

# **NZ Dolphin Underwater & Adventure Club Newsletter August 2020**

**Club Meeting: Wed 12<sup>th</sup> August 2020**

**Club Rooms : 7:00pm**

**Guest speaker: Club Mid-winter BBQ**

**[www.dolphinunderwater.co.nz](http://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

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

### Life & Honorary Members

Barry Barnes – Life	Peter & Margaret Howard – Life	Brian Horton – Life
Reg Lawson - Life	Roberto Tonei – Life	Dave Quinlan – Life
Graham Thumah – Honorary	Tony & Jenny Enderby - Honorary	Eileen Slark – Honorary

**Cover Page Photo:– Peter & Trish with buckets of rubbish from their foreshore clean-up by Denis.**

### What's on our coming agenda?

**12<sup>th</sup> August – Wednesday – 7.00pm – Dive Club Meeting – NSCC - Northcote Rd Ext.n –Mid winter BBQ**

**Tbc 21<sup>st</sup> – 30<sup>th</sup> August 2020 – Club Trip to Fiji** — For divers and non-divers. We had such a wonderful trip to Tonga – we want to do the same in Fiji. We have had a number of Club trips to Fiji in the past, we will be diving and visiting different areas this time, **Check with Margaret if the date has changed.**

**5<sup>th</sup> September to 15<sup>th</sup> September - Kermadec Islands Trip** on the 'MV Braveheart' sharing with Mount Maunganui Club, leaving from Tauranga. There has been plenty of info sent out in the past on this trip. September is a far better time as we will see the **humpback whale** migration at this time of year. Five Members from the Dolphin Club are on this trip Chris Nipper, Margaret Howard, Allan Dixon, Laurie Wright and John Herring. There are still two places available if you are keen on the new dates contact Steve Grant 0276583599 or [steven@holmesbearings.co.nz](mailto:steven@holmesbearings.co.nz)

**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 16<sup>th</sup> August – Local boat dive departing Takapuna or Omaha
- Sun– 8:30am 23<sup>rd</sup> August – Local boat dive departing Takapuna or Omaha
- Sun– 8:30am 30<sup>th</sup> August – Local boat dive departing Takapuna or Omaha
- Sat- 9:00am 5<sup>th</sup> Sept – Shore Dive
- Sun– 8:30am 6<sup>th</sup> Sept – Local boat dive departing Takapuna or Omaha

*Upcoming Trips with Global Dive you may be interested in 2020 - Ph. 920 5200.*

- Sat -29<sup>th</sup> August – Poor Knights Is. Ladies Day
- Sat 12<sup>th</sup> Sept – Poor Knights Is. Day Trip w/Yukon Dive
- Sat 19<sup>th</sup> Sept – Poor Knights Is. Day Trip w/Yukon Dive

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

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

Sat 26<sup>th</sup>- 27<sup>th</sup> 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 **MUST** 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!**

### **Difference Between Freediving and Snorkelling**

Written by Sophie Gaze



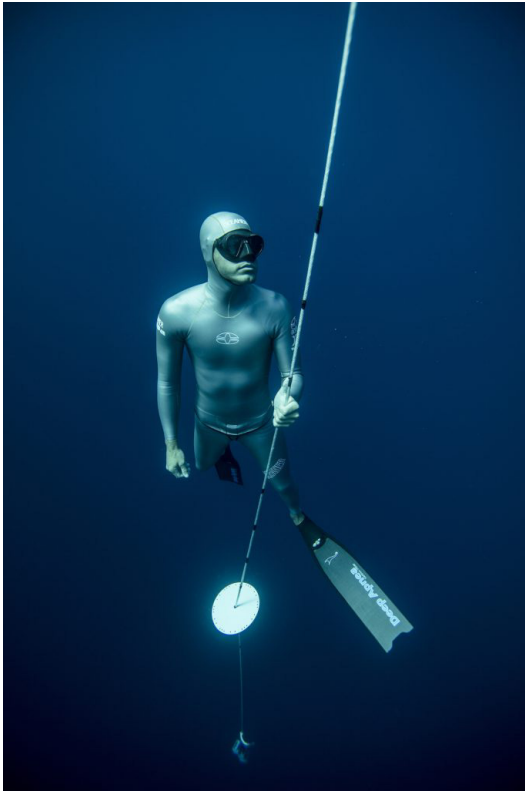
I caught the freediving bug, without knowing it, when I was a newly certified [PADI Open Water Scuba Instructor](#) working in Hawaii. One of my salty-dog co-workers told me that once I had mastered the recreational world of scuba, the next phase would be to “lose the tank.” He was referring to the alluring world of freediving, which had not yet been commercially developed. At the time, my scuba ego was quite inflated and I disagreed with him. I considered myself a proficient snorkeler and I could skin dive to about 20 feet to set a mooring line. I was already a freediver in my opinion.

