportunity to have the boat all to themselves and be free to set their own schedule with the full support of crew and guides.

7. EXPANDING HORIZONS WITH PELAGIAN

Divers can widen their horizons aboard the dive yacht Pelagian. This 115-foot liveaboard departs Wakatobi Resort for week-long and extended cruises through the Wakatobi Archipelago and the muck diving mecca of South Buton Island. Carrying a maximum of 10 guests, the 12-person crew of Pelagian is devoted to providing the same high standards of service and comfort as guests enjoy ashore at Wakatobi Resort.

Find dining complements a daily diving schedule that takes in top sites within the Wakatobi National Park. The boat's high guest-to-staff ratio ensures attentive personal service and a relaxed diving experience.

8. WAKATOBI IS A SNORKELER'S PARADISE

The pristine coral reefs that impress divers are equally inviting to snorkelers. The House Reef provides hours of exploration with mask and fins, with calm conditions that make snorkeling fun and easy for all guests, including children. Quite a few of the more than 40 dive sites within the resort's marine preserve are also well suited for snorkeling, as there are areas of the reef that rise to less than a meter from the surface.

Snorkelers are welcomed aboard dive boats headed to any of the many sites with a shallow component and are given equal respect as divers. This creates unique opportunities for a diving/non-diving couple or a family with younger children who do not dive, as both diver and snorkeler can share the same reef, and those who remain on the surface can watch their scuba-equipped companion or parent drop over the edge of the reef into deeper water, then meet up once again near the end of the dive.

9. GUESTS ENJOY EXPERT ASSISTANCE

Wakatobi's professional dive team is comprised of both local and international staff who speak several languages. Each boat dive comes with the services of one or more highly experienced guides. These guides are much more than dive leaders. They are experts at assessing each diver's goals and abilities and provide the services that are appropriate.

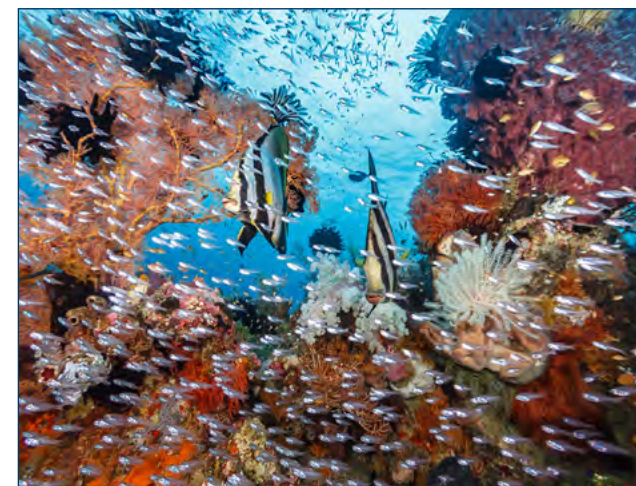
This could mean delivering a bit of additional assistance and guidance to new divers or ensuring more experienced divers can get the most out of every submersion. The guides are also excellent marine life spotters and have helped many photographers find and document rare and hard-to-find subjects. For the ultimate in personal service, guests can work with a Private Dive/Snorkel Experience Manager, whose role is to focus entirely on the needs and goals of a buddy pair or a single diver or snorkeler.

10. WAKATOBI IS A GOOD CITIZEN

Wakatobi remains a leader in conservation and environmental protection. The resort's award-winning Collaborative Reef Conservation Program was among the first of its kind, creating a new paradigm for sustainable tourism.

The resort operates recycling and waste-water mitigation, sponsors weekly village cleanups that involve up to 100 local people, and works closely with local communities and governments on the issues of waste management. The resort owners have been instrumental in bringing clean solar power to the region, and most recently tied Wakatobi into a local solar cooperative.

To learn more about a visit to Wakatobi, or to book a trip, email Linda Cash: linda@wakatobi.com



Assisting a Trapped Diver

Assisting a scuba diver who has become trapped underwater is always a complex exercise that could even necessitate tools that depending on the object trapping the diver.

As a recreational diver it should be noted that you are not allowed by your certifying agency to pass through any obstruction that could cause you to become trapped underwater.

That aside, what and how do you respond if you find yourself trapped, be it by disregarding your training limitations, by accident or coming across a trapped diver?

Firstly, and of most concern in such a situation, is the amount of air (gas if nitrox qualified) remaining. This will determine the time that you will have to perform a rescue or to stay

alive if you are the trapped diver yourself. From the trapped diver's perspective, it is essential to stay calm and to control and slow down your breathing to maximise your time to be rescued.

For the diver assisting the trapped diver, the following would be recommended:

Firstly make eye contact with the trapped diver and indicate to him/her to stay calm and to try and control their breathing. At this stage it might be a very good idea to check the air supply of the trapped diver along with yours

as well. The idea here is to try and supply the trapped diver with an alternate air supply if possible in order to preserve as much of their air supply as possible until it is absolutely required.

If diving in a group of more than two people it would be a good idea if at least one diver (the one with the least amount of air – gear could be swapped if a more experienced diver wants to stay down and try and free or assist the victim), surfaces in order to firstly try and get surface support and arrange for more cylinders and regulators to extend the time the trapped diver has under the water.

With the importance of the air supply having been discussed, trying to free the trapped diver now needs to be focussed on. The source of what is keeping the diver trapping needs to be located. This might be quite obvious in some cases, yet in others it may not be so easily identified.

For example, a diver could be trapped in fishing gut which might to be visible. Once the source have been located consider if it requires tools to be used (like a knife) to free the diver or if an action by either you or the trapped diver will be required.

If an action is required by yourself, communicate to the victim that they should remain still while you are busy trying to free them.

If possible, try to stay within sight of the victim while freeing them so that they can stay calm and feel as if the situation is under control.

If you require the victim to assist or to perform an action on their behalf, such as twisting their body in a certain way when trying to free them, this will have to be communicated.


When communicating this or any plan of action to the victim, make sure that they stay calm, that they understand what they should do and know when to do it.

