NZ Dolphin Underwater & Adventure Club Newsletter December 2023

<u>Club Meeting 7:00pm Wednesday 13th December 2023</u> What's on : BBQ - please bring Salad & a Dessert

www.dolphinunderwater.co.nz



Club's Mail Address 14 Gails Drive Okura RD2 Albany



Club Contacts Inside Website As Above

COMMITTEE MEMBERS: 2023/2024

President/Entertainment	Allan Dixon	021 994 593	allanandjilldixon@xtra.co.nz
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Life Members Barry Barnes, Margaret Howard, Peter Howard, Brian Horton, Reg Lawson, Roberto Tonei, Denis Adams, Trish Mahon-Adams, Dave Quinlan

Honorary Members Graham Thumah, Tony Enderby, Jenny Enderby, Eileen Slark. Cover Page Photo:- Feather Star in Tonga by Denis

10th Dec –Sun – 6.00pm – Bays Club - Xmas Dinner

13th Dec. – Wed. – 7.00pm – Club Room – BBQ Please bring Salad & a Dessert– Northcote Rd Ext'n

<u>*Dive trips, NZ & Overseas*</u> – Check out the dive shop's web sites, there is plenty available, but you do need to contact the shops in person to confirm costs & booking availabilities.

Performance Dive NZ - Ph. 489 7782. or https://www.performancediver.co.nz/Dive+Trips++Events

Global Dive - Ph. 920 5200. or https://www.globaldive.net/page/trips.

Aucklandscubadive - Ph. 478 2814 or https://www.aucklandscubadive.co.nz/dive-trips

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, etc.

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 financial members will be charged an extra \$10 on trips.

NB: All Memberships Now Due: Single – \$40 Family- \$50.00

For the club to continue we need paid up members 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 Club Membership also includes Affiliation to the New Zealand Underwater Association

Fishers and divers encouraged to share sightings

Date: 13 November 2023

DOC is encouraging fishers, divers and boaties to be citizen scientists and share protected species sightings this summer.

Clinton Duffy, DOC Marine Technical Advisor, says recreational fishers and others out on the water can make a significant contribution to research through reporting sightings and accidental catches.

"I'm very interested in what the public has seen – and usually they're keen to identify an unusual creature too. All photos, videos and reports help build a better understanding of our rare and protected fishes, including rays, and sharks.

"We encourage people to take a few photos, full length shots and also of any defining features like fins, jaws and teeth, and details of the colour pattern. The exact location the fish was spotted or caught is useful too", says Clinton.

Certain fish species are protected because they are naturally uncommon and therefore at greater risk of extinction than other fishes.

"Factors that make them naturally uncommon can include being slow to mature, which means they must survive a longer time before they can reproduce or having a slow reproduction cycle or a low number of offspring," says Clinton.

There are nine fish species that are protected in New Zealand; five sharks, two rays, and two grouper.

While fishers are not allowed to target these species it's not illegal to accidentally catch a protected fish. If you do catch one, you must release it as quickly as possible and take care not to cause it further harm, and you must report the capture to DOC. If the fish dies or is found dead, DOC may request you bring it back to shore and provide it to DOC so samples can be taken to support research.

"Spotting an uncommonly seen species would be an amazing fishing story to tell. The basking shark for example, has hardly been seen in our waters since the late 1990s. I'd be thrilled to get a report of one," says Clinton.

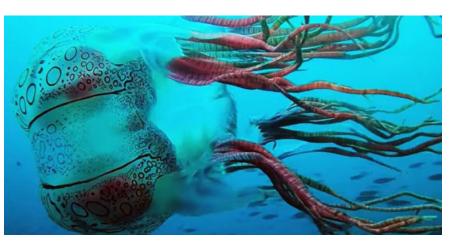
DOC has a set of protected species identification guides on its website to help identify sea life, plus a protected species handling guide to assist recreational fishers to safely release marine life back to the water.

The public can report sightings, captures and stranding's to DOC:

- anonymously via the Protected Species Catch App
- by emailing sharks@doc.govt.nz
- by calling 0800 DOC HOT (0800 362 468).
- A diver has come across one of the rarest jellyfish in the world. She has only been photographed twice in her life.

