NZ Dolphin Underwater & Adventure Club Newsletter September 2020

Club Meeting: September 2020 Cancelled Club Rooms : <u>Not open</u>

Guest speaker: Nil

www.dolphinunderwater.co.nz



Club's Mail Address: 14 Gails Drive Okura RD 2 Albany



Club Contacts Phone numbers & emails Committee listing inside

COMMITTEE MEMBERS: 2020/2021

President/Editor	Denis Adams	<u>0278 970 922</u>	da.triden@gmail.com
Secretary/Treasurer	Margaret Howard	0274 839 839	marg.howard@xtra.co.nz
Sec/Treasurer backup	Trish Mahon-Adams	444 0501	t.triden@gmail.com
Committee	John Freeman	021 983 610	john@witblitz.net
Web Site	Matt Gouge	021 0777 282	mattgouge@gmail.com
Dive Trips Organiser	Vacant – Note any Club member is welcome to arrange one		
Adventure Trips	Martin Saggers	410 2363	saggersmar1@orcon.net.nz
	Kate Ellis	410 2363	kate65nz@orcon.net.nz
Entertainment	Tom Butler	624 3505	trbutler@xtra.co.nz
Life & Honorary Members			
Barry Barnes – Life	Peter & Margaret Howard – Life		Brian Horton – Life

Barry Barnes – LifePeter & Margaret Howard – LifeBrian Horton – LifeReg Lawson - LifeRoberto Tonei – LifeDave Quinlan – LifeGraham Thumah – HonoraryTony & Jenny Enderby - HonoraryEileen Slark – Honorary

Cover Page Photo:- Almost camouflaged in Tonga by Denis.

What's on our coming agenda?

9th September – Wednesday – <u>Cancelled</u> (limit of 10 & unknown number may attend)– Dive Club Meeting

14th October – Wednesday – 7pm – Club BBQ – Dive Club meeting - NSCC - Northcote Rd Ext.n

Postponed tbc - Group going to Rarotonga - Diving, snorkelling trip - contact Margaret if keen to join in.

You will need to contact the shops

Upcoming Trips with Performance Dive NZ you may be interested in 2020 - Ph. 489 7782

Sun– 8:30am 13th Sept – Local boat dive departing Takapuna or Omaha

Sun-8:30am 27th Sept – Local boat dive departing Takapuna or Omaha

<u>Upcoming Trips with Global Dive you may be interested in 2020 - Ph. 920 5200</u>.

Sat 12th Sept – Poor Knights Is. Day Trip w/Yukon Dive

Sat 19th Sept – Poor Knights Is. Day Trip w/Yukon Dive

Sun 20th Sept – Poor Knights Is. Day Trip w/Yukon Dive

Mon 21st Sept - Poor Knights Is. Day Trip w/Yukon Dive

Sat 26th- 27th Sept – Bay of Islands Weekend

Other events & suggestions please contact a committee member or organise it yourself & get the club to make up your numbers. i.e. – Dives, trips NZ & O'Seas, Events, Outings, Tramps, Dinners, Movies, whatever social event tickles your fancy.

Our Club's Trip Rules (Organiser's rules apply for overseas trips)

- A. Bookings allowed on all trips. *Two trips & club membership is a must.*
- B. A deposit or full payment to be made at time of booking.
- C. Full payment <u>MUST</u> be paid at least two weeks before departure date.

- D. Trip Organiser to handle trip & bookings, & Treasurer to handle finances. Cancellations due to weather will be refunded in full, or transferred to another trip.
- E. Members cancelling for any reason will lose full monies unless they find a replacement for their position on the trip.
- F The trips Organiser will determine if there are enough people to run a trip & if not will notify cancellation two weeks prior to departure.

Non-Members & non-financial members will be charged an extra \$10 on trips.

Membership: Single – \$40 Family - \$50.00

see Margaret or Trish next meeting or do it online.

Club's Internet bank account is 06 0122 0074227 00 & don't forget to put in your name or cheques posted to Club's mailing address, (front page).

Club Membership also includes Affiliation to the New Zealand Underwater Association

Have you paid your subs yet, quite a few have not!

Divers face long-term health impact from COVID-19

By Michael Klein April 24, 2020

Doctors and scientists are learning every day about the harmful effects of COVID-19. The long-term impact of the disease on recovered patients is only slowly emerging.

First indications paint a devastating picture for a number of divers, who had seemingly recovered from the lung disease.

Dr. Frank Hartig, a senior physician at the University Clinic Innsbruck in Austria, has treated six divers who were infected with the coronavirus but had suffered only mild symptoms. None of the six had to remain in hospital and all recuperated at home.