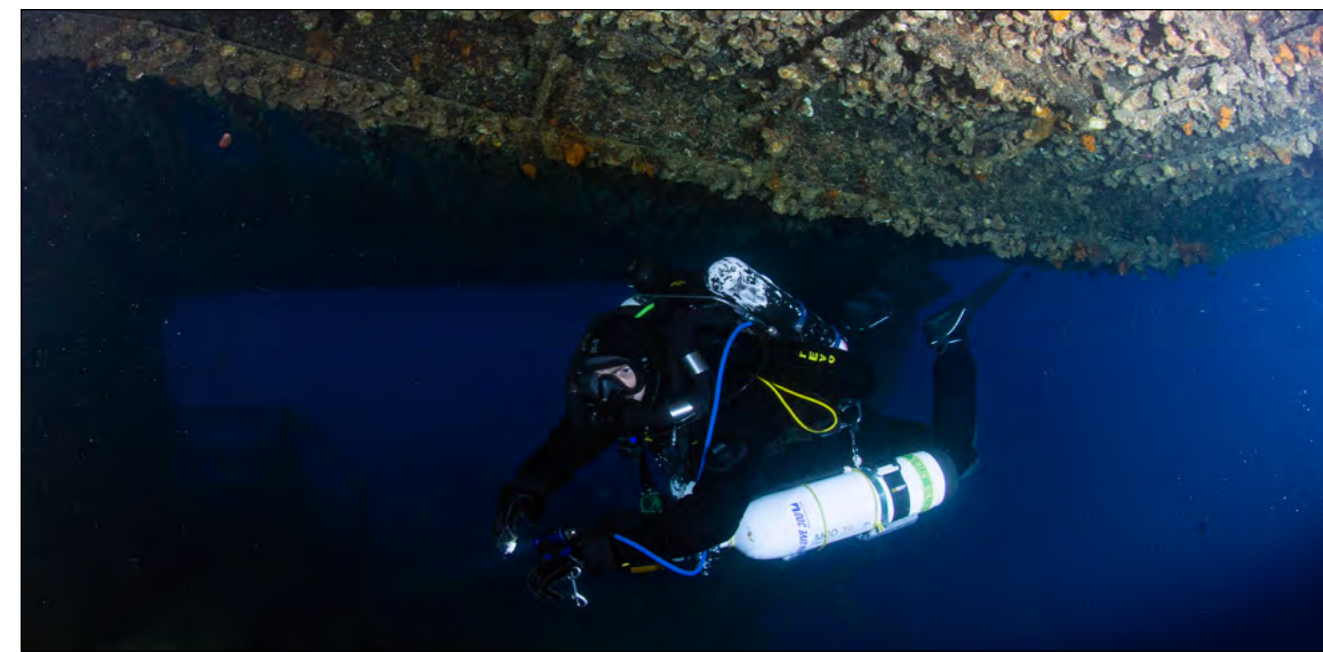
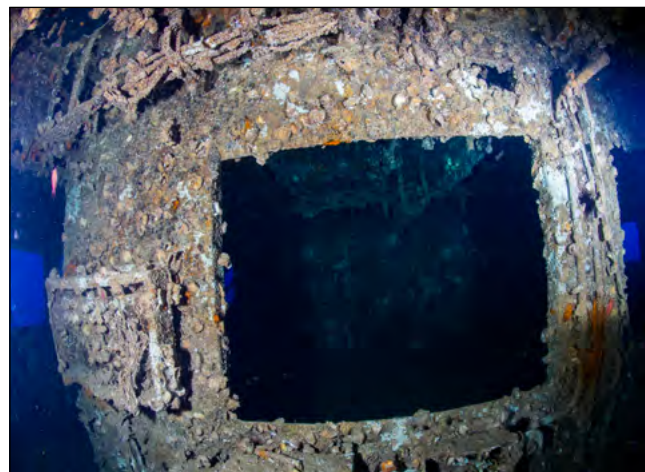
Here are some ideas to consider when trying to free a trapped diver (depending on the object causing the entrapment):

- * How long can the victim keep breathing on their current air supply
- * How did they get stuck and will they be able to 'reverse' out of the situation?
- * Can they remove their gear to try and free themselves?
- * Would blowing out some air from their lungs allow them to swim clear?
- * Are additional tools needed, and if so, what is the plan to get them down to the trapped diver?
- * Is intervention required by the rescuer to free the diver?

It is important to always dive within your training limits and to know and accept one's own personal limitations.

Always consider the following:

- * Am I qualified to dive here?
- * Have I dived in a similar environment before?
- * Do I feel comfortable to dive here?
- * Have I got the appropriate equipment to dive here?
- * Will my buddy or I be able to handle an emergency situation? 

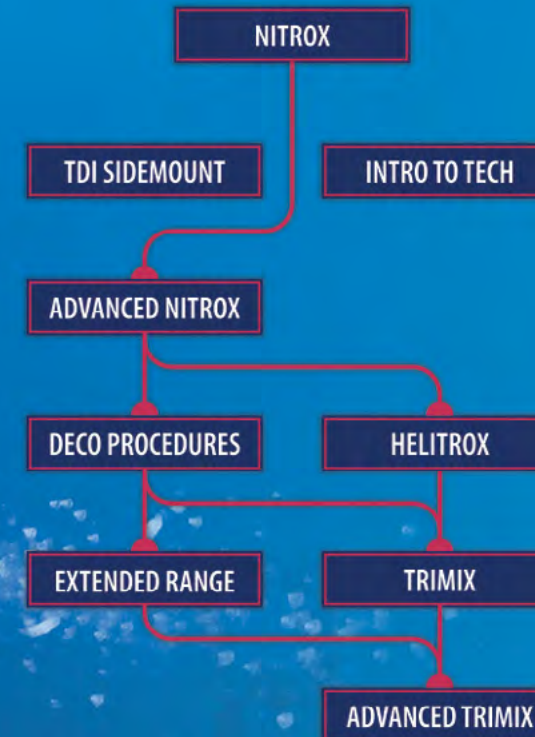




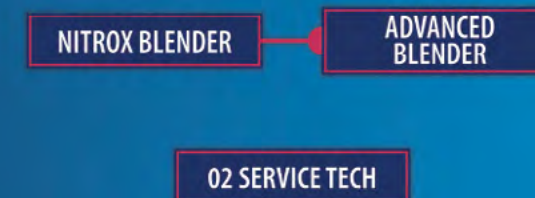
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DIVERS
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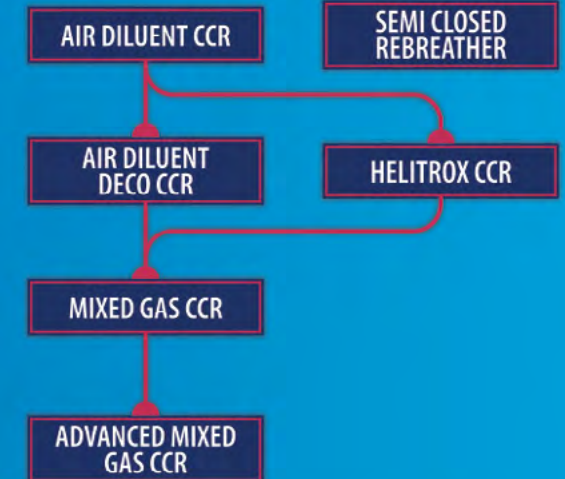
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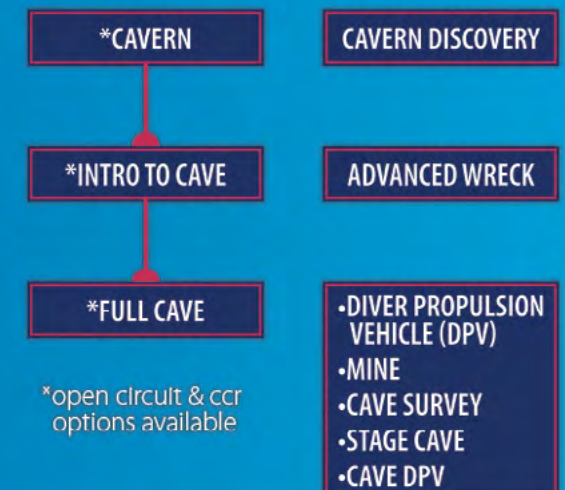
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Nuno Gomes



In basic terms, a good cave diver is the cave diver that comes back alive from every cave dive.