I did not revisit the matter until many years later when one of my job requirements was to film underwater video on a breath hold dive. I wanted to be good – like really good – so, acting on impulse, I signed up for my first freediving course down in South Florida. I was hoping to extend my bottom time, but not really expecting to take away much else from it. I quickly learned that snorkelling and freediving were about as



comparable as parasailing and skydiving: the former, a leisurely activity that can be enjoyed after a few cocktails by the pool on holiday, the latter, an extreme sport that requires training, concentration, and technique.

As the sport of freediving increases in popularity, the once blurry line between the recreational worlds of snorkelling and freediving is becoming more defined. The two are not one and the same, and that misconception could ultimately cost someone their life.



For me, snorkelling has always been a laidback activity that I participated in while on holiday with my family at the beach or on a boat trip. I think I put my first mask and snorkel on before I was even potty-trained. Snorkelling can be enjoyed by those of all ages, requiring minimal equipment and training in exchange for the incredible chance to gaze into the underwater world. This activity calls for basic knowledge of the importance of buddy pairs, how to respect marine life, and how to evaluate ocean patterns such as tides and waves. Snorkelling equipment ranges from affordable masks, fins, and snorkels that you can find at department stores, to more sophisticated equipment manufactured with high quality, long-lasting materials. Buoyancy compensation vests are also optional and can make an uncertain swimmer feel more comfortable in the water. Not all snorkelers necessarily want to become scuba divers or freedivers.

Let's return to my Hawaiian colleague's "losing the tank" concept for a moment. Freediving is an extreme sport where the diver performs a dive on one breath without surfacing. This sport is pursued by daring enthusiasts for a number of reasons, one being competition. Freediving competitors are the extraordinary men and women who push their personal limits by holding their breath longer and diving deeper. Freediving is appealing to the competitive spirit because at the end of

the day, the only person you're competing against is yourself. And, whether your last dive was to 60 feet or 200 feet, it's still an accomplishment every time you break a new personal best. And some, like myself, simply enjoy the relaxing sensation of being underwater, the freedom of minimal equipment, and the proximity to marine life that freediving allows.

Unlike snorkelling, freediving requires extensive training, both in the classroom and in the water. Sure, anyone can put on a mask and fins and dive down below the surface, but the knowledge of what is happening to your body as you make that move could be the deciding factor between life and death. Before I even set foot in the water, I knew I was in way over my head just from the classroom sessions of my first freediving course. Students are introduced to the fundamentals of breathing techniques, physiology, and safety in order to be successful once you hit the pool.

Whatever the objective, freediving must be taken seriously and requires training before attempting to dive. The [PADI Freediver](#) course is recommended for ages 15 and up, and requires mask, snorkel, fins, and you may also use a wetsuit and weight belt. The risks and hazards are also more serious than snorkelling, and therefore safety is the most important component of a freediving course.