Although all six patients were deemed clinically recovered, the long-term damage to their lungs appears irreversible, Hartig told Austria Press Agency.

CT scans of the patients' lungs revealed such an extent of damage that it makes a full recovery unlikely.

"This is shocking, we don't understand what's going on here. They are probably lifelong patients," he said.

Two of the six patients exhibited irritable lungs, similar to asthmatics. Two patients suffered a lack of oxygen supply indicative of a persistent pulmonary shunt. And scans of four patients showed significant changes to their lungs.

The images were so at odds with the healthy-looking patients sitting in front of him, Hartig said in the interview, he had to double-check with the X-ray department that the files had not been mixed-up.

The extreme cases prompted Hartig, an avid diver himself, to write an article for German-language dive publication *Wetnotes* to warn divers of the potential long-term health damage of the coronavirus.

In the article, the head of the accident and emergency department at the clinic in Innsbruck advises that divers who have contracted COVID-19 in the past must consult a dive physician before entering the water again, even if they only had mild symptoms.

Hartig said it is now certain that patients who feel fully recovered can still suffer from severe effects of the lung disease weeks and months later, prohibiting diving and many other forms of exercise.

Professional divers, like dive instructors or commercial divers, should do everything they can to avoid a coronavirus infection, he wrote.

One particular problem in severe cases appears to be related to the treatment with oxygen. In his article, Hartig outlines how many patients who were given oxygen saw their blood levels initially improve, only to suffer lung failure a short time later, forcing a transfer to the intensive care unit. Many doctors have the feeling that oxygen causes a cascading domino effect, he said.

Sensitivity to higher oxygen levels after COVID-19 can become a problem for divers who are using nitrox. This mixture of nitrogen and oxygen, sometimes called enriched air, uses a higher share of oxygen than in regular air, typically 32% to 36% compared to the regular 21%, to reduce some of the side effects of breathing nitrogen under water.

Scientific studies confirming these limited clinical observations are not expected before next year.

Local diver finds '14 Just Eat bikes' dumped in Water of Leith under bridge at the end of a busy cycle path

A local diver says he counted 14 Just Eat bicycles dumped in the Water of Leith today beneath a bridge as he searched for a pal's bike which had been nabbed by a group of kids and thrown in there.

By Jamie McKenzie Tuesday, 30th June 2020, 5:31 pm Updated Tuesday, 30th June 2020, 5:32 pm



Shane, pictured by the Sandport Place bridge and Water of Leith. Picture: Hilary Thacker/ Friends of the Water of Leith Basin. Shane, pictured, says he counted 14 Just Eat bikes while diving for his friend's bicycle. A group of 'magnet fishers' also pulled out an old safe from the water last week. Pictures: Hilary Thacker/ Friends of the Water of Leith Basin

The fully certified diver, called Shane, said he was "shocked" by how many bikes he found in the water beside the Sandport Place bridge in Leith.

The 26-year-old said he was initially helping out a friend who works for Deliveroo who had his bike taken a couple of weeks ago while out delivering an order - and when he caught the youngsters in the act they dumped it in the water.

After seeking permission from the city council and Forth Ports, Shane went in to find it on Tuesday morning - and he reckons he counted 14 different Just Eat bicycles in the water.

The diver, who lives in Inverkeithing, said: "I was quite shocked to come across them. I just kept thinking, 'wait a minute, is this right? Am I really seeing what I am seeing?"

As well as the Just Eat bikes, Shane found other bicycles and scooters in the water which he said was about 15 metres deep in the middle section - and he unexpectedly came across a salmon at one point.

Shane says his friend's bike was very dirty but still in a usable condition after he hauled it out with some assistance today.

Wildlife concerns

Hilary Thacker, who runs Facebook group Friends of the Water of Leith Basin, spoke with Shane today after he had been diving and shared some pictures of him all kitted out on social media.

She said that, as this location marks the end of a main cycle path, people might see it as a convenient place to dump the bikes.

She highlighted that the metal from the bikes will disintegrate over time and pose a threat to wildlife, and questioned how many of these bikes have been dumped in other parts of the Water of Leith.

HIlary also said that an old safe was recovered from the Water of Leith a few days ago, close to where the bikes were found, by some 'magnet fishers' - but it only contained a few old 5p coins.

Shane, who has been diving since the age of 12, said he planned to head back to the Water of Leith on Tuesday afternoon to try and retrieve a second safe which they had apparently detected.

He has sent an email to Just Eat about the latest bikes discovery and the company has also been contacted by the Evening News to see if they are aware.

