



Lunarfins Scuba Club

Robert Yin

September 17th

STILL DIVING: The Cinematography of Robert Yin.

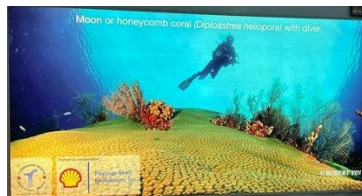
Robert “Bob” Yin, now retired in La Jolla, California, USA, has been an avid underwater photographer for all his adult life and was one of the early pioneers in underwater photography.

Robert Yin plunged into underwater photography over SIXTY years ago in the Philippines, while working as a paper engineer. That launched a life-long passion for underwater adventures around the world.

Robert Yin continues to accumulate bottom time at his favorite diving destinations of the Philippines, Malaysia, Indonesia, and Palau. His compilation of photos has been published in 35 books and countless magazines.

Most recently, his underwater videos was featured in the International Underwater Film Festival in Belgrade, in the last three consecutive years and won awards at the Houston Underwater Film Festival, Houston, Texas, USA, and in the last two years at the San Diego Underwater Film Exhibition, San Diego, California, USA.

In addition to her underwater videography, video editing, sound effects, and special visual effects, Cindy Liphay creates her own digital music compositions. This this time she has teamed up with Bob Yin to produce his amazing underwater videos of animal behaviors into a story that is relevant to our current times.



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[pwd=YUtDMkdGdkhzVHRleFdwrfGTOpWL1hTdz09](https://us06web.zoom.us/j/83674642772?pwd=YUtDMkdGdkhzVHRleFdwrfGTOpWL1hTdz09) ID: 836 7464

2772 Passcode: 076802



Lunarfins Board Meetings

are held every other month on the 2nd Thursday of the Month. Our next meet will be on **Nov. 14** if you want to attend contact Brion Saathoff at <brionsaathoff@icloud.com> before 7:00 PM. on day of meeting to get the zoom access code.

It will be a ZOOM Meeting

If you have an item to bring before the board, contact any board member to get on the agenda.

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Karen Clark.
Dennis Deavenport,
Paul Cater Deaton,
Cathy Strahan,
Mike Peters,
Ja Van Pruett,
Brion Saathoff,
Justin Wallace,
Peggy Widaman



Lunarfins
P.O. Box 57514
Webster, TX
77598-7514



Membership

2024 Membership dues are now being accepted from **April 1st, 2024 to March 31st 2025**

"The renewal form and dues payment is required as soon as possible prior to April 1.

Please bring the form (below) to the next meeting or mail it in.

Please fill in all fiANelds completely so that records can be verified this time around.

Don't forget to check your interest (s) and if you want to be included in the directory.

Membership Application

<https://www.lunarfins.com/>



Events Calendar

(Tentative plans)

Sept. 17th — General Meeting — Robert Iching Yin
"Still Diving "

Sept. 14th. — Beach Party (p.11)

Oct. 12th. — Underwater Pumpkin Carving Contest!

Oct. 15th — General Meeting — Dan Tirtowidjojo—
"Diving in Raja Ampat"

Oct. TBA — Get-to-gather Tookie's Seafood

Nov. 19th. — General Meeting — Jim Ritterhoff
— Marine conservation deployments FORCE BLUE

Nov. TBA — Get-to-at Katie's Seafood

Dec. 1st. — Annual Christmas Party — Opus Grill—
5 pm (p.25)

ELECTED OFFICERS

President	Brion Saathoff
Vice President	Ja Van Pruett
Secretary	Frances Boutin
Treasurer	Cathy Strahan
Social Director	Mike Peters

APPOINTED

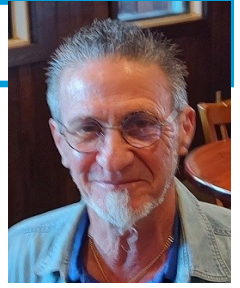
Media Manager	Dennis Deavenport
Training information	Jessica Lee
Trip information	PJ Campagna
	Jessica Lee
TGCC Representative	Tom Burns
Advisor	Dennis Deavenport
Advisor	PeeWee Dwire
Advisor	Mike Peters
Newsletter	Ja Van Pruett
Website	Tom Burns

Do you have any ideas for event or

Topics for Speakers for 2024?

Please share them with any of our officers.

Lunar fins President's Notes



Hello Lunar fins,

Well, we got lucky and dodged a double header, my thoughts and prayers go out to our dear family and friends in Louisiana. I called Texas City and they said the dyke is reopened and will be taking visitors this weekend so, the beach party is still on, I will be there early on Saturday and am looking forward to spending the day with everyone, this is an annual event for the club, sort of a thank you to everyone for helping to keep Lunar fins going and growing, we will be providing sausages, dogs and burgers if you want to bring a side dish its fine. I want to welcome Michelle and James Robert Stoffel, Amanda Smith, Trish Ross, and Mike Callaway to the family. If there is anything we can help you with, please let us know. Speaking of growing, one of my worries has been that we would eventually outgrow South Shore grille, I really like the venue the food is good the staff is awesome, and they have worked with us in every way to make it a great meeting place but as I tell my grandchildren, nothing lasts forever. If anyone has any ideas for a larger venue, please let me know and I will check it out. it must be able to be closed off from the rest of the facility for noise and foot traffic so as not to interrupt with the presentation and have wi-fi.

We have a very special guest this month, Robert Yin I first saw him in his video submission at the Houston Underwater Film Festival this past April which won an award, in the film he says that his only wish for his next birthday is to still be diving, it looks like his wish came true he turned 97 after the film festival and he is still diving.

Don't forget to mark your calendars for October the twelfth, our sister club, Bay Area Divers are having an underwater pumpkin carving contest at Mammoth Lake. It is a sanctioned event by the Texas Gulf Council of Clubs. Everyone is welcome, there will be food, gear consignment Tables and a raffle. It's always fun when the clubs get together for these events, I will be there helping set up so come hang out with us. I will post more details on the face book page as I get them. If you have any ideas for an event or any input that you think would be helpful let me know, I am always open for suggestions.