A good cave diver is the diver that follows the basic ten commandments of cave diving.

The basic ten principles of cave diving, as proposed

by the late Sheck Exley are:

- * Always use a guide line when venturing into a cave (reel).
- * Plan the gas supply and follow the plan (use the rule of thirds).
- * Do not dive in excess of an equivalent air depth of 30m (narcosis in caves is dangerous).
- * Prevent the onset of panic by venturing into caves gradually.
- * Always use at least three cave diving lights (one primary and two secondary emergency lights).
- * Use good, reliable, well maintained cave diving equipment.

- * Prevent silt (maintain good neutral buoyancy and good horizontal trim at all times).
- * Know your emergency procedures (make sure that you practice them frequently).
- * Ensure that you have the required basic equipment as well as the necessary redundant equipment in case of emergencies.
- * Do not let overconfidence allow you to rationalise violating the recommended cave diving safety procedures.

By following the above ten basic principles of cave diving, anyone can become a good cave diver.

Barry Coleman



The simple answer is that a good cave diver is a person who is still alive! Bad cave divers are soon sorted out and hopefully we learn from their mistakes.

That is why many cave diving disciplines and protocols are in place because people died and we learnt

their lessons (hopefully). Never believe you have the best equipment configuration or have the attitude that you know it all.

Cave diving is not so much a sport but more a way of life; it requires caution, balanced exploration instinct, strong discipline, calm nerves, a strong mind and survival skills.

I have not been cave diving for months now and would have to start at the beginning again and brush up on all the skills. It would take me months of cave diving to get back to a level that I once was and the depths and distances I once did.

If you rush and push the limits within a short space of time, generally there is only one outcome; a body recovery.

You only have to look at the past to confirm this. The cave is not going anywhere, but the water might be, especially if it is fresh as our rapidly dwindling supplies disappear!

Pieter Smith



1. Training and self development
There is no shortcut or substitute for proper training – spending enough time and effort on practical training is just the basis – after qualifying it is vital to continue with self development.

2. Time underwater
Divers are not spending enough time in the water. You need to put in the hours regularly (monthly).

You need to dive different caves. We are very restricted in SA – Wondergat, Boesmans, Bobbejaansgat, Wetsgat and Badgat... Some of these sites are remote and only dived by a handful of SA cave divers. A good cave diver should know and have dived all these caves.

3. Obey the rules
Pioneers like Sheck Exley developed rules and techniques by trial and error. We now have good standards and techniques to ensure we dive as safe as possible. It is again human error and discipline that cause unnecessary accidents.

4. Self control
Cave diving is stressful and requires a lot of self discipline and control. You need a good 'cave-head' to manage situations and

avoid potential accidents developing into real accidents. We are all human and there is a point in time where any diver will panic.

5. Knowing and diving within your limits
Most cave divers are also mixed gas qualified and this opens diving to 'where you're willing to go'. You need to know yourself, your own limitations, your ability underwater and know your body and how it reacts to underwater demands. We're not all the same and what one diver can do is not necessarily the same for another.

Cave divers may call a dive at any time with no questions asked!

Pieter Venter



A good cave diver needs to be well trained, experienced, have good equipment and an understanding thereof and should be a perpetual student of the art.

He or she should also strive to be totally self dependent to the point where all cave dives should theoretically be safely

done solo. If cave diving is done in a buddy or group environment, being a team player is a good attribute. To me, most importantly, is a diver's temperament – although a serious undertaking, the diver should be prepared, relaxed and should enjoy every cave dive. If you are stressed or apprehensive before or during a cave dive, the dive should be aborted.

Take smaller steps to stay within your comfort zone and if still apprehensive, take up another sport. Cave diving should not be a thrill sport or be undertaken half heartedly, if it is, it is a recipe for disaster. When things go wrong you should be able to stay calm and deal with the problem.

If a problem or a crisis excites you easily above water then stay away from an underwater cave.

Although training such as no mask or blackout mask skills training goes a long way to staying calm and dealing with problems, it is only when a problem crops up in real life that one will know.

A few years of cave diving normally delivers one or two problems to test your temperament.

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Enjoying your dive in crystal clear water, drifting over the reef checking out Nemo you notice the dive master signaling with his hand above his head in a fin type of illustration.

Following his finger you see what he is pointing at... it's a shark! What kind you are not sure of, but who cares, this is not what you wanted to see because now you are at risk.

As the shark circles around the group you notice that it's not really coming any closer, it's just staying on the outskirts and the next moment it's gone.

Usually one of my first questions or comments when training an

open water course is, "Will we encounter a shark? And if we do will it attack?" Personally I have not heard of shark attacks on divers, ever! So yes, if you encounter a shark on a dive, get the group close together and stay together.

This is not protect to each other, this is because you want to create a bigger mass in the water which will trigger the sharks' curiosity, causing it to come in closer, investigating.

You want the shark to come in closer – these creatures are majestic and strike awe into every diver's soul when encountered in their domain. The way they move and react is incredible and this is

one of the main reasons why I dive.

Why are the boats loaded when a Pinnacle dive is scheduled? It's because you as a person get to be close to an untamed predator on its terms. It's the thrill, the respect, the passion and the opportunity few people on earth have.

I believe shark diving should be encouraged. People must start understanding that these creatures have a place in our seas and they play a critical role to our being.