Most divers take a freediving course with the single hope that they will extend their bottom time, but they will also gain lifesaving knowledge. Without following the safety protocol, what could have been a simple rescue with the proper training, could escalate into a serious emergency without proper training. Fortunately for freedivers, the rudimentary safety techniques are quite simple and, if followed correctly, educate participants on how to swiftly rescue their buddy in times of trouble.

While the risk is greater in freediving compared to snorkelling, the reward is equally increased. For me, there is no feeling more liberating than immersing yourself in the sea with minimal equipment and exploring the underwater world from a perspective that makes you almost feel a part of the aquatic life surrounding you. Freediving is a challenge certainly, but with the proper training and safety measures, it is an experience like no other.



Some more photos of clean-up day & EMR training day combined.



Not as much rubbish as usual but it was only a shoreline sweep.



EMR had very good attendance with several club members participating also.

## 11 Important Steps in the Evolution of Diving Suits

Here are some of the most important milestones their history. By [Christopher McFadden](#) June 21, 2020



[Sea TREK/Twitter](#), [Soljaguar/Wikimedia Commons](#)



Diving suits have enabled us to explore the deepest ocean depths. Initially developed to reclaim lost items from sunken ships or inspect ship's hulls, they have since opened up new possibilities for ocean exploration.

## What are some of the major milestones in the evolution of the diving suit?

And so, without further ado, here are some of the major milestones in the evolution of the diving suit. This list is far from exhaustive and is in no particular order.



### 1. Konrad Kyeser's "Diving Dress" was an interesting early concept

Source: [Multicultural-Inventors/Twitter](#)

One of the first major steps in the evolution of the diving suit was [Konrad Kyeser's "Diving Dress"](#). A renowned military engineer, Kyeser wrote a book in the early-1400s called *Bellifortis*, on military arts and technology.

Within it was a description and depiction of an early diving suit.

### 2. Franz Kessler's diving bell was another important step

Source: [Daderot/Wikimedia Commons](#)

Another important step in the development of the modern diving suit was [Franz Kessler's diving bell](#). Kessler spent his life as an artist and inventor within the Holy Roman Empire between the 16th and 17th centuries.



One of his inventions, the diving bell, was a crude but effective underwater exploration device. Kessler is believed to have been inspired by the earlier work of [Guglielmo de Lorena](#), who actually dove in a sunken Roman vessel in his own diving bell in the 1530s.

Kessler's device consisted of an airtight, wooden, upside-down, bell-chamber that could accommodate a small crew of divers. Once lowered into the water, air would remain trapped inside the bell, allowing the crew to breathe underwater for a short period of time.

### 3. Leonardo Da Vinci may have invented air tanks



Source: [ewan morrison/Twitter](#)

In the 15th century, [Leonardo Da Vinci](#) made the first known mention of the concept of air tanks. In one of his notebooks, called the [Atlantic Codex](#), he provided tantalizing descriptions of systems that may have been used at the time to artificially breathe air underwater.

More from Interesting Engineering

[Flask Collision Test](#)

He also made some sketches of what appeared to be different kinds of snorkels and an air tank that was carried on the diver's chest. No mention is made of whether these tanks were connected to the surface or not.

Additional drawings showed a form of a complete diving suit, equipped with some sort of mask, with a box containing air. He even included provisions for a **urine collector** in his design.

collector in his design.

Da Vinci also famously made designs for an "[Underwater Army](#)" diving suit with bamboo pipes, sheepskin suit, and a bell-shaped air-trap.

### 4. John Lethbridge used one early diving suit to dive wrecks for salvage



Source: [Trubs/Twitter](#)

In the early-1700s, an English inventor called [John Lethbridge](#) developed one of the first-known, completely enclosed suits to help divers during salvage work on **sunken ships**. His suit provided the diver with a fair amount of maneuverability in order to complete the work successfully.

After initial trials in his garden pond, Lethbridge actually used the device to dive a number of wrecks -- four sunken English men-of-war, one East Indiaman, a Spanish galleon, and some galleys.