May you have many happy wet days in the years to come.

*Best regards,
Fins up (please)
Brion Saathoff
2024-2025 President!*



**Happy Birthday! to
anyone that has
a birthday this month!
May your day be wonderful!**



Our General Meeting — South Shore Grille

Be sure to check out their menu

<https://soshoregrille.com/league-city-south-shore-grille-food-menu>

Sept 17th., 6:00pm

Come at 6pm—and order, 6:30—announcements & social

Speakers start at 7:00 pm

2800 Marina Bay Dr. League City TX 77573

Lunarfin's Raffle — Let's Make Some Money

Lunarfin's will be offering raffle items at meetings. Tickets will be very reasonable and the items raffled off will be interesting and worth having. We have enjoyed receiving prints 16" x 20" prints that have been donated by Dennis Deavenport. They are mounted on foam board or Gator Board and ready to frame. Thank you Dennis is donating lots of his photo's.

Each month will be a great item and you never know till you come and see what you can pick from what we are offering. Bring a few extra dollars to the meeting to help Lunarfin's make some money.

Your friendly Board of Directors

New Product NEWS —To protect your skin

Safe Sea Jellyfish Sting-Blocking Sunscreen, SPF 50+ Lotion 4oz, Waterproof, Biodegradable, Coral Reef-Safe – Body and Face Sunscreen, Anti-Jellyfish and Sea-Lice sting protection.

- **LONG-LASTING AND WATERPROOF** – Rely on Safe Sea sunscreen for guaranteed protection. Safe Sea is very water-resistant, You don't need to re-apply so often as in other sunscreens.
- **CARE FOR CORAL** – Protect your skin and safeguard the ocean with your reef safe sunblock, Safe Sea. This biodegradable, Oxybenzone and Octinoxate free sunscreen do not harm marine life, unlike other popular brands.

Can be found on Amazon.



About our Members

Prayers are Needed

Peggy Widaman

Peggy lives in Ft. Worth, and comes down every year for our Christmas party. Her brother was Randy Widaman, he passed away in 2021. There is a reef named after him. We need prayers for Peggy, on December 22, 2023 she was diagnosed with Stage 4 Colon Cancer, it took 3 months to get her started on Chemo. Then her doctor took her off Chemo and they wanted her to go into Hospice and spend her time enjoying the rest of her life. That doctor then took away all medical help. Being Peggy, she would not take that sitting down Peggy had an appointment on August 14 & 15 at M.D. Anderson in the Woodlands and her new doctor put her back on a lower dose of chemo that she will be taking in Ft. Worth. Peggy is schedule to return to Houston again the 1st week of November. Our trip to New Orleans, has been canceled. Her Cancer has spread, so please continue praying for her.



Karen Clark

I am 70 ½ and have had a wonderful full life! Got certified as a diver around 1967, dove the Galveston offshore rig. Stetson Bank and the Flower Gardens usually in our 30 ft sailboat FREENEASY. Made around 10 offshore races to Vera Cruz and Isla Maheras and took our time cruising back. Raced FREENEASY many times in Galveston Bay, had many Lunarphins parties on the old Redfish Island. Needless to say, I was out in the sun a lot. So, I am very lucky to only have cancer surface now.

Some of you may recall when we were supposed to have a Lunarphins party on the Texas City dike recently. The morning activities ran late closing the dike to us. Our party moved to a nearby park. Those there may remember I keep disappearing to our van. I felt terrible. At 5PM I got a call saying my 3rd neck biopsy showed cancer. Monday when I was able to call doctor office was told could not schedule surgery for



This was taken in 2011 when Karen won this award.

3 weeks. Said NOT acceptable in too much pain. The surgeon called me 5pm Tuesday and told me to come 8AM and he would work me in. Feel sorry for those scheduled as he spent much time with me which made it a very late day. When the surgeon came back for a 3rd time as cancer tests showed still present took more out but said he had to stop as my right side at high risk for paralysis. 30 minutes later I could barely lift my right leg and arm. Asked if it would improve and he said probably not. Well while he was attending to other patients for the next 2 hours, I prayed to everyone dead and lots of friends. Worked. My right arm cannot be lifted much past the shoulder, but I can live with that. The surgeon got me as a patient in MD Anderson where I have chemo for a year. Hopefully the last one this Dec.

Since then, I have had around 6 skin cancers removed by a local surgeon with one to go. Hopefully no more will appear. George went in with me for many of my surgeon visits and he noted suspicious places on George's body for cancer. Since then, he has had several removed. George is ecstatic after a recent nose surgery which on the 3rd attempt to get all cancer had an explosion of blood. Very messy but now George can BREATHE easily.

Congratulations!



Meet our Guests



Dylan Huss



Brandon Mann



Nick Woinarowicz



Christine Emerson

About our Members

Dennis Deavenport

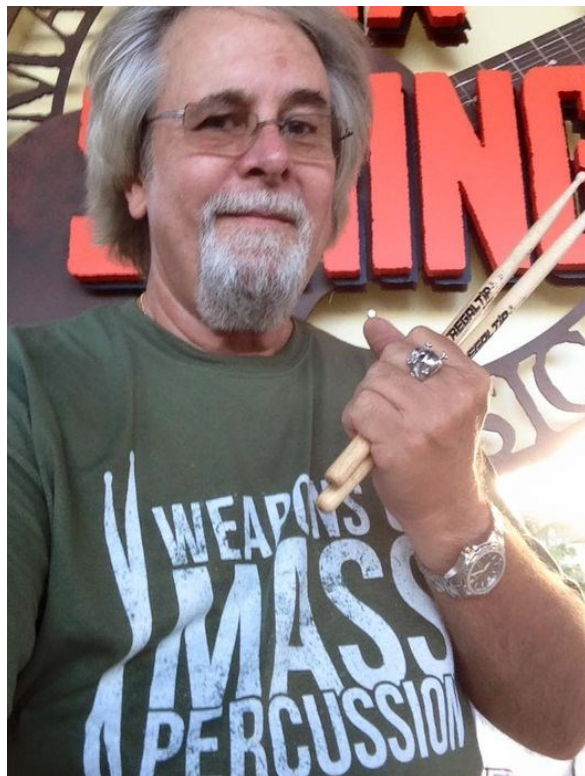


Paul Cater Deaton

[Paul Cater Deaton](#) is at [Jimmy Buffett's Margaritaville Caribbean](#).