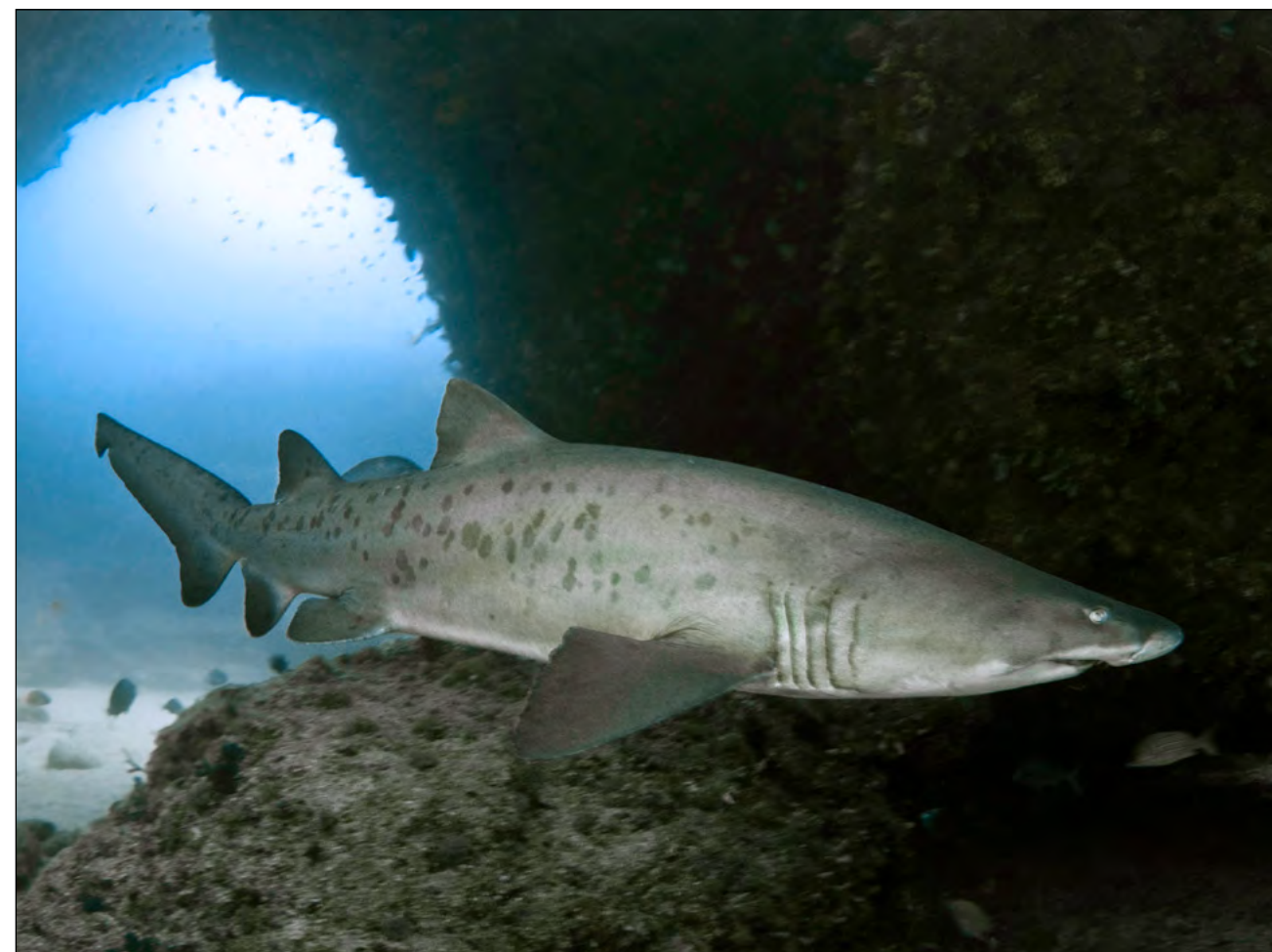
I don't want to go into the whole debate around chumming and whether it's right or wrong because people have very strong views on both sides of the

argument.

The only thing that I want to state is that shark finning must be stopped! There is no place on planet earth for those people who don't care about our hugely valuable resources.

I want to conclude by saying that shark encounters are rare – appreciate them, know your place and enjoy them. It's an incredible opportunity where memories will be created. If you do get the opportunity to swim with a whale shark, treat it with respect, leave it alone and do not hang on its fin like an idiot.

Happy and safe diving. Enjoy all your shark encounters and take photographs! 



SCUBA GEAR CARE

GET READY FOR SUMMER DIVING!



Spring is just around the corner and we want to make sure your scuba gear is ready for every underwater adventure that comes your way!

There are a few important things to do to ensure your scuba gear is in proper working order.

Has it been sitting on a shelf for most of the year? Check out these simple steps to ensure your gear is in good shape before you dust it off and jump right in. Follow this guide to make sure your scuba gear is ready for summer:

1. Regulator.

Your regulator is one of the most

essential pieces of your scuba gear, delivering you an uninterrupted supply of air while you explore the wonders of the underwater world. The last thing you want to happen during a dive is to have your regulator fail.

To avoid regulator failure, most manufacturers recommend an annual tune-up of your regulator with a total overhaul every other year.

SSI recommends contacting your local dive centre to inquire about their servicing packages.

You can drop off your entire regulator unit, including the first stage, second stage, and octopus or secondary air

source, for inspection.

2. Dive computer.

You do not want to start your descent and notice a low battery sign on your dive computer.

So, before heading out on your next dive, pull all of your dive computers out of storage, turn them on, and check the battery level.

Make sure each dive computer is functioning correctly with a full battery. Run through your computer's dive planning mode to ensure everything is working.

If using an air integrated computer, check the battery in the transmitter too.

If you get a low battery indicator, change the battery immediately if your computer model allows self-battery changes or send it to your nearest service centre. Make sure you do this before going on any dives!

3. Buoyancy Compensator.

Your Buoyancy Compensator does not necessarily need to go in for servicing at a service centre unless there is an obvious problem.

If your BC has been in storage for a while you can find the inflator button can be sticky or the O rings are dried out. This can cause a problem on your dive.

Get you BC checked. Run through a few self-checks to ensure your BC is in good working order:

- Orally inflate your BC to make sure it still holds air. For an even more thorough check, fill your bathtub with water or take the BCD out to your pool and hold it underwater fully inflated. Rotate the BC underwater and look for any bubble streams escaping from the BC's bladder or valve seals.
- Make sure the BC's entire dump

valves are working properly. Deflate your filled BC by pulling on each valve individually.

- Check your BC's weight pockets as well. Ensure they are working correctly by putting the BC on, adding weight to the pockets, and checking that the pockets do not unlock by themselves and release when prompted.

4. Wetsuit.

Wetsuits are pretty straightforward and do not require much preparation for use. However, it is a good idea to try on your wetsuit and check it still fits if you have not dived recently.

This small but useful step could save you from trying to squeeze into a too-small wetsuit on a rocking dive boat or getting cold in a wetsuit that is too big!

You may also want to ensure the zipper is still in good working order and that there are no holes or worn-out areas.

Remember that most modern diving wets especially hyper flex models, are manufactured to only last around 100 dives as the neoprene permanently compresses a little during each dive. An older wetsuit will not keep you as warm as it should.