By Ruetir September 13, 2023

It is estimated that there are currently around 10 million species on our planet. And, despite centuries of study, **and 86%** Of these species have not yet been discovered, according to various studies. That means that less than 15% of the species that roam the Earth have been catalogued. Not only that: with the current rate of discovery, it is very likely that many of them will cease to exist before we can document them.



The case of the oceans is not verydifferent. The number of species that could be found in the seas is estimated **between 150,000 and 10 million**, one million being the most plausible figure for the Institute of Marine Sciences and Limnology of the UNAM. Of all of these, only around 250,000 are known, which means that around 70% are still a mystery.

This is the case of the animal that stars in today's story. More than a dozen striped tentacles crawl behind a translucent body, dotted with rings of different sizes. Inside, a bright red organ (possibly the gastrovascular cavity). **A fascinating spectacle** for our eyes. A wonder of nature at its maximum splendor.

It is actually a jellyfish. One so rare that it has only been sighted twice in its life.

The how is just as surprising. A diver off the coast of Queensland, Australia, recorded **a huge jellyfish** swimming next to him. Within hours he posted the video on Facebook commenting that it was bigger than a soccer ball and swam "pretty fast." It turns out, as some biologists later confirmed, it was Chirodectes maculatus (meaning "spotted" in Latin), an extremely rare species of jellyfish found in Australia.

This species was described in 2005 for the first time. A team of Australian scientists led by biologist Paul Cornelius managed to capture a specimen in 1997 which they called Chiropsalmus and commented in that article on their reluctance to dissect the animal, so they only made external observations. It would not be until a year later that the organism was registered in the genus Chirodectes by scientist Lisa-Ann Gershwin, who published a study on the jellyfish.

In this Vice report, Dr. Allen Collins, zoologist for the National Museum of Natural History of the Smithsonian Institution explained that although it is not possible to distinguish all the characteristics of the species Chirodectes maculatus in the video, it fits the description very well. . He also emphasizes that the pattern of **color in the "bell"** of the jellyfish is



different from that described by the original scientists. The one from 2005 had solid stains, while the one in the video has rings.

Even so, the expert states that it is most likely "a specimen of a closely related but not yet described species of Chirodectes" and is surprised that "something so large and striking in appearance has only been seen twice in history.".

As for the animal's venom, so far there are no recorded cases of its bite in humans. However, due to its large size and the **poisonous nature** Of the chirotropids, the Chirodectes jellyfish is most likely very poisonous. A shame, because it is a really beautiful animal.

Image and video: Scuba Ventures Kavieng

In Xataka | We have been buying the most common and common fish for our aquariums for years. Turns out it's a new species.

Dr Sylvia Earle: 'We know the surface of Mars better than our ocean floors'

The renowned marine biologist is a tireless advocate for protecting our seas and their vital ecosystems

Marine biologist and explorer Sylvia Earle, at the Oceanogràfic marine complex in Valencia, Spain; November 6, 2023.Mònica Torres





Every day, millions of people fly 35,000 feet (11,000 meters) above sea level. Around 500 humans have <u>travelled</u> to <u>space</u>, and we've even set foot on the moon multiple times. But only 13 people have reached the bottom of the Mariana Trench, the deepest point on Earth at 36,200 feet (11,034 meters) below sea level in the Pacific. From 1960 to 2012, there were only three successful attempts.

The exploration and study of the ocean's depths is much less extensive than research of the Earth's surface or the skies above. Sylvia Earle, a marine biologist and explorer, has devoted her entire life to delving into the mysteries of the ocean and is baffled as to why there is so much more <u>interest in space</u>. "The ocean is also part of the universe and it's right here," she said. While most people look skyward for spiritual inspiration, Earle finds heaven in the depths below.