September 7, 2024

Playin' the Labor Day Weekend Show at Margaritaville, rockin' my new shirt. Thanks to [Séan Chapman](#), everyone is duly warned.



About our Members (Continued)

Cathy Strahan's

Cathy's Yard



**Cathy's
Passenger**



Justin Wallace

Is in Jupiter, FL

September 2, 2024

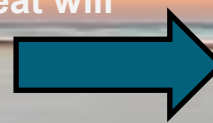


Beach Party— Texas City

Sept. 14 rd @ 10:00 AM

Hello everyone! Just a quick note to let everyone know about the Beach Party. It will be Saturday, Lunarfin's is supplying water & drinks. Don't forget to bring your chairs, umbrellas, maybe a dish to share. The meat will be furnished.

Look for the Lunarfin's Flag



Sanctuary Snapshots: Expert Photography Tips

Office of National Marine Sanctuaries (ONMS)

Our 16 national marine sanctuaries are home to stunning views, majestic marine life, and opportunities to explore, recreate, and discover. Every summer from Memorial Day to Labor Day, NOAA's Office of National Marine Sanctuaries and the National Marine Sanctuary Foundation celebrate all the different ways we can connect with our sanctuaries through the annual [Get Into Your Sanctuary Photo Contest](#).

We spoke with some of the photographers whose iconic images won our *Get Into Your Sanctuary* Photo Contest in previous years. Let's look behind the lens and get their top tips of how to capture the perfect picture in and around national marine sanctuaries.

M-V Fling has been carrying divers out to the World-Class sites at the Flower Garden Banks NMS and beyond! It's by far the best diving in Texas. Come with us to dive in BLUE-WATER and see coral reefs and all the animals there!

726 West Brazos Boulevard, Freeport, TX, United States, Texas
(979) 233-4445

info@TexasCaribbean.com

Go view this video to get a small view of the Flower Garden Banks: <https://www.facebook.com/100057303948082/videos/422927503937073>



Brion Saathoff — Tiger Sharks

My trip to Dumaguete and the dives we did as we visited the islands and dive sites around Cebu gave me many ideas for articles to share with you, it was a life's dream to encounter so many awesome people and such an amazing variety of ocean life from the tiniest (pygmy seahorse) to the largest (whale shark) that I have ever been blessed to encounter.

The Philippines forms an ocean region that has long been recognized as the world's center of biodiversity. with the Malay Archipelago, Papua New Guinea and Australia. They form the 'Coral Triangle', so called because of the abundance of its coral reef life.

One of the highlights for me was the encounter with the tiger shark, so I thought it might be a good subject to start with.

Tiger Sharks

The tiger shark is from the order Carcharhiniforms, the most species-rich order of sharks, consisting of over 270 species which includes hammerheads and small cat sharks, the oldest fossils of the modern tiger shark dates back to the Middle Miocene period around 13.8 million years ago, they are characterized by a transparent membrane (nictitating membrane) that can be closed over the eyes to protect them as they close in to feed, they have two dorsal fins one anal fin and five gill slits. and dark (tiger) stripes on the side that get lighter as the shark matures.



It is the largest member of the order, commonly referred to as ground sharks.

They average 10 to 14 feet, females are capable of reaching 16 and a half feet, they can weigh between 700 and 2000 pounds, the largest recorded female was caught in Australia she was 18 ft 1 in long and weighed 3360 lbs. (she was pregnant).

Tiger sharks are apex predator's their only threats are orcas and humans, they are naturally very curious which can make them aggressive, they will circle their prey and eventually prod it with their snout before taking a bite. They are the second largest predatory shark and second only to great whites in recorded fatal encounters with humans, which is very low when you consider the massive amount of people that are in the water worldwide at any given moment. they will eat almost anything as they are not as picky as other sharks and have one of the widest food spectrums, crustaceans, fish, seals, birds, squid, turtles, sea snakes, dolphins, and other smaller sharks, they have been found with license plates, a horse head, tires and even a chicken coop, there has also been a report of a suit of armor being found in a tiger shark's stomach, these things seem to not affect them.

Their ability to eat almost anything is in the design of their teeth, they are unique with very sharp pronounced serrations with sideways pointing tips, they are considerably shorter than a white but as wide at the root, they have developed to slice through flesh, bone, and hard surface prey like turtle shells.

Tiger sharks are typically solitary and nocturnal feeders they use the Ampullae Lorenzini to detect electrical impulses created by voluntary and involuntary muscle movements in the prey's body, they also have a lateral line that runs the sides of the body and detects minute vibrations in the water, tigers also have a reflective layer behind the retina (Tapetum Lucidum) it allows the light sensing cells a second chance to capture photons of visible light which enhances low light vision. all of these attributes allow the tiger to hunt in the darkness and detect hidden prey.

The tiger is considered near threatened due to finning, fishing and their low reproduction rate. they sexually mature at around seven to nine feet for males and eight to eleven feet for females. the females only reproduce every three years, there are typically 10 to 80 pups the embryos hatch internally and develop inside the mother for 16 months, the tigers average 27 years in the wild it is believed they can live up to 50 years in the wild. in captivity they only live for up to 17 to 20 years. There is so much more on these majestic animals, but I fear I am getting a bit long winded on the subject I have gleaned my information from many resources including NOAA and Wikipedia. my thanks to them and the many others.