5. Mask, snorkel, and fins.

Most divers do not put much thought into checking their basic scuba gear before packing up for a dive trip or taking them out after long-term storage.

These essential items are just as susceptible to wearing out as other scuba gear, especially if they are stored in an area with low airflow and extreme temperatures, like the garage.

- Check the silicone skirt around your mask to ensure it has not turned a dingy yellow colour. This could indicate that the silicone has hardened and may not be as pliable as it should, which can lead to

a constantly leaking mask.

- Check the purge valve plug and mouthpiece for the same discoloration on your snorkel. High-end snorkels make these parts out of silicone as well, and if they are not in good working order, you could end up with a leaky snorkel.

- For fins, check the heel strap and buckles are not broken and that the fin blade is not warped. If you have a bungee heel strap, check for signs of perishing and make sure you have a spare.


The fin should look straight, and the heel strap should be easy to tighten and loosen.

6. Scuba Cylinder.

Every scuba cylinder requires an annual visual and hydrostatic inspection.

Check the visual inspection sticker on the side of your cylinder for the month, and the year it was last inspected, check your cylinder well in advance of your next scheduled dive.

By checking your scuba gear thoroughly before your next diving adventure, you will stop your dives from being ruined by preventable gear problems!

Keeping your scuba gear in tip-top condition will ensure you get years of good use out of your equipment investment, and it will keep you safe along the way. 



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OZ DIVER



CONTENTS

Regulars 3 - Editor's Dico 4 - The Team Letters 7 - Log Book Dive the Continent 9 - OZ News 15 - Port Kennedy to Esperance Weird and Wonders 31 - Manta Ray 33 - Climate changes 35 - Photographers Dive Med 39 - Hyperension Dive the Globe 41 - Global News 47 - Manta Mambo 61 - Ras Mohammad 73 - The Hilton Wreck Explorations 77 - World War II - Part II	 COVER PHOTO Neil Truitt www.petertruit.com	Through the Lens 87 - Photo Competition 91 - Photo School 93 - Editing School Giant Stride 97 - Shape Up 105 - A last glimpse 115 - Micro infiltration Technically Speaking 119 - Dive Planning 123 - Q&A - Backup Instructor Diaries 127 - Log Gear Talk 129 - Kiting Up 135 - Reviews Safety Stop 139 - Funnies Dive Operators 141 - Listings
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The Dive Spots of NEW SOUTH WALES

The Dive Spots of New South Wales is an indispensable guide for all levels of divers and snorkeler, broadening their horizons on places to visit and dive/snorkel in New South Wales.

Through extensive travel and diving, Johan Boshoff and Graham Willis bring you valuable information on more than 250 dive spots in New South Wales.

Important guidelines on each coastal dive destination include accommodation, facilities, travelling tips and dive conditions. Complete with photographs and more than 100 illustrated maps of each dive site.

All spots are star rated to cover depths, marine life and other essential information for the diving and snorkelling community.

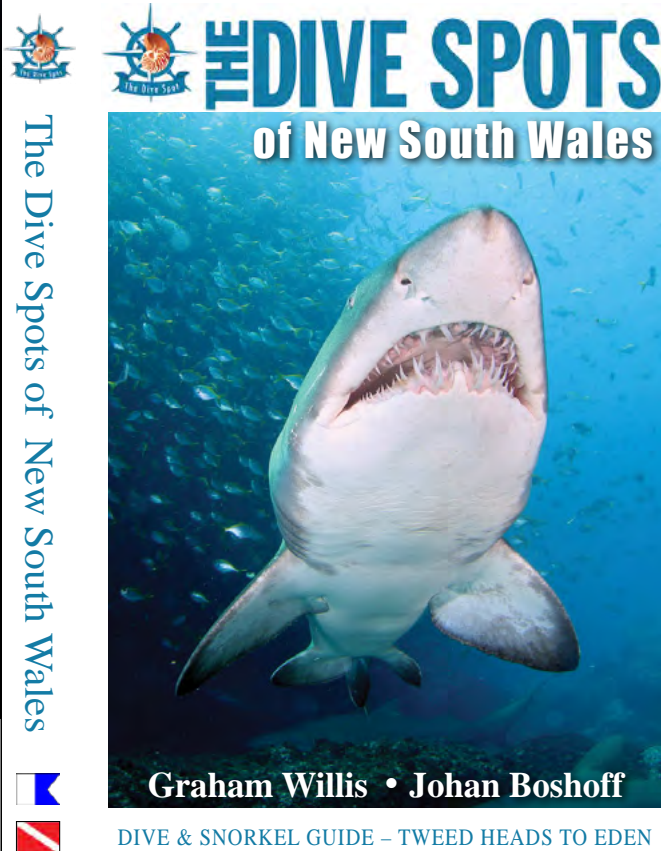
To buy your copy for \$ 39.95, visit www.ozdiver.com.au or email info@ozdiver.com.au



The Dive Spots of New South Wales is an indispensable guide for all levels of divers and snorkeler, broadening their horizons on places to visit and dive/snorkel in New South Wales. Through extensive travel and diving, Johan Boshoff and Graham Willis bring you valuable information on more than 250 dive spots in New South Wales. Important guidelines on each coastal dive destination include accommodation, facilities, travelling tips and dive conditions. Complete with photographs and more than 100 illustrated maps of each dive site. All spots are star rated to cover depths, marine life and other essential information for the diving and snorkelling community.

OZ DIVER

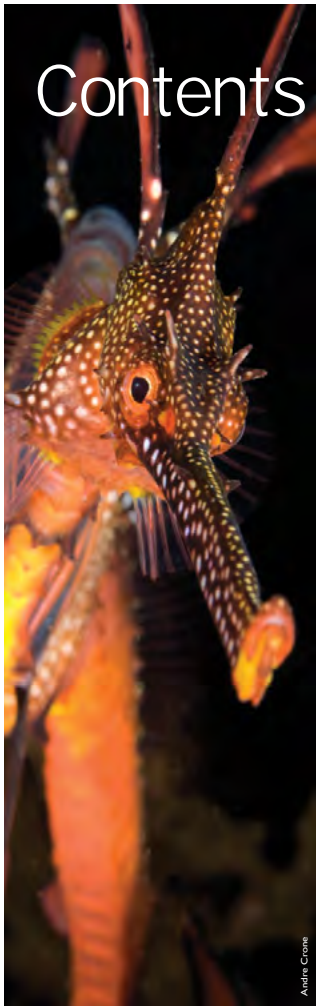
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THE DIVE SPOTS
of New South Wales