By Land or by Sea – Shore vs Boat Diving

By Adan Banga August 11, 2020

Images courtesy of Robert Stansfield

When we go diving, our choice of site is often greatly influenced by the means we have available for reaching it. The reverse can also be said to be true, how we reach the site may be influenced by where it is. For certain kinds of diving, such as at inland sites and cave diving



sites, the diving will almost always be "shore" based, in that we simply walk into the water once we reach the site. For ocean-based sites, especially those that are within a couple of hundred meters of shore, there may be a choice to be made between a shore entry or a boat entry.



Sites more than a few hundred meters from shore and remote islands will almost always be reached by boat. Depending on how you reach your dive site, there are considerations that need to be taken into account. These range from your own personal comfort level with how you will reach the site to what logistical choices you may need to make.

I would wager that most people's first open water dives were done from the shore. Shore diving is a great way to simplify the process of getting into the water, due to the fact that it cuts out the need for taking a boat to the site. For any diver, especially the less experienced, the added element

of kitting up on a rocking boat can make the experience more stressful. In any areas which have the option of a beach entry, as many good diving destinations around the world do, shore entries are often simple to carry out. In some areas though, your first dives may still have been off a boat. I completed my PADI Open Water course in the Florida Keys, where much of the coastline is mangrove forest. As such, my first two open water dives were actually boat dives. This is less common in most locations. While shore entries are generally looked at as being simpler, there are definitely cases where they are more challenging, and a range of factors may make you reconsider whether it is a sensible entry choice.

Terrain is potentially the largest factor in whether attempting a shore entry is desirable. Even if there is easy access on foot to a bather, when encumbered with dive gear this can become a very different story. In areas such as the south-west of the UK and further afield in places like the Canary Islands, much of the coast is rocky cliffs or boulders with coves which allow access to the water. Reaching these coves can often be a daunting task. Some have good paths or winding roads leading down to them, while others may simply have a rough trail. Any coast which is primarily cliffs often share the same problem of it being a steep descent to the beach and a hard ascent back up to where you left your vehicle.



You then might have the added challenge of the beaches being boulder rather than sandy, due to them being made up of rocks which have fallen from the surrounding cliffs. These can make for some interesting journeys across the tidal zone to the water if you don't time your visit right. Add all these factors together and throw in a set of dive gear, and you have a high amount of faffing around to complete before you even get in the water. In hot climates this can be particularly hard. The risk of somebody getting hurt before you even reach the water is a real one. To avoid injury, it is often best to use some slightly different equipment. Rock boots are designed for shore diving, and have a much more substantial sole for crossing jagged terrain with weight on your back. Owning a drysuit with these integrated or a standalone pair of neoprene rock boots is essential for safer shore diving.

Building on from this is that while these shore entries may be suitable to one diver, they may be impossible for another. The less able bodied would have a very tough time or simply not be able to attempt some of the shore entries in rougher terrain. Even people who have full functionality need a good level of fitness and strength to handle shore entries in areas where the walk from the car park to the sea may be long, steep, or awkward. When

diving with generally fitter divers, this may not be much of a consideration, but when diving with a broader range of fitness levels, it may be best to accommodate to the needs of the individual that will have the hardest time.

When I first started UK diving, I was not particularly fit and decided to tag along on a club dive to Long Quarry Point near Babbacombe in Devon. It is one of these ideal secluded coves, but is a long steep walk from the car park above. We did this on a warm summer evening and decided to get into our dry suits at the car park rather than at the beach. By the time we were done lugging our kit down there, the guys I was diving with were looking at me as if I was about to spontaneously combust. I felt very faint and had to splash around in the water for a while to cool off before donning the rest of my kit. I suppose this is one of the downsides to diving somewhere that the air temperature can be drastically warmer than the water you will dive in. In more recent years, I have known club members who would struggle to walk more than a few meters while wearing their kit, let alone ascend 200m up a steep hill after an hour long dive. Fitness is a real potential limitation to shore diving, and one that should not be neglected if the entry may be a challenging one.

Shore dives of this nature are often limited to single cylinder recreational diving, carrying multiple cylinders or a rebreather up and down a cliff for technical diving would be a reckless exertion before and after decompression diving.



Boat diving is often the preferred choice in many locations as it cuts out the need for lugging equipment across difficult terrain. You may still have to struggle with getting your gear to the boat, but once you are on board, it's usually pretty hassle free until you reach the dive site. Of course, actually kitting up and getting into the water off a boat can be a bit more challenging, especially if there is swell or chop, but you are not faced with the same fitness challenge as the previously mentioned shore diving scenarios. For those that aren't so fit, there is often even the option to remove your kit at the end of the dive and pass it up to the boat crew, allowing you to climb out of the water without the extra weight

dragging you back. Some boats even have lifts installed which will remove a fully kitted diver from the water and up to deck level with no issues.