If there is anything that I have published that is incorrect, please feel free to let me know as I am learning as I go.

Fins up (please)
best regards,

Brion Saathoff

A pregnant shark was tagged and monitored for 5 months, then disappeared. Scientists now know its fate

September 6, 2024

When scientists attached a tag to a pregnant porbeagle shark in October 2020 to learn more about the creature's habitat, they didn't expect their tracker to capture evidence of how large sharks hunt one another. But when the tracker registered some unexpected activity in March 2021, the scientists realized a larger shark had eaten their research subject.

"This is the first documented predation event of a porbeagle shark anywhere in the world," said lead study author Dr. Brooke Anderson, a marine fisheries biologist in the North Carolina Department of Environmental Quality, via email.



Porbeagle sharks, which are found across the Atlantic and South Pacific oceans and Mediterranean Sea, can reach a little more than 12 feet (3.7 meters) long and weigh as much as 507 pounds (230 kilograms). The elusive, large sharks can also live between 30 and 65 years old. But female porbeagles can't reproduce until they reach 13 years old. The females give birth to four pups every one or two years.

Habitat loss, overfishing and their fate as bycatch in fishing nets have threatened porbeagle shark populations. Northwest Atlantic porbeagle sharks are listed as [vulnerable](#) on the International Union for Conservation of Nature Red List of Threatened Species.

"In one event, the population not only lost a reproductive female that could contribute to population growth, but it also lost all her developing babies," Anderson said. "If predation is more widespread than previously thought, there could be major impacts for the porbeagle shark population that is already suffering due to historic overfishing." Now, the researchers said they may have identified two suspects — a great white shark and shortfin mako shark—in this scientific murder mystery, changing the way researchers think about how large sharks interact.

Keeping tabs on sharks

When Anderson and her colleagues were tagging porbeagle sharks off Cape Cod in Massachusetts in 2020 and 2022, their intention was to track where pregnant porbeagles go to identify areas where the sharks and their newborn pups require conservation and protection efforts.

She and her team have been studying porbeagles for more than a decade, and they have become experts at tagging the sharks for study.



The researchers used rods and reels to catch the sharks and bring them aboard their boat. Saltwater pumps were placed in the sharks' mouths to allow them to breathe.

"They actually calm down really well to make tagging easy," Anderson said. "We've tagged dozens of porbeagle sharks in the past 10 years and are currently working on analyzing the data to determine the most important habitats for the population that can be prioritized for conservation and management directions."

Each shark was outfitted with two satellite tags, a satellite transmitter mounted on the fin, and a pop-off satellite archival tag. The fin-mount tags transmit a shark's current location to satellites when its fins are above the ocean's surface. The pop-off tags measure depth and ocean temperatures and store the data until the tag pops off after a certain amount of time, floats to the surface and transmits its data to satellites. The fact that the pregnant porbeagle was prey for a bigger shark became a bonus scientific discovery, Anderson said.

The researchers tagged multiple porbeagle sharks in 2020 and 2022. - Courtesy James Sulikowski. The team's shark, measuring 7.2 feet (2.2 meters) long, largely remained underwater for five months, cruising along at depths of 328 to 656 feet (100 to 200 meters) at night and 1,969 to 2,625 feet (600 to 800 meters) during the day. The ocean temperature fluctuated between 43.5 and 74.3 degrees Fahrenheit (6.4 and 23.5 degrees Celsius).

But 158 days after the shark was tagged and released, the pop-off tag began to transmit data from the sea southwest of Bermuda, suggesting it had come off the shark and was floating on the ocean's surface.

A pregnant shark was tagged and monitored for 5 months, then disappeared. Scientists now know its fate (Continued)

September 6, 2024

For four days in March 2021, the tag registered a constant temperature of 71.6 degrees Fahrenheit (22 degrees Celsius) at a depth ranging from 492 to 1,968 feet (150 to 600 meters). Then the tag floated up. The team pieced together several factors that indicated the shark had been eaten and the tag excreted by a larger predator that gobbled up the shark, Anderson said.

“The first and most important data was the sudden spike in temperature recorded by the tag, even at 600 meters depth,” she said. “This indicated right away that the tag was now inside the stomach of a warm-bodied predator such as a lamnid shark. There was also a slight change in the diving pattern recorded by the tag, which also indicated the tag was now tracking another animal (the predator).”

The tag popped off eight months earlier than expected, and the porbeagle’s fin-mount tag never transmitted any data again.

“If the pregnant porbeagle shark was indeed still alive, we expect that she would have returned to the sea surface again and the fin-mount tag (would) transmit her location,” Anderson said.

Unusual suspects

Porbeagles belong to a family called lamnid sharks, which also includes great white sharks and mako sharks. Unlike other sharks, most lamnid sharks are endothermic, meaning they can keep their bodies warmer than the water temperature.

“The porbeagle can do this better than almost all of its relatives and loves the colder waters of Canada and New England year-round,” Anderson said.

To determine what could have eaten the porbeagle shark as it swam near Bermuda, the team narrowed down the list of large predators swimming in the same vicinity big enough to hunt porbeagles — including its relatives, the great white shark, or *Carcharodon carcharias*, and the shortfin mako shark, known as *Isurus oxyrinchus*.

Shortfin makos have been known to hunt small sharks, porpoises, sea turtles, seabirds, bony fish and cephalopods. And great whites chow down on whales, dolphins, seals and rays.

Anderson’s team suspects the great white shark is the most likely culprit, given that shortfin makos make rapid dives between the ocean surface and its depths during the day, which the pop-off tag didn’t register.