Through his exploits as a salvage diver, Lethbridge became **very wealthy**, with one

particular dive on the Dutch *Slot ter Hooge*, sunk off Madeira, netted him **three tons of silver**.



## 5. Pierre Remy de Beauve's diving dress was another important step

Source: [Sardonicus/Twitter](#)

In the 1710s, the French aristocrat [Pierre Rémy de Beauve](#) made another important step forward in the development of the diving suit. His 'diving dress' featured a metal helmet with two connected hoses.

One hose supplied the helmet with air from above via a bellows, the other removed the diver's exhaled air.

## 6. Charles and John Deane invented one of the first diving helmets



[SeaTREK/Twitter](#)

Another major milestone in the development of the modern diving suit was [Charles and John Deane's diving helmet](#). Building on their work for an earlier smoke helmet for the fire brigade in the 1820s, the brothers adopted the design for potential use underwater.

At the time, diving bells were the main go-to for dive and rescue missions, but were very limited. The Deane's design was effectively a large metal bowl with vision ports that also sported a short jacket that could prevent water from reaching the wearer's face.

Air was supplied to the helmet via a surface air pump. It also included an air exhaust that would **direct bubbles away** from the diver's field of vision.

## 7. Lodner D. Phillips and his atmospheric diving suit

Carmagnolle brothers atmospheric diving suit. Source: [Myrabella / Wikimedia Commons / CC BY-SA 3.0](#)

Yet another important step in the evolution of the diving suit was the work of [Lodner D. Phillips](#). In the 1860s, Phillips developed one of the world's first-ever, fully-enclosed atmospheric diving suits.

It featured articulated joints, a viewing chamber, and even a hand-cranked propeller for movement. While there is documentary evidence of the suit's existence, it is not clear if one was ever made for use.



In the 1880s, however, the [Carmagnolle Brothers](#), drawing their inspiration from Phillip's design, developed their own articulated atmospheric diving suit.

## 8. "The Old Gentleman of Raahe" is one of the world's oldest surviving diving suits



Source: [Wonder World Tube/YouTube](#)

Another important development in the evolution of the diving suit was "[The Old Gentleman of Raahe](#)". Created to help inspect the hulls of ships without the need for a drydock, it is currently one of the oldest surviving early diving suits in the world.

Dating to the early 18th century, this suit is primarily constructed using hand-stitched seams. The suit was sealed and waterproofed using a mixture of mutton tallow, tar, and pitch.

The helmet was reinforced with a wooden frame, to prevent it from collapsing, and an air pipe was affixed to the front. Air was supplied using bellows, and exhaust air was removed via a pipe at the rear of the helmet.

## 9. Mike Humphrey and Mike Borrow's JIM Suit was revolutionary

Source: [Geni/Wikimedia Commons](#)

Skipping forward in time, another milestone in the evolution of the diving suit was the [JIM suit](#). Developed in the late-1960s by Mike Humphrey and Mike Burrow, the first JIM suit was inspired by Joseph Peress' 1930s [Tritonia diving suit](#).

An atmospheric diving suit, it was specifically designed to maintain an internal pressure of **1 atmosphere** despite external water pressure. Because of this, no gas mixtures were required, and deep-sea divers did not need to undergo decompression when they returned to the surface.

It was made from cast magnesium and weighed in at around **499 kg**. The suit featured breathing apparatus that supplied air for up to **72 hours** and delivered air through the mask directly to the diver's mouth and nose.



## 10. SCUBA gear was another important step

Source: [Soljaguar/Wikimedia Commons](#)

No discussion of diving equipment would be complete without a discussion of *self-contained underwater breathing apparatus* ([SCUBA](#)). While many of the basic elements of SCUBA had been invented by the 1940s (notably Henry Fluess' rebreather), it took Jacques-Yves Cousteau and Emile Gagnan to modify them sufficiently to make SCUBA of practical use for most people.

The pair were able to redesign a car regulator to function as a demand valve that provided divers with a supply of compressed air delivered





with each breath. This compressed air was stored in a tank, allowing the diver, for the first time, to swim untethered for long periods of time.