Such steadfast commitment to the ocean has earned Earle nicknames like "Her Deepness" and "Queen of the Deep," and accolades like Spain's Princess of Asturias Award in 2018. She has achieved multiple ocean exploration records, logging over 7,000 diving hours, spending weeks in underwater laboratories, and being the first person to walk on the ocean floor. Yet the world's focus on space rather than the underwater world is still frustrating for her. "Why? Because the technology exists… Water is essential for life — no water, no life. It's important to be sustainable and greener, of course. But we can't forget about water — it covers a whopping 97% of the planet. It's where life thrives and diversity flourishes. Our biosphere is mostly blue."

Petite, agile and always smiling, Dr. Sylvia Earle radiates curiosity and kindness. Her fascination remains beautifully intact as she continues to dive at age 88. Today, she is at the Oceanogràfic marine complex in Valencia, Spain, where she took part in Science Week. Scientists and admirers surround her, eager to take selfies. In our interview, Earle explains that, unlike astronauts who don't build their own spaceships, she had to collaborate with engineers to explore the depths of the sea. She also started a group to develop underwater technologies that aid scientific research. Earle believes that while space exploration has given us a better understanding of the vastness of the Earth's oceans, "we know the surface of Mars better than our ocean floors. You can't care about something you don't know." That's why she continues to spread awareness about the significance of sea life. For Earle, the great era of ocean discovery and exploration "is just beginning." She also thinks it's important to recognize how much we don't know and not solely rely on existing knowledge. "We should care more about what we don't know," she said.

"We need to give access to children, teachers and scientists," said Earle, which is why she has embarked on a project to build two submarines that can descend to 3,300 feet (1,000 meters) where you can see squid, crustaceans, jellyfish and many fish species ascending to the surface every night. "It's the biggest migration on earth and we know very little about it. I feel privileged to have been there and want everyone to go."

Earle doesn't think that more interest in the deep sea will lead to overcrowding. "It's ignorance that's killing the ocean." One of the big problems in her view is that the oceans are full of millions of tons of wild animals, yet "We call them all fish — seafood. We don't call them 'magnificent wild animals.' People don't know what a tuna actually is. All they know is a piece of meat... If you only knew dogs as pieces of meat, you wouldn't care about them as we do... If we knew the ocean, <u>if we knew fish</u>, we would think differently about them. They have faces and personalities."

Dr. Sylvia Earl always knew she wanted to dedicate herself to the marine world, despite facing stereotypes and societal expectations. People advised her to work as a stewardess or nurse, but she doggedly pursued her dream of becoming a scientist. While she acknowledges that times have changed, there's still progress to be made, which is why she actively encourages young girls to explore her world. "There are still biases," said Earle. "But it isn't just gender — you're too old or too young, you're the wrong color or speak the wrong language... Never let anyone tell you that you can't do something, and don't let anyone steal your dream."

Earle will be off to Patagonia soon, where she will participate in a <u>Mission Blue</u> project accompanied by ocean policy expert Maximiliano Bello and Juan Antonio Romero, a biologist and ocean explorer. "Her Deepness" wants

to protect an area of Chile known for its vast kelp algae forests. These underwater forests capture carbon and release oxygen up to 20 times more than tropical forests on land. The Mission Blue team will spend over a month working in the area, which is under threat from salmon farming. They are tirelessly fighting to raise awareness about the importance of oceans in protecting the environment because, as she says, "life is precious."

How to Scuba Dive Safely When You Wear Glasses or Contact Lenses

By The Scuba News Press Team December 1, 2023



Scuba diving has been a popular activity for many ocean-lovers and adventurers for a long time now. The United States alone saw 2.48 million <u>scuba diving participants</u> in 2021, showing how many people love exploring the sea. However, diving is more than just jumping into the water head first; there are some essential considerations to make before diving, such as your vision. For people needing vision correction, diving can be a struggle when you can't see clearly. As such, many people use prescription diving masks or contact lenses when diving to ensure they can see their surroundings clearly.

If you want to get the best experience, it helps to consider your preferences and needs before choosing how to correct your vision when underwater. Here's how you can scuba dive safely if you wear glasses or contacts:

Diving with a prescription mask

Scuba diving with glasses is not recommended, as they prevent your mask from creating a tight seal on your face. It's also not the most comfortable experience and can cause your glasses to get damaged or broken. Prescription scuba masks are a viable way for you to see clearly underwater. You can choose a dive mask that fits your face well and see if prescription lenses can be installed. It's important to consider your prescription as well, since that can affect the thickness and curve of your lenses, impacting your comfort when diving.