“We often think of large sharks as being apex or top predators, but with technological advancements, we have started to discover that large predator interactions could be even more complex than previously thought,” Anderson said. “It’s clear that we need to continue studying predator interactions, for example to estimate how often large sharks are hunting each other, and start to uncover what cascading impacts these interactions could have on the ecosystem.”

It’s not the first time one large shark has been eaten by another large one, but documentation of such events is rare.

Sharks hunting sharks in the open seas

Some of the biggest shark species aren’t shy about hunting their own kind, which is a fascinating part of the shark world that often goes unnoticed, said shark biologist Dr. Adrian Gutteridge, fisheries assessment manager for international nonprofit Marine Stewardship Council and member of the International Union for Conservation of Nature’s Shark Specialist Group. Gutteridge, who was not involved in the study, agrees that a white shark is the most likely culprit.

“This particular porbeagle, at 2.2 meters, might have seemed pretty formidable, but white sharks are around 1.5 meters (4.9 feet) the moment it’s born,” Gutteridge said. “By the time they reach their full size at 4 to 5 meters (13 to 16.4 feet), they’re fully capable of taking down other sharks. So, this porbeagle meeting its end from a much larger white shark isn’t so much surprising as it is a reminder of white sharks being at the top of the food chain.”

Satellite tagging is helping researchers track and discover shark nurseries, seasonal movement and behavioral patterns in sharks, which is especially crucial for protecting vulnerable populations, he said. For decades, northwest Atlantic porbeagles were hunted for consumption. Fortunately, that population is stabilizing and increasing, but continued protection is vital to allow such recovery to continue, Anderson said.

Now, the team wants to uncover how often other sharks hunt porbeagle sharks.

Kyrenia Shipwreck's Discovery June 26, 2024

Decades after the famed Kyrenia shipwreck's discovery, researchers have a new estimate of when it sank



Kyrenia is the name of a town and small harbor on the north coast of Cyprus.

Now, a [new study](#) may have a better time estimate of the Kyrenia's demise — and the revelation came together thanks to newly cleaned wood samples from the ship, as well as clues provided by a twig, an animal bone and a cache of ancient almonds.

Local diver Andreas Cariolou [first discovered the Kyrenia ship](#), while collecting sponges at a sea depth of 33 meters came across a pile of ancient amphoras (they protruded from the surrounding eel grass. Turned out that this mound of artifacts marked the resting place of an ancient Greek merchant ship that sank in the 4th century BCE. Greek Hellenistic-period ships to be found largely intact, in 1965, and a team led by the late marine archaeologist Michael Katzev excavated the wreck and its cargo in the late '60s.



The researchers originally believed the vessel sank around 300 BC. One text, the first volume of the site's final reports [published in 2022](#), estimated a range of 294 BC to 290 BC, based on pottery and some coins found on board. But there was no scientific dating available to back up the estimates, according to the latest study.

By using radiocarbon dating — a method used to determine the age of organic materials, such as wood from trees — and dendrochronology, the science of dating tree rings, the researchers of the new study determined the Kyrenia's sinking occurred between 296 BC and 271 BC. And they found a strong probability that it happened between 286 BC and 272 BC, the study authors wrote.

“We got dates that are very close to those that archaeologists have been recently suggesting but just ever so slightly more recent,” said lead author Sturt Manning, distinguished professor of arts and sciences in classical archaeology at Cornell University in New York.

While an updated timeline supported by scientific data is important for the famous ship, the pivotal revelation is in new techniques and a revised radiocarbon calibration that can help scientists more accurately date structures and shipwrecks from this period, Manning said.

Dating a Hellenistic-era ship

Two main obstacles stood in the way of achieving a high-precision age estimate for the Kyrenia shipwreck, according to Manning. The first was that polyethylene glycol or PEG, a petroleum-derived compound used to conserve the ship's wood, was interfering with radiocarbon dating.

Often, shipwrecks remain well preserved due to the lack of oxygen at the bottom of the ocean. But once the materials are brought up to the surface, they quickly deteriorate, Manning explained. Injecting polyethylene glycol into the wood keeps the timber from crumbling and turning into powder, but it then becomes difficult to remove with time.

“You only need to have literally a fraction of a percent of this stuff (polyethylene glycol) on there, and the date will be wrong, often by hundreds, if not thousands of years,” said Manning, who had tried to date the Kyrenia ship 10 years ago but failed because of PEG.

However, an international team of researchers developed a cleaning protocol, described in an [October 2021 study](#), that successfully removed the petroleum-based compound from wood that was fairly recently conserved, Manning said. To confirm that the protocol would work with something as old as the Kyrenia shipwreck, Manning and his colleagues applied the technique to a piece of PEG-preserved wood they knew to be from nearly 2,000 years ago and found accurate radiocarbon ages.

Now with a solution to clean the wood, the researchers thought they would be able to date the ship's wood. But they encountered a second roadblock instead and kept receiving ages that did not match “any possible archaeological solution around,” Manning said.

After investigating, he and his team determined that the Northern Hemisphere international radiocarbon calibration curve, the conversion of measurements to dates based on known tree rings, was outdated for the period between about 400 BC and 250 BC.

Kyrenia Shipwreck's Discovery (Continued) June 26, 2024

After investigating, he and his team determined that the Northern Hemisphere international radiocarbon calibration curve, the conversion of measurements to dates based on known tree rings, was outdated for the period between about 400 BC and 250 BC.

The researchers were able to formulate their date estimate by recalibrating the curve using sequoia and oak samples of known age from this period. The revised curve was critical to homing in on an accurate time frame for the Kyrenia shipwreck and could further help researchers across the world facing similar problems when dating ancient structures, Manning said.

A treasure of ancient almonds

The radiocarbon ages from the wood gave the researchers an idea of when the ship was built, but it was a cargo of almonds that gave the study authors a date estimate for when the shipwreck happened, Manning said. "If you've got material like almonds — or you can imagine olives or anything like this which was being used as a food crop — and it was on the ship when it sank, it's got to have been there from probably about a year ... or maybe it was two years older than when a ship went down."