Graham Willis • Johan Boshoff

DIVE & SNORKEL GUIDE – TWEED HEADS TO EDEN



Contents

GENERAL

How to use this book	4
Map of Australia	7
About Australia	8
Map of New South Wales Regions	15
About New South Wales	16
East Australian Current	24
Environment	290
Travelling Tips	292
About the Authors	294
Index of Dive Spots	296
Acknowledgments	298
NORTH COAST	
About the North Coast	29
Tweed Heads & Cook Island	34
Byron Bay & Julian Rocks	44
Solitary Islands & Surroundings	56



South West Rocks	74
Lord Howe Island	84
Port Macquarie	92
Laurieton	96
CENTRAL COAST	
About the Central Coast	102
Forster & Seal Rocks	106
Port Stephens / Nelson Bay & Broughton Island	116
Swansea	130
Norah Head to Terrigal	140
SYDNEY & SURROUNDINGS	
About Sydney & Surroundings	150
Northern Beaches	
About the Northern Beaches	156
Palm Beach & Surroundings	158
Narrabeen & Surroundings	151



Manly & Surroundings	163
Sydney Harbour	168
Southern Beaches	180
About the Southern Beaches	183
South Head to Bondi	189
Bronte to Little Bay	196
Botany Bay	204
Cronulla & Port Hacking	210
SOUTH COAST	
About the South Coast	214
Wollongong to Kiama	228
Jervis Bay & Surroundings	246
Ulladulla	252
Batemans Bay	260
Narooma & Montague Island	272
Bermagui to Tathra	280
Merimbula to Eden	

The Dive Spots of New South Wales

3

Gear, books, software, apps and scuba diving gadget reviews.

Here is a chance for your diving gear, books, software, apps and gadgets to be reviewed. If you have anything that you would like to share with the OZDiver Magazine and other divers, send an email to Log Book at info@ozdiver.com.au.

OZ DIVER

Marine Species Guide

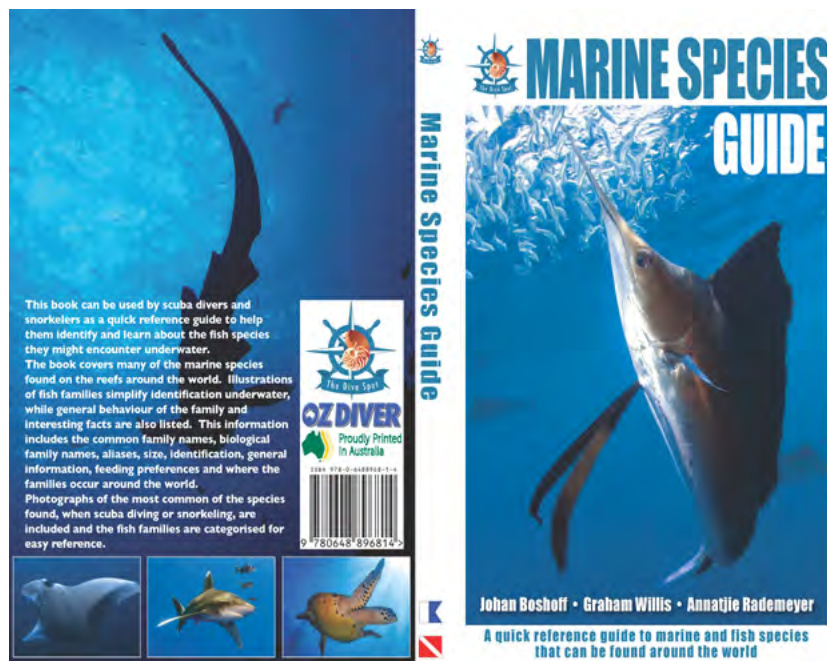
This book can be used by scuba divers and snorkelers as a quick reference guide to help them identify and learn about the fish species they might encounter underwater.

The book covers many of the marine species found on the reefs around the world. Illustrations of fish families simplify identification underwater, while general behaviour of the family and interesting facts are also listed.

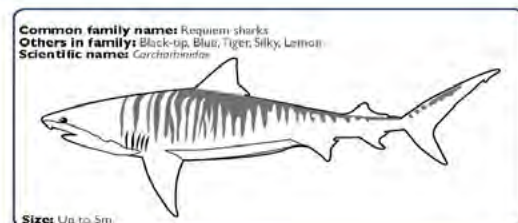
This information includes the common family names, biological family names, aliases, size, identification, general information, feeding preferences and where the families occur around the world.

Photographs of the most common of the species found, when scuba diving or snorkeling, are included and the fish families are categorised for easy reference.

To buy your copy for \$ 25, visit www.ozdiver.com.au or email info@ozdiver.com.au



Requiem sharks



Common family names: Requiem sharks
Others in family: Black-tip, Blue, Tiger, Silky, Lemon
Scientific name: *Carcharhinidae*

Size: Up to 5m

IDENTIFICATION
Tiger shark (*Galeocerdo cuvier*): Greyish upper body with distinctive darker 'tiger-like' stripes. Up to 5m long, average 3m.

Black-tip shark (*Carcharhinus limbatus*): Snout is pointed, long gill slits. Black tips on dorsal, pectoral, pelvic and caudal fins. Up to 2.8m long, average 1.5m.

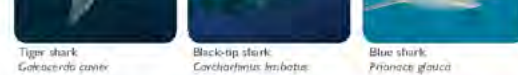
Blue shark (*Prionace glauca*): Long body, tapered at each end. Very long pectoral fins. Top of body darker blue. Tip of pectoral and anal fins are black. Up to 4.5m average 1.5m.

GENERAL INFO
Family consists of 12 genera and 59 species. The teeth are blade-like with a cusp. The sharks have five gill slits. They have a nictitating eyelid (third eyelid to protect the eye). Potentially dangerous.

FEEDING
Feeds on fish, seals, birds, smaller sharks, squid, turtles and dolphins.

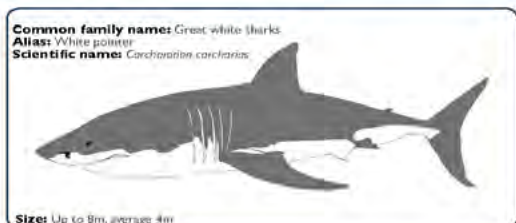
DISTRIBUTION
Widely distributed in all of the tropical oceans of the world.

Common species:



Tiger shark: *Galeocerdo cuvier*
Black-tip shark: *Carcharhinus limbatus*
Blue shark: *Prionace glauca*

Great white sharks



Common family names: Great white sharks
Aliases: White pointer
Scientific name: *Carcharodon carcharias*

Size: Up to 8m, average 4m

IDENTIFICATION
Large spindle-shaped body with a blunt, conical snout and large, triangular, saw-edged teeth. Large half-moon dorsal fin. Prominent black eyes. Lead-grey to brown or black above, lighter on sides, white below.