If you only need to see or read things up close, Another option is getting bifocal diving masks that act like typical reading glasses. You can stick adhesive magnifying lenses onto your mask or have them custom-made. There are also accessories like SeeDeep's underwater <u>reading glasses</u>, which are worn overtop of the user's diving mask and held in place by a rubber head strap. These can be moved up and down on the mask so they aren't just at the bottom. Divers can also leave them on for the whole dive or remove them for unobstructed vision when necessary.

Diving with contact lenses

Other than prescription diving masks, you can use contact lenses when diving. <u>Contacts</u> are easy to purchase through various channels and retailers; you can buy them online or in-store and find lenses that match your specific needs. They're also often cheaper than prescription masks and allow you to see clearly even when your mask is off.

Hard contact lenses are an option; however, they don't allow gas to penetrate, which can cause blurry vision, dryness and discomfort. The nitrogen your eye absorbs is released when you descend into the water, and the contacts act as a barrier when that happens. Soft contact lenses are recommended for scuba divers as they can let gas penetrate, preventing blurriness and discomfort. They're also more likely to stay in your eyes if your mask floods since they're bigger than hard contacts.

Which is better?

Either prescription masks or contact lenses are safe and ways to help you see clearly underwater, so the best option depends on your vision needs and preferences. If you already wear contact lenses, you can stick with them since you're already comfortable with them or swap your hard lenses for soft ones for the best experience. Prescription masks can help if you don't like the feel of contact lenses or if you're someone who dives often and believes the investment is worth it.

Scuba diving can be an exciting adventure, but it's essential to <u>stay safe while underwater</u> to minimize and avoid risks. Extensive training, understanding limits, and diving with a buddy are all important safety aspects, but so is ensuring you have the right equipment and gear for the dive, including the proper eyewear that can help you stay aware of your surroundings and other divers.

Is this the next problem we have to look out for? Ed.

The Great 'Seaweed Blob' of 2023 Can Carry Flesh-Eating Bacteria, Scientists Warn



By <u>The Scuba News Press Team</u> September 26, 2023

Photo by Lauren Probyn on Unsplash

In March 2023, word swept through the boating community that a **giant seaweed 'blob'** was en route to eastern North America.

Known in professional circles as <u>The Great Atlantic Sargassum Belt</u>, the mass began formulating off Africa's west coast over the winter before making its annual spring journey across the Atlantic.

The blobs form every year between the Caribbean and West Africa in the Sargasso Sea (hence the name), at which point the currents push it west towards North America. A unique combination of nutrient-rich water, steady currents, and bad luck created an unusually large mass in 2023, which had governments and businesses all over the Eastern Seaboard scrambling to prepare for its arrival.

The mass spanned more than 5000 miles (8000 kilometers) and stretched all the way from the west coast of Africa to the Gulf of Mexico. Several coastal areas were told to **prepare for up to three feet** of Sargassum on their beaches.

Not only is the seaweed a nuisance, it also rots once it reaches landfall, and the stench is enough to drive anyone off the beach. *Sargassum* contains sulfur, which has the distinct aroma of rotten eggs.

But while the 'blob' may be a scourge to boaters, it's a boon for the ocean. The bloom is essentially a floating ecosystem that absorbs CO2 while providing food, nutrients, and resources to marine wildlife. It's only once it reaches the coastline and beings rotting that it becomes propeller enemy #1.

However, between the stench and the risk to boaters and beachgoers, scientists have uncovered the biggest hazard of all — a <u>new study</u> has found the bacteria *Vibrio* present in high levels within decomposing algae trapped inside the *Sargassum*.

The infamous 'flesh-eating' bacteria is known as <u>*Vibrio vulnificus*</u> and is just one species of the genus. Infections of *Vibrio vulnificus* can be caused by eating raw or undercooked shellfish, as well as by exposure of open wounds to the bacteria.