By using the organic materials from the cargo, such as the almonds, an unidentified wood twig that was not part of the ship's build, and an ankle bone of livestock, researchers were able to narrow the dates and estimate a range of years for when the Kyrenia ship's last voyage took place.

"Part of the value of this story is about process. ... the (radiocarbon) dating and dendrochronology fields have grown, developed, refined their results over many decades," said Mark Lawall, a professor in the department of classics at the University of Manitoba in Winnipeg, in an email. "Science — whether 'hard' or 'soft' — develops over time through a lot of work 'in the trenches'. It takes time and it needs time." He was not involved in the new study.

With the slight modification in the estimated sinking date, it's impressive that the original dates based on archaeological evidence of ceramics and coins were only off by a few years, said Lawall, who has studied amphorae. Eventually, the wreck site yielded nearly 400 (mostly Samian and Rhodian) amphorae, nearly 30 grain millstones, coins, anchors, iron blooms, stone ballast, rope, tools, and various other pots and cooking utensils. Among the pots were found over 10,000 almonds, 18 olive pits, 760 grape seeds, over 10,000 fig seeds, and more—an amazingly huge amount of retrievable items. [ancient Greek containers](#) used for shipping wine, olive oil and other goods, from the Kyrenia shipwreck.



"The other part of the Kyrenia story is its window into past lives that are otherwise difficult to 'see' through the well-known ancient writers (or even less known)," Lawall said. "The Kyrenia crew may have been a band of more marginal traders, taking up what they could, where and when they could, and hoping for a small profit at the end of the day."

He added, "They dealt across cultures and in doing so were part of an immensely complex network that tied all parts of the Mediterranean together. In this way we start to understand the origins of the modern, multi-cultural, inter-linked Mediterranean world."

To see more pictures of the Kyrenia go to:

https://www.google.com/search?q=kyrenia+shipwreck&sca_esv=4e5abd8d1627d1c0&sxsrf=ADLYWIKoKSI6rFJbqNYRCNwpEwW7AXOoQ:1725724295118&udm=2&source=iu&ictx=1&vet=1&fir=CAos-3Kb-KevzM%252C2MXCtUHbj5fVPM%252C%253Bdbd8WToBYntQIM%252CsJTublwRms-ZJM%252C%253BjuoOtFLsLZ7-LM%252CTXCrVvvZGVIFrM%252C%253BfKvVmdbeCtGpwOM%252CJ1t_l8J-36tEGM%252C%253BwGfoB0cuC5NI3M%252CN9TBEekCACoe7M%252C&usg=AI4_kTLKJ-sfw9ce_XyMjQqZcToDcveJQ&sa=X&ved=2ahUKEwiN2Nz8I7GIAxWRKkQIHV22BTEQ_h16BAgmEAE#vhid=FKVmdbeCtGpwOM&vssid=mosaic

Orphaned Dolphin Rescued from Power Lake near Seadrift, Texas



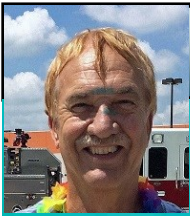
This past weekend an extraordinary rescue operation successfully saved a young female dolphin found land-locked in Power Lake off San Antonio Bay. The dolphin, initially observed with her presumed mother about two weeks ago, was discovered alone after the mother was found deceased on the shore.

The [Texas Marine Mammal Stranding Network](#) (TMMSN) was alerted through its stranding hotline (1-800-9MAMMAL), prompting an immediate response. Within 24 hours, a collaborative effort was launched, involving TMMSN, [SeaWorld San Antonio](#), [Texas Parks and Wildlife](#), [NOAA Fisheries Service](#), and critical local partners including [Bay Flats Lodge Resort](#) Captain Todd Jones, [Brigid Berger](#) with Middle Coast Sea Turtle Rescue/[San Antonio Bay Partnership](#), and Captain John Humbert. The rescue mission, which required four boats, knowledge and resources from the locals, and experienced teams traveling from Galveston and San Antonio, was a significant logistical effort.

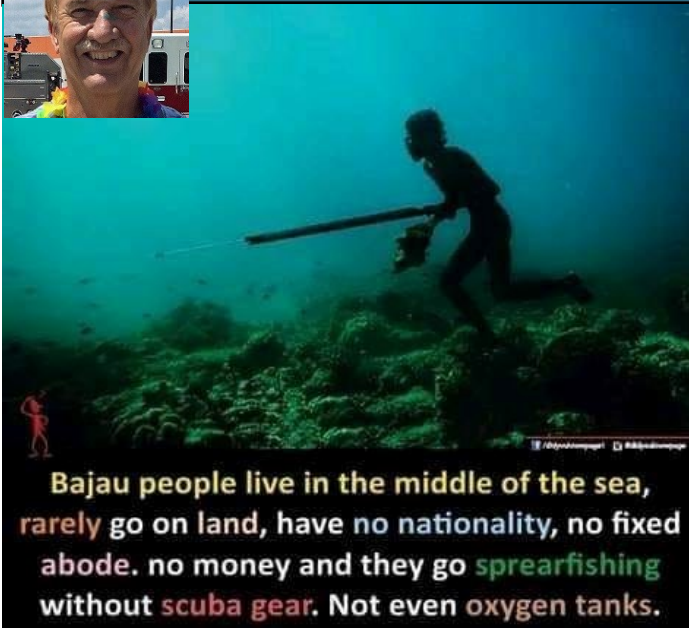
The dolphin was successfully rescued and assessed by a veterinarian on-site. Given her young age and condition, NOAA Fisheries recommended her transfer to a rehabilitation facility. Due to damage from Hurricane Beryl, the TMMSN Galveston rehabilitation center was unable to accommodate her. Therefore, emergency authorization was obtained from NOAA for her to be transported to and rehabilitated at SeaWorld San Antonio, where she is receiving expert care.