Called the "Aqua-Lung" by Cousteau and Gagnan, the lightweight and relatively easy-to-use SCUBA equipment suddenly opened up diving for pleasure to the general public.

## 11. Phil Nuytten's "Newtsuit" is very light and strong



Source: [Piotrus/Wikimedia Commons](#)

And finally, the "[Newtsuit](#)" is the current go-to diving suit for sea exploration and underwater work. It was invented by Phil Nuytten in the late-1980s and is a fully articulated atmospheric diving suit that enables divers to reach a depth of up to **305 meters**.

The suite features an acrylic dome for visibility and can be modified with an optional backpack, with two horizontal and two vertical **thrusters** for added manouverability underwater.

Primarily used for ocean drilling rigs, pipelines, salvage work, and photographic studies, it is the standard deep-sea diving suit of many of the world's navies too.

Unlike the JIM suit, the Newtsuit is primarily composed of aluminium, trimming its total weight down to **113 kgs**, making it more practical and easier to use than its heavier predecessor.

## [SharkSchool Teaching Aims to Capture the Minds and Hearts of the Post-Jaws Generation](#)

Raising a new generation of shark activists, one convert at a time

By [Becca Hurley](#) July 15, 2020



When is the moment that a human becomes afraid of a shark? According to multiple medical studies, humans are born with only two innate fears: the fear of falling and a fear of loud noises. All other fears are learned, including the fear of sharks.

Dr. Erich Ritter teaches a class of shark enthusiasts during his annual SharkSchool stop at Beqa Lagoon Resort. Ritter plans to use some of the same principles from SharkSchool to educate students through SharkSchool Teaching — his latest endeavour.



“Most kids think sharks are cool. If we can give them a little ammunition, we can create a new generation that will do the right thing,” says Erich Ritter, founder of SharkSchool and SharkSchool Teaching. For more than 20 years, Ritter, who has a Ph.D. in behavioral ecology and is considered an expert in shark-human interaction, has lived by the motto of “conservation through education.”

He’s taught hundreds of divers about shark behavior through in-water interactions, seminars, and his books and scientific articles, with the hope that if people can only understand these animals, they’ll be more inclined to protect them. Recently, that lifetime motto triggered a new approach for Ritter—kids first—when he realized that engaging with young people before they learn a fear of sharks is a better way to protect these animals than relying on working through governments for policy change.

But it’s not only about kids, or educators. It’s important to Ritter that people understand “everybody who is passionate can do the right thing.” [SharkSchool](#) offers teaching and interaction in almost a dozen destinations, such as Fiji’s Beqa Lagoon Resort, Galapagos and the Red Sea.

[SharkSchool Teaching](#) was designed as a simple way for an ordinary person to translate science for kids. Spend some time with Ritter and you’ll see his passion for sharks is unmistakable.

The agency or group you support isn’t the most important piece of the conservation puzzle—Ritter just wants you to get involved.