Like, say, by going swimming where *Sargassum* is floating. Or by dropping anchor in a shallow bay anywhere off the East Coast.

Symptoms of *Vibrio* infection include vomiting, diarrhea, and abdominal pain, with serious cases having the potential to cause the breakdown of skin. The Center for Disease Control and Prevention (CDC) says these can ultimately lead to <u>necrotising fasciitis</u> where the flesh around an open wound effectively "dies" and becomes necrotic.

The study's authors are encouraging boaters and beachgoers to wash thoroughly if they come into contact with *Sargassum*. it should also be noted that *Sargassum* and algae can become sticky and adhere itself to other debris like floating plastic, driftwood, or other hazards.

According to Tracy Mincer, assistant professor of biology at FAU's Harbor Branch Oceanographic Institute and Harriet L Wilkes Honors College, "Plastic is a new element that's been introduced into marine environments and has only been around for about 50 years. Our lab work showed that these *Vibrio* are extremely aggressive and can seek out and stick to plastic within minutes. We also found that there are attachment factors that microbes use to stick to plastics, and it is the same kind of mechanism that pathogens use."

"We really want to make the public aware of these associated risks. In particular, caution should be exercised regarding the harvest and processing of *Sargassum* biomass until the risks are explored more thoroughly," he added.

In terms of the U.S. response near boating hotbeds, Florida's Department of Health is advising residents and visitors to avoid *Sargassum* wherever possible.

A typical case of <u>vibriosis</u> lasts about three days, according to the CDC. However, people with a *Vibrio vulnificus* infection can become dangerously ill quickly. Advances cases may require intensive care and the possibility of limb amputation or significant removal of damaged skin and organs. About one in five people who become infected with *Vibrio vulnificus* will die, sometimes taking only 1-3 days from the onset of symptoms.

However, on a more positive note, scientists at the University of South Florida (USF), who are tracking the *Sargassum* using satellite imaging, say the amount in the Atlantic unexpectedly decreased by about 15% in May.

"[That] is good news for many coastal residents of Florida," the university's optical oceanography laboratory <u>says</u> on its website.

The *Sargassum* levels in the Gulf of Mexico are also expected to drop in June. However, researchers expect the large uptick in *Sargassum* masses over the past decade to continue. The leading theories surrounding the annual

increase including excessive sewage and fertilizer levels in the Atlantic causing nitrogen levels to surge, creating an ideal environment for *Sargassum* to grow and bloom.

These sites following maybe worth having a look at over the holidays.Ed.

Dive into Conservation: How Scuba Divers Can Help Save Our Oceans

By <u>Lee</u> May 5, 2023



Photo by Francesco Ungaro on Unsplash

As scuba divers, we have the privilege of experiencing the wonders of the underwater world firsthand. But with that privilege comes the responsibility to protect and preserve the marine environment we so love. In recent years, marine conservation has become an increasingly urgent issue as our oceans face threats such as overfishing, plastic pollution, and climate change. As a scuba diver, you can make a difference in the fight to save our oceans.

Here are some ways you can get involved in marine conservation:

1. **Support sustainable diving practices:** Choose dive operators that prioritize sustainable practices, such as responsible diving practices and eco-friendly accommodations.

2. **Reduce your plastic footprint:** Avoid single-use plastics like straws and water bottles, and participate in beach clean-ups to help remove plastic waste from our oceans.

3. Learn about marine conservation issues: Educate yourself on the issues facing our oceans and spread the word to others. Attend talks and workshops, read books and articles, and watch documentaries.

4. Get involved in conservation efforts: Join a local conservation organization, volunteer for reef monitoring or restoration projects, or participate in citizen science initiatives.

By taking these steps, scuba divers can make a real impact in the fight to save our oceans. And not only will you be helping to protect the marine environment, but you'll also be ensuring that future generations can enjoy the same incredible experiences that we have as scuba divers.