GENERAL INFO
Lamnidae family consists of 3 genera and 5 species. The Great white is the only surviving species in the genus *Carcharodon* - *Megolodon* is extinct. The Mako, Salmon and Porbeagle sharks also fall under this family. Upper and lower lobe of the tail is nearly the same size. Females are generally larger than males. Weighs up to 2,200kg. Ovoviviparous. Potentially dangerous.

FEEDING
They are carnivores and eat primarily fish, but are also opportunistic feeders. They will eat rays, dolphins, whales, seals, turtles, sea otters and penguins. Hunt with ambush technique.

DISTRIBUTION
Occurs in all subtropical oceans of the world.

Common species:



Great white shark: *Carcharodon carcharias*
Great white shark: *Carcharodon carcharias*
Great white shark: *Carcharodon carcharias*

Scubapro A2 Dive Computer

There is a saying "big things come in small packages" and that is what the Scubapro A2 Dive Computer is: a big computer in a small housing. I always fancied small dive computers and when it was time for an upgrade, I found exactly what I needed.

By Johan Boshoff

I needed a watch type computer that did everything I wanted it to do. I was looking for a dive computer for recreational scuba diving but that could also be used for my technical diving and the Scubapro A2 Dive Computer offered everything. From recreational diving to full technical diving and it even works for my rebreather.

The Scubapro A2 Dive Computer is a fully functional wristwatch-style dive computer with a high-resolution, hybrid matrix display with large numbers, making it easy to read underwater, even in adverse conditions, and even easier to use and navigate.

You can choose from six dive modes: Scuba, Gauge, Freediving, Trimix, Sidemount and CCR. Its Predictive Multi-Gas algorithm can accommodate up to eight gases (21-100% O₂) plus two in CCR mode. The digital tilt-compensated compass provides easy navigation underwater or on the surface. And when the diving is done, cord-free connectivity using a Bluetooth LE interface lets you easily sync with a PC, Mac, Android or iPhone, for data downloading and more. The A2 has wireless air integration which can handle multiple transmitters while monitoring tank pressure and providing true remaining bottom time based on a diver's workload from breathing. An optional heart-rate monitor belt allows the A2 to record heartbeat and skin temperature, providing even more vital, individualized information that can be factored into your decompression calculation.

Features

- Wireless air-integration can handle multiple transmitters, monitor tank pressure and provide true remaining bottom time (RBT) calculations based on the workload from breathing
- Digital tilt-compensated 3D compass allows for easy navigation
- Predictive Multi-Gas ZH-L16 ADT MB algorithm accommodates eight gases (21-100% O₂) plus two in CCR mode
- PDIS (Profile Dependent Intermediate Stops) calculates an intermediate stop based on N₂ loading, current and previous dives and breathing mixes for better diving
- Microbubble levels let you adjust the level of conservatism in the algorithm to match your experience level, age and physical conditioning
- Heart rate monitor records heartbeat and skin temperature (with SCUBAPRO HRM Belt only) that can be factored into the decompression calculation along with workload
- Multiple Dive modes: Scuba, Gauge, Apnea, Trimix, Sidemount, CCR
- Sport mode offers sport-related functions like a swim stroke counter, activity counter (pedometer) and stopwatch
- High-resolution hybrid matrix display with large numbers is easy to read under water, even in adverse conditions
- Intuitive menu and four button controls make it easy to navigate through the system
- Lightweight design is so comfortable on the wrist you won't want to take it off
- Modern design with full watch functions is perfect for topside time-keeping as well as underwater data tracking
- Max Operating Depth: 394ft/120m
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- CR2450 battery is rated for up to two years/300 dives
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- Optional equipment: Transmitter and heart rate belt



If watch type dive computers is your thing, then this one is for you.

The Eloquence of the Sardine

Humans have identified just a fraction of the 2.2 million species living in the sea. Roughly 91% of all marine species remain unknown: myths still to be written, discoveries still to be made, blank pages with room to dream . . .

In the book *The Eloquence of the Sardine*, already translated in 17 languages and released in August in Australia, french biophysicist and diver Bill François takes us on a global underwater tour to discover the secret life of fish, with a host of fun facts and amazing discoveries.

As a small boy, Bill François was frightened of deep water. Until a chance encounter with the elusive sardine set him on course for a life in marine science: a mission to better understand and preserve the underwater world, to find his place in that ecosystem and learn how to converse harmoniously with the ocean.