The swift and coordinated response highlights the dedication of all involved in ensuring the well being of this dolphin. Following storms, heavy rain or flood events, dolphins may be found in areas of unsuitable habitat (e.g., too shallow, low salinity, lack of prey) and should be reported immediately. If you observe dolphins in an area that seems unusual, please report them to your nearest marine mammal stranding responders; in Texas call **1-800-9MAMMAL(800-962-6625)** and throughout the Southeast U.S. call **1-877-WHALE HELP (877-942-5343)**.





Sea Nomads——Article sent in by Mike Peters



Known as "sea nomads," the Bajau people have been living in boats or ocean dwellings on the waters of Southeast Asia for centuries without a homeland to call their own. Though they spend up to five hours a day underwater, diving to depths of more than 200 feet, they have little sense of time or age, with virtually no calendars, clocks, or birthdays. They've since evolved to have internal organs and physical capabilities unlike our own and are the last of their kind on Earth. Photo by James Morgan.

Bajau people of Indonesia, Philippines and Malaysia were first recorded by Europeans when Venetian explorer Antonio Pigafetta met them in 1521 AD. These maritime nomadic people have been fishing and diving for many millennia and over that time they have evolved

bigger spleens which allows them to dive for longer than the average human.

According to scientists :

"The bigger spleen makes more oxygen available in their blood for diving. Located close to the stomach, the fist-sized spleen removes old cells from the blood and acts as a biological scuba tank during long dives."

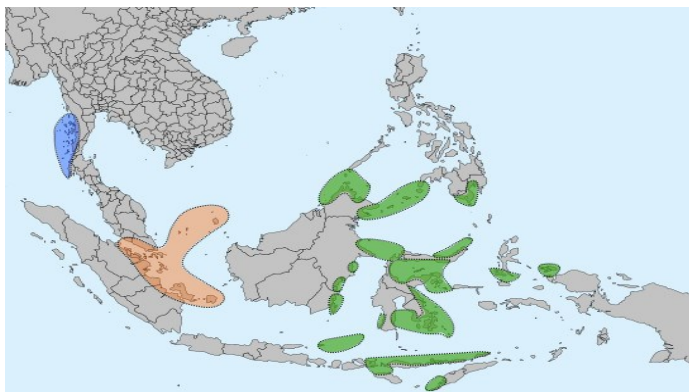
Bajau people can dive to depths of over 200 feet and hold their breath for 13 minutes. They can also walk across the seabed hunting fish. These people live most their lives at sea and are the first known humans genetically adapted to diving.

***Do you want to see more posts like this? Well, today we are continuing our fundraising drive to reach our goal. All funds raised, go right back into research. If you are able, please help support our group today. Every little bit helps!

GoFundMe Link...

<https://gofund.me/e2436823>

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[#mysterious](#) [#unknown](#) [#lost](#) [#missing](#) [#History](#) [#enigma](#) [#unsolved](#)
[#questions](#) [#sea](#) [#seanomads](#)



Sea People Southeast Asia

Erik Abrahamsson, Lund University, and Erika Schagatay, Mid-Sweden University, 831 25 Östersund, Sweden

Breath-hold Diving
 The sea nomads breath-hold dive to collect food and catch fish on the seabed using very little equipment, usually homemade spearguns, wooden goggles and sometimes swimming feet. A fishing tour can last for up to nine hours, with only short breaks for food and water. In 1988 Erika Schagatay visited the village Topa located on the sea in Indonesia. Registrations revealed that these people display a powerful and efficient diving response. Erik Abrahamsson returned to the village in 2011 and found that little had changed. Measurements in the best Bajau fishermen revealed that they spend 60% of the fishing time submerged, and thereby stay up to five hours a day under water (3).

Underwater vision
 Some children were observed to dive well at 2-3 years of age, and to collect even small clams without goggles (Schagatay 1991). Anna Gislén studied the underwater vision of Moken children in Thailand, and found the explanation; they can constrict their pupils much more efficiently than others, thereby obtaining a superior underwater vision (3).

Conclusion
 We conclude from our observations in the sea nomads that modern humans possess the necessary adaptations for living an efficient lifestyle based on marine resources largely obtained by diving.

References
 1. Schagatay E (1991) The significance of the human diving reflex. In: "The aquatic ape: Fact or fiction?" M. Bende, J. Ward, J. Harrell, V. Heynolds (eds). Seaworld Press, London, 247-254.
 2. Schagatay E, Ledin-Sundström A, Abrahamsson E (2011) Underwater working times in two groups of traditional apnea divers in Asia: the Ama and the Bajau". Diving and Hyperbaric medicine, 41 (1): 27-31.
 3. Gislén A, et al (2003) Superior Underwater Vision in a Human Population of Sea Peoples? Current Biology 13(10): pp. 833-836.

American Charitable Watersport Activities Foundation



2024 Supporter Registration

The “American Charitable Watersport Activities Foundation” (ACWA) was established by SCUBA divers on March 31, 2023. ACWA is recognized by the IRS as a 501(c)(3) public non-profit charity. Staffed by non-paid volunteers, ACWA’s administrative and donation support is provided annually by members of our community.

Supporter Registration for the “American Charitable Watersport Activities Foundation” (ACWA) is open to Dive Clubs and Individuals who reside in the United States of America. 2024 registration is \$20.

“Supporters” on record for 2023 are listed on a “Supporter Master List” and need not complete this form. They continue their charity efforts with their 2024 payment of \$20 to ACWA’s treasurer - Mark Leiserowitz (contact information listed below).

New “Supporters” need to complete this form to provide ACWA with contact and IRS reporting information. To join as an individual (must be a certified scuba diver, or a member of a dive club) - fill out the application below. Please print legibly as e-mail addresses will be utilized to keep supporters abreast with the charity’s status and your name as identified below, used in any future donation reporting required by you or the IRS.