For those that are technical divers, boats are a far better option due to the short distance one needs to move while wearing the especially heavy equipment compared with shore diving. It is very easy to injure oneself or someone else if you fell over wearing the often 50+ kilos of tech gear. The other major advantage to boat diving is that if a diver is struggling to get back to the boat for whatever reason, the boat is able to come to them to assist them (as long as they are easily visible to the skipper). In many areas such as on offshore reefs, boat diving is the only option, and in marine reserves there are often anchoring restrictions meaning your boat will likely try to follow you from the surface and locate you when you surface. This minimizes the time spent with your equipment on where you aren't actually diving.

Boat diving does have some problems, notably that it is adversely affected by weather conditions on the surface. It is sometimes the case that while the conditions at depth are good, the surface conditions and top of the water column may not be ideal. This can cause issues ranging from simply being a bit uncomfortable on the boat ride out the site, to making entry, safety / decompression stops and exit difficult or dangerous. Sometimes if the weather is forecast to deteriorate over the duration of an upcoming dive, a skipper may decide to cancel it and head back to harbour. While it may be relatively flat when you enter, if high winds arrive while you are diving, you may surface to a very choppy scene. This can make exiting challenging, especially if winds are pushing the boat one way while currents are carrying divers in another. Boats having to reposition with their propellers while divers are in close proximity is never an ideal situation.

Spending a long time on the surface or on deck in chop can have another unfortunate consequence, that being seasickness. I would say any diver that has spent significant time boat diving has felt sea sick or been sea sick at least once or twice. Luckily you can remedy this in many cases by simply taking some dive safe, over the counter

medication on the morning you are due to boat dive and remembering simple tricks like watching the horizon while taking slow, deep breathes. Chop can also move equipment around on deck if it is not stowed properly, and even when it is, extreme chop may move it anyway. In most cases you won't be out in these kinds of conditions, but the odd freak wave is possible in lighter chop. This can be quite alarming when a 23kg cylinder comes lose and careers across the deck towards an unsuspecting foot. Good skippers are usually aware of how their boat handles in a range of conditions and will let you know whether you need to be particularly aware of loose gear beginning to move.

Both shore and boat diving have their merits, and in many situations, it will simply be a case of whatever is the best way of reaching the site you are diving at. In the bulk of scenarios, boat diving is the preferred choice of many divers as it allows access to a much broader range of sites, and when conditions are ideal is an enjoyable experience being out on the boat itself.

Shore diving might still be necessary to reach certain sites, and is often a good way to get some experience before heading out to deeper boat dives. The choice between the two is therefore quite situational, but it is important to bear in mind the extra measures you may need to take for one over the other. The scenarios mentioned are here by no means an exhaustive list, but they are often those that affect unprepared divers in the greatest capacity. Given time and experience, most divers will learn what they are capable of and happy with when it comes to reaching their dive site.

When Am I Ready to Dive with an Underwater Camera?

Here's How to Know When to Take the Leap By Brent Durand June 21, 2019

Practicing buoyancy skills is essential to ensure you don't harm delicate corals while shooting.



Brandon Cole

Scuba diving opens up a mesmerizing world that feels foreign and yet familiar at the same time. Naturally, we want to share this experience with friends as soon as we get out of the water. It's a part of life. But underwater it's much more complicated, and safety becomes a primary concern.

There are a number of factors to consider before starting underwater photography and video, each of which will not just keep you — and your dive buddy, and the reef safe, but help you create better imagery.

Log Your Hours

Spending time diving without a camera helps make key skills second nature. For example, which arm do you use to release air from your BC? Can you grab your SPG in one swift movement without fiddling around? Can you estimate remaining air before checking? Practicing these skills is essential so that you stay safe when you have a camera in your hands and the excitement meter pushes toward 11.

Start with a modest camera, then invest in your lighting and arm-clamp system.



David Fleetham

Master Fundamental Techniques

Excellent buoyancy, body position, and avoiding hand use are also key skills. The last thing you want is to set up for a photo then crash into delicate corals, ruining decades of fragile growth.

Precise control of your body position also will help you create better photos and video. This is because great photos are carefully thought out and composed, which takes time hovering in one position. Video is even more challenging because you need to be completely stable to record steady footage.

Try diving in a horizontal position with your knees bent at a 90-degree angle. Frog kick to slowly move forward, pivot, and even move backward. Not only will you have great control of your positioning for the shot, but you will not kick up a backscatter-inducing sand cloud. Your buddies will thank you, and experienced divers will be more open to showing you cool critters that are hidden to the untrained eye.