### **Woman Sandwiched by Humpbacks**

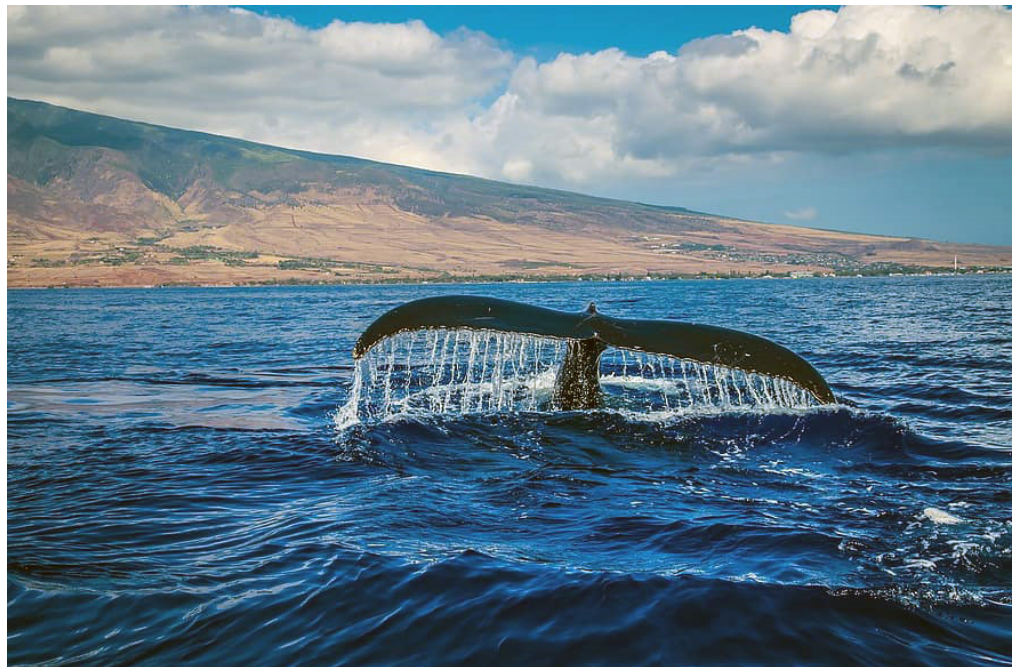
A 29-year-old woman has sustained fractured ribs and internal bleeding after finding herself trapped between two humpback whales while snorkelling on Ningaloo Reef off Exmouth in Western Australia.

She was airlifted from the boat to Royal Perth Hospital in a serious but stable condition following what was described as a freak accident yesterday (2 August), and is expected to make a full recovery.

Other people in the group were understood to have sustained minor injuries during the whale interaction. WorkSafe, the Australian equivalent of the Health & Safety Executive, is reported to be investigating the incident.

Each year the whales follow the “Humpback Highway”, migrating more than 3000 miles from their Antarctic feeding grounds to breed and give birth in the warm waters off Australia. Ningaloo, the continent’s biggest fringing reef, is a global hotspot for surface interactions not only with the whales but with whale sharks and manta rays.

The injured woman was on one of a number of humpback interaction tours that provide the opportunity to snorkel with the whales whenever it is deemed safe to do so. Many scuba divers visiting the area aim to participate in such surface interactions, either on dedicated trips or from their dive-boat.





# PERFORMANCE NZ Ltd *Diver*

John Haynes

72 Barrys Point Road, Takapuna  
Auckland, New Zealand  
Phone: 64-9-489-7782 Fax: 64-9-489-7783  
Email: sales@performance-diver.co.nz  
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Thomas Marsters  
Instructor

2/49 Arrenway Drive  
Albany, Auckland  
T: 09 478 2814 M: 021 135 8628  
E: info@aucklandscuba.co.nz

www.aucklandscuba.co.nz



## GLOBALDIVE

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### Andrew Simpson

Manager  
mob (021) 233 8763  
andrew@globaldive.net

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Westhaven, Auckland  
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fx (09) 360 8321  
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Editor and  
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Mob 0274 784 900  
Fax +64 9 521 3675  
PO Box 42 020, Orakei,  
Auckland, New Zealand 1745  
davem@DiveNewZealand.com  
www.DiveNewZealand.com  
www.Dive-Pacific.com

## Jackson Shields

6 Arrenway Drive, Albany, Auckland, New Zealand  
P: (09) 479 4232 M: 021 2016525  
E: jackson@wetter.com.zk



MIKE SMITH  
MANAGING DIRECTOR

mob 021 778 633  
email - mike@oceanhunter.co.nz  
100 Gaunt Street Westhaven Auckland  
09 377 0896 - PO Box 46 Greenhithe 0756  
www.oceanhunter.co.nz

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www.emr.org.nz

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auckland@emr.org.nz

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E

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

Any articles from any club members are always welcomed