Dive Club _____

or

Certifying Agency: _____ C-Card Number: _____

Make Checks Payable To: **ACWA, c/o Mark Leiserowitz, 5205 De Milo Dr., Houston, Texas 77092**

Name: _____ Phone / Cell Phone: _____

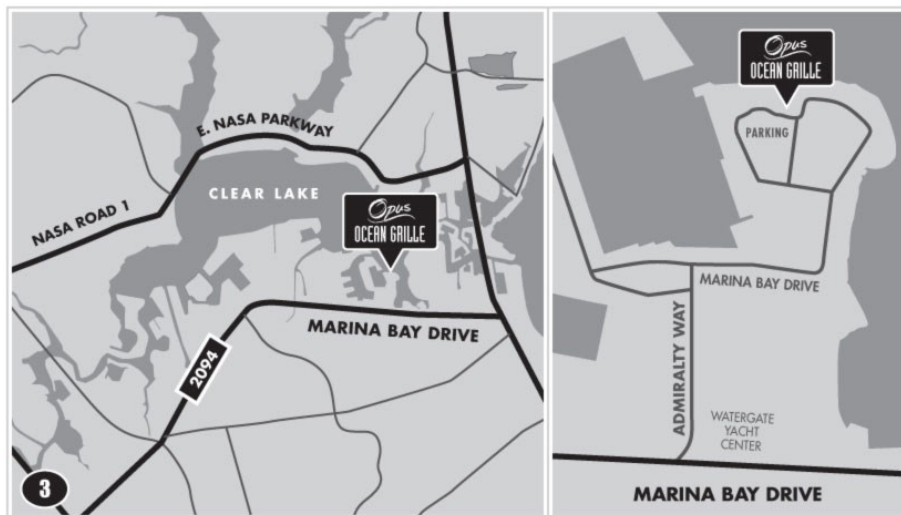
E-Mail: _____

Signature: _____ Date: _____

2024 NASA Lunarfins Christmas Party

December 1, 2024

5:00PM, Second Floor



OPUS OCEAN GRILLE

1510 Marina Bay Drive, Building 124

Clear Lake Shores, Texas 77565

Opus Ocean Grille offers a variety of your favorite fresh seafood dishes; from oysters on the half shell, Alaskan King Crab, Chilean Sea Bass and much more!

Located within the Watergate Yachting Center in Clear Lake Shores, our waterfront dining experience makes for a perfect brunch, or evening out with Friends and family.

Be sure to bring a White Elephant Gift

I need a good head count by November 28th.

Please RSVP: Ja Van Pruett, text or email

281-229-8631 or caladyfish@yahoo.com

<http://www.opusoceangrille.com/>

Go check out the menu and pictures.

**You should have
been at our
General Meeting Aug. 20, 2024**



The Lunarfins Scuba Club was organized in 1963 by a small group of divers who worked at the Manned Spacecraft Center, as Johnson Space Center (JSC) was known back then. The club grew primarily through the sponsorship of SCUBA training classes, local dive trips and social activities. Since that time, membership has broadened to include anyone interested in diving. The majority of our members are in some way affiliated with NASA but this is not a requirement for membership and we have members from all across the board.



Lunarfins

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281-851-5206

webeditor@lunarfins.com

Facebook:

<https://www.facebook.com/groups/687047211312336>

Website:

<https://www.lunarfins.com/>

TGCC

<https://www.tgccdiving.org/>

TPWD reefs:

https://tpwd.texas.gov/landwater/water/habitats/artificial_reef/

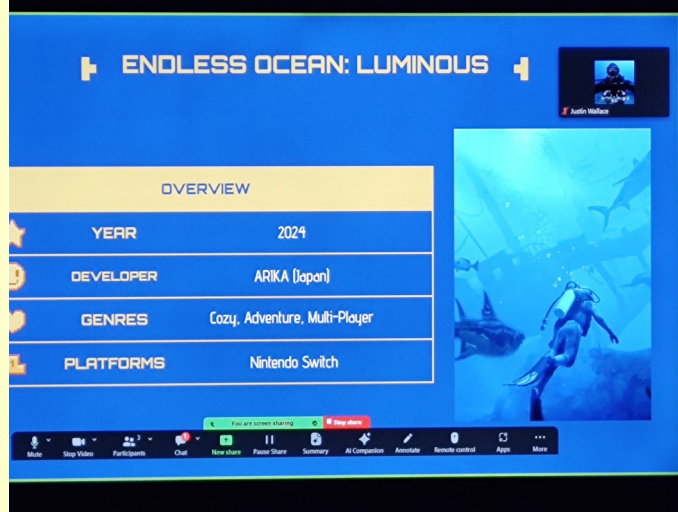


You should have been at our General Meeting Aug. 20, 2024



Lily Douglas

Talked about Scuba Video



Dennis

Deavenport

Gave an introduction to his Cuba trip.



Trips Offered by Dive Shops etc.

Captain Beard Charters

1011 Casko Rd – Freeport TX

captainbeardcharters.com/index.shtml



Giggle Marlin Dive & Swim

4502 Almeda Rd – Houston TX

gigglemarlin.com

Island Dreams

10245 Kempwood Dr E119 – Houston TX

www.divetrip.com



Maximum Scuba

134 Gulf Freeway North – League City TX

maximum-scuba.com

Oceanic Ventures

5808 Newcastle Dr. – Houston TX

oceanicventures.com



Outside The Asylum

15015 Westheimer Rd #H – Houston TX

otadiving.com

REEF Trips

Dive Vacations That Count – Key Largo FL

reef.org/trips



Sport Divers

20814 Gulf Fwy #60 – Webster TX

sportdivers.com

Texas Dive Center

364 FM 1959 #D – Houston TX

txdivecenter.com/



Texas Scuba Adventures

2315 Mechanic St #120 – Galveston TX

texasscubaadventures.com