Many action cams on the market offer accessories, such as mask or hand mounts, that can help reduce your distraction while diving. Francesca Diaco



Start Small

Smaller cameras deliver excellent image quality at an affordable price. If you dive frequently and really want to make underwater photography and video a hobby, start with a modest camera, then invest in your lighting and arm-clamp system. Your wallet will thank you, and when you do start pushing the camera's limits and want to upgrade, your lighting will carry over to the new system.

Immerse Yourself

Like most hobbies, you will learn the most by shooting as frequently as possible. Look for a dive resort or liveaboard with a resident photo pro or join a professional photo workshop to quickly increase your skills in a seven- to 10-day period.

Be sure to write down your favorite settings and techniques at the end of your vacation. Read over these and practice before your next trip so that you don't spend valuable dives relearning settings.

Improving your videos and photography can be a lifelong pursuit, as long as you stay safe and enjoy the underwater world on each dive.

Scientists Create Underwater Internet

First there was Hi-Fi, then Wi-Fi. Get ready for Aqua-Fi. By Melissa Smith September 6, 2020

Checking your notifications on a dive or live-streaming from the reef may not be such a far-off reality thanks to an underwater internet dubbed "Aqua-Fi."

Developed by researchers at the King Abdullah University of Science and Technology (KAUST) in Thuwal, Saudi Arabia, Aqua-Fi uses a combination of lasers and existing computing technology to connect devices to the internet more than 30 feet underwater.

With the new technology, researchers were able to place a brief Skype call from a waterproof smartphone, using a standard Wi-Fi signal to connect to an underwater modem.

The modem is a Raspberry Pi computer, which is about the size of a credit card. It converts a wireless signal to an optical laser signal, which then is beamed to a receiver attached to a surface buoy. This creates a bi-directional wireless connection.

In order for Aqua-Fi to keep a constant connection, the lasers have to stay aligned with the buoys and have power banks to store their energy. Because of strong waves and currents, lasers can easily be knocked off their alignment. The team is currently looking into options to make the signal more reliable, Bassem Shihada, an associate professor of computer science at KAUST, tells TechRepublic.



Lasers aligned to receivers strapped to surface buoys allowed researchers to briefly Skype underwater.

2020 KAUST; Xavier Pita

Although commercial application of the technology is still a ways away, the team says it is making strides toward being able to deploy a reliable connection for underwater data centers and ocean conservation efforts.

The technology has many potential applications, including underwater robotics, marine life studies and live monitoring of pollution, environmental factors, ocean temperatures, natural disasters and underwater structures such as oil rigs.

Because Aqua-Fi is Wi-Fi based, it can also transfer GPS coordinates of underwater devices, Shihada says. Without an internet connection, GPS signals can't penetrate seawater, so this opens up a whole other realm of geographic information system (GIS) and other mapping possibilities.

"In 2019, we talked about connecting everything with everything, and we put together a vision on how to connect the underwater devices with the internet. Aqua-Fi will be the main element for the futuristic internet ... where it will connect underwater stations, divers, autonomous vehicles, etc. with the terrestrial networks," Shihada says. "The future of Aqua-Fi based network will be a scalable, flexible, and efficient communication solution for and with the underwater environment."

https://www.facebook.com/itsliveocean/

TAKE PHOTOS & VIDEO

FOCUS ON IDENTIFYING MARKS; LEFT SIDE OF THE HEAD AND FULL LENGTH OF THE BODY



THIS WINTER YOU MAY SEE SOUTHERN RIGHTS, HUMPBACKS, BLUE WHALES OR SPERM WHALES...

DATE TIME LOCATION

INCLUDE GPS COORDINATES AND THE DIRECTION THEY WERE TRAVELLING...



STAY 50 M AWAY AND OPERATE AT A NO-WAKE SPEED WITHIN 300 M



ALWAYS COME FROM A DIRECTION THAT IS PARALLEL AND SLIGHTLY FROM THE REAR

North Shore Scuba Centre PERFORMAN Air Technology Limited NZ Ltd HIGH PRESSURE COMPRESSOR SPECIALISTS John Haynes **HASAN SOYKAN** Dive Shop Manager 72 Barrys Point Road, Takapuna Auckland, New Zealand Phone: 64-9-489-7782 Fax: 64-9-489-7783 Email: sales@performance-diver.co.nz Website: www.performance-diver.co.nz



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Stay Safe All - remember the rules & pay your Subs please

Any articles from any club members are always welcomed