Other Ways To Help

Here are some marine conservation charities you can consider supporting:

1. The Ocean Foundation: https://oceanfdn.org/

- 2. The Marine Conservation Institute: https://marine-conservation.org/
- 3. Sea Shepherd Conservation Society: <u>https://seashepherd.org/</u>
- 4. Oceana: https://oceana.org/
- 5. PADI AWARE Foundation: https://www.padi.com/aware
- 6. Coral Reef Alliance: https://coral.org/
- 7. The Nature Conservancy: https://www.nature.org/en-us/about-us/where-we-work/united-states/
- 8. Mission Blue: https://mission-blue.org/
- 9. The Blue Marine Foundation: https://www.bluemarinefoundation.com/
- 10. Reef Environmental Education Foundation: <u>https://www.reef.org/</u>
- 11. Reef-World: https://www.reef-world.org
- 12. Green-Fins: <u>https://www.greenfins.net</u>

These organizations work towards protecting and conserving marine ecosystems, and your support can make a real difference in their efforts.

Sea Shepherd Lawsuit Succeeds in Protecting Māui Dolphins

By The Scuba News Press Team November 30, 2022



Court of International Trade bans import of fish from certain New Zealand fisheries to protect the Māui dolphin.

Today, in a lawsuit brought jointly by Sea Shepherd Conservation Society and Sea Shepherd New Zealand (collectively Sea Shepherd) to protect the critically endangered Māui dolphin, the United States Court of International Trade ordered a ban of imports of nine fish species caught off the west coast of New Zealand's North Island. The ban specifically applies to set-net and trawl fisheries operating in Māui dolphin habitat.

The Māui dolphin is found only in New Zealand waters and most recent estimates suggest between only 48 and 64 individual dolphins over the age of one year remain. Sea Shepherd brought its lawsuit against the United States Department of Commerce under the Marine Mammal Protection Act because set-net and trawl fisheries that overlap with Māui dolphin habitat result in injury and death to dolphins in excess of United States standards. The preliminary import ban will remain in place until the United States makes a valid finding that New Zealand's regulatory program for the fisheries is comparable in effectiveness to the U.S. regulatory program or until the court case is fully resolved.

"The Court's ruling sends a strong signal to New Zealand and other countries that unless they can show their fisheries regulatory program is comparable to the U.S. regulatory program, they risk an import ban," said Pritam Singh, Chairman of the Board and CEO of Sea Shepherd Conservation Society. "The Court found we are likely to succeed on two of our legal claims and that a preliminary import ban for these nine species was in the public interest. We agree."



"This is a victory for independent science, which, in this case clearly demonstrated the technology used by the fisheries at issue – indiscriminate set nets and trawls – were putting the endangered Māui dolphin at greater risk of extinction," said Michael Lawry, Managing Director of Sea Shepherd New Zealand. "We're happy the Court of International Trade recognized the urgency of this situation for the Māui dolphin and agreed with us that an import ban was legally required."

The nine fish species included in the Court's injunction are: 1) snapper; (2) tarakihi; (3) spotted dogfish; (4) trevally; (5) warehou; (6) hoki; (7) barracouta; (8) mullet; and (9) gurnard deriving from New Zealand's West Coast North Island multi-species set-net and trawl fisheries.

Sea Shepherd is represented in the lawsuit by Lia Comerford and Allison LaPlante of Earthrise Law Center, at Lewis & Clark Law School in Portland, Oregon.

Learn more about Sea Shepherd and Sea Shepherd New Zealand <u>https://www.seashepherd.org</u> and <u>http://www.seashepherd.org.nz/</u>

Sad news from Margaret, a previously active club member Trevor Pearson who some may remember has recently passed away. Our condolences to his family from us all.

Also from Margaret, EMR are looking for guides for their snorkel day at Waiake/Torbay on Saturday the 16th & a snorkel dive on the Sunday the 17th at Goat Island. Check with Margaret for more details.



Merry Xmas & A Happy New Year to All Members and Associates.

Practice being safe & staying safe for you & your buddies & we will see you all at the club meeting

The MAF regulations vary in particular when it comes to your catch size/limits & locations.

NB: Especially in the Hauraki Gulf area, things have changed.