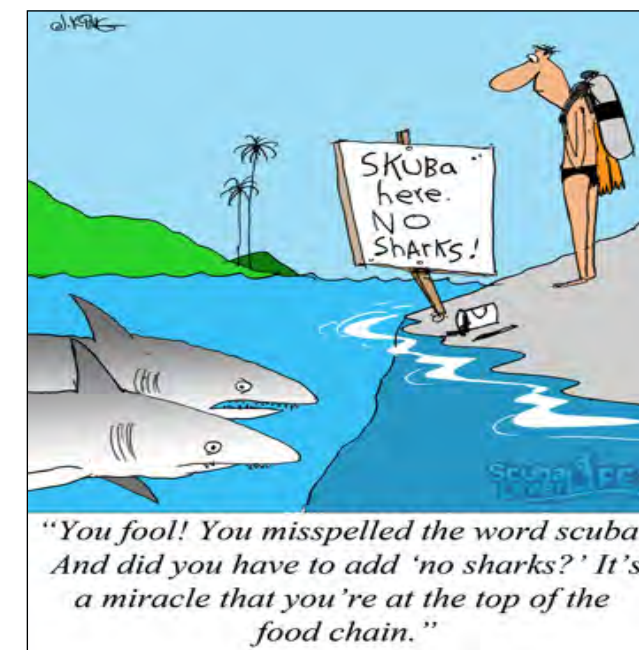
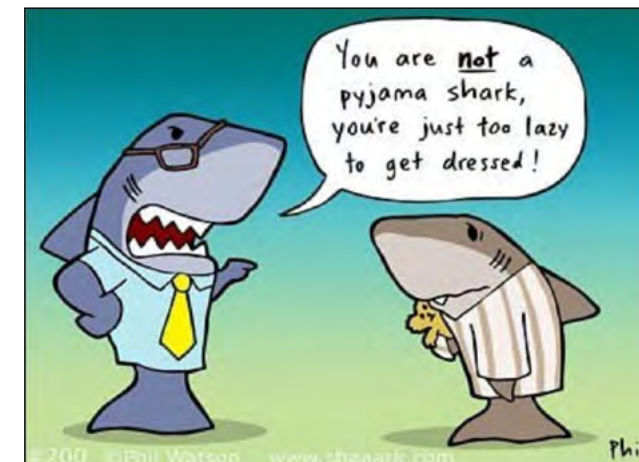
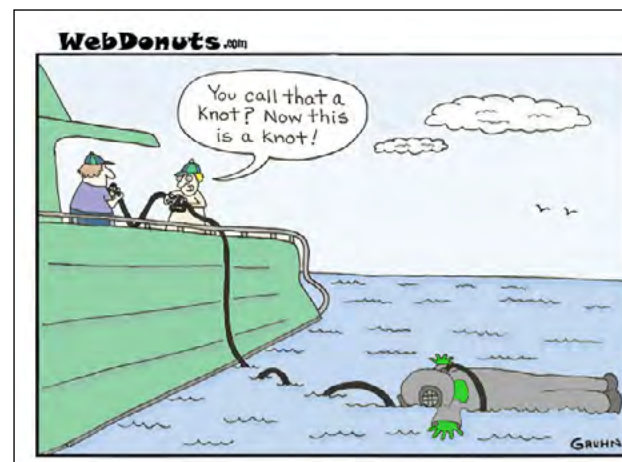
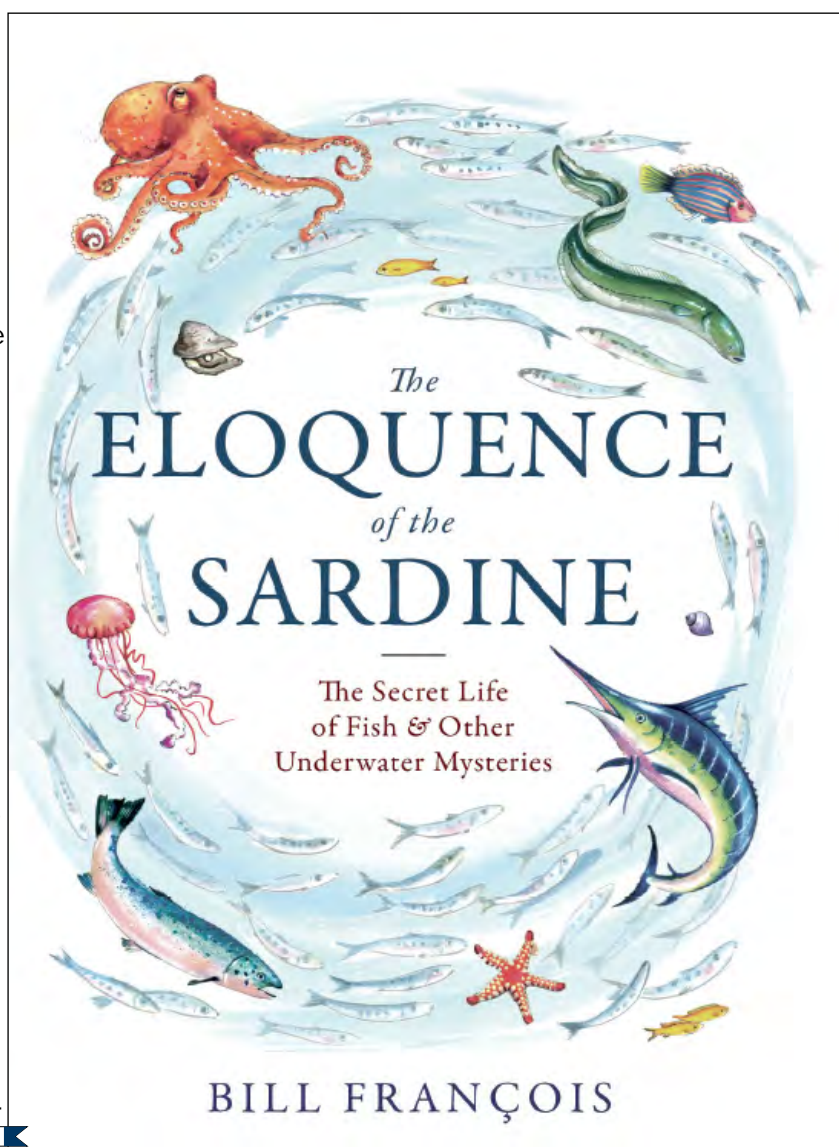
This is the beginning of a journey full of life and discoveries, vibrantly told in this small book of narrative nonfiction.

François unpicks the sound of the sea – an underwater symphony orchestra voiced by a choir of fish – and deciphers the latest scientific discoveries on the immunity of coral and the changing gender of wrasses. We visit the depths of underwater Paris as François delves into the mysterious world of the eel, and explore an extraordinary three-generational friendship between humans and killer whales, and the role a shoal of herrings played in Cold War tensions.

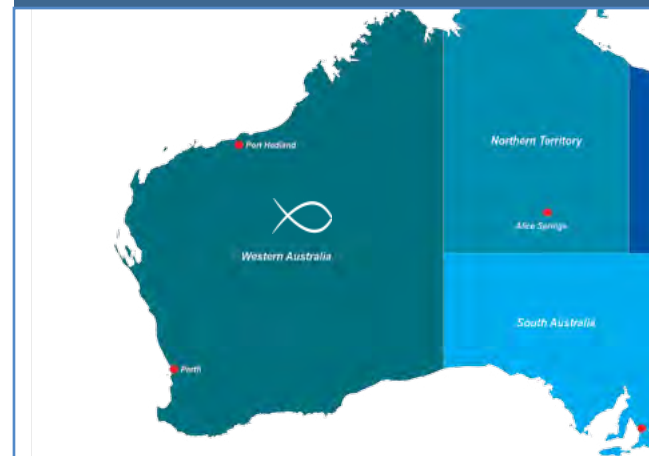
Drawing on history, myth and legend, but always grounded in science, *The Eloquence of the Sardine* will change the way you think about the sea in a poetic way. This book is aimed for all the ones who love the ocean and are curious about it: divers, sailors, fishos... Even experts in marine biology should find some original facts in it.

But it will also open the eyes of those who don't know this universe yet. It can thus be a nice present to introduce your friends and relatives to your passion for the underwater world.

The Eloquence of the Sardine – Bill François
Release date: Aug. 31st 2021
Editor: Little, Brown
<https://www.hachette.com.au/bill-francois/the-eloquence-of-the-sardine-the-secret-life-of-fish-and-other-underwater-mysteries>



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Mail: steve@ausdivinginstruction.com.au

Web: www.ausdivinginstruction.com.au

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Web: www.baycityscuba.com

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New South Wales



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Mail: john@frogdive.com.au

Web: www.frogdive.com.au

Southern Cross Divers



Southern Cross Divers is best known for rebreathers and "tec" diving – we do nothing else but "tec". We will not stock a unit unless we can offer the customers a complete solution to all their CCR needs. We are Australia's CCR specialist store.

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Web: www.southerncrossdivers.com.au

Erina

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South West Rocks Dive Centre



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