

The Scuba Sports Club of Westchester, New York

Our 43rd year serving the local and northeast dive community !

The Scuba Sport Club's Spring 2018 Newsletter



Gary Lehman, Newsletter Editor



The Anchor Line



Denise Blais, President



Welcome to the Spring 2018 issue of The Scuba Sports Club Sea Swells!

We invite members of the diving community to contribute; please contact Gary at gary.a.lehman@gmail.com with your article. Our Club Newsletter includes features about our Club's diving and social calendar; our diving adventures, social/educational events, occasional

equipment and health issue discussions, and profiles on some of the more colorful and intrepid characters in our local diving community (of which there are many!), and other features of interest.

The Current issue reflects many scuba diving-related yearly events during the winter months. Just because it is too cold to dive locally doesn't mean we forget about diving! For one thing, many of us have the opportunity to get away to warm, blue water— and we'll hear about some of those great times in this issue. Furthermore, we all have the opportunity to further our dive education during the winter. We also can check out diving-related cultural attractions, enjoy our Club's "deco" stops, attend the Explorers Club's Sea Stories annual conclave, the Long Island Dive Association Film Festival which we all enjoy, and attend Boston Sea Rovers and Zig's Beneath The Sea. What better reason to raid our respective slush funds to buy MORE GEAR! Additionally, we are favored to have numerous local scuba dive clubs in our area (most notably our own!) which feature terrific and captivating monthly presenters. A report on some of those, accordingly, are featured in this issue.

There is an article I call particular attention to: Nick's USS Bibb article. Enough said. Draw your conclusions after reading the article. Bravo Zulu to Nick ! (y)

Find the articles of interest to you, then relax and enjoy — and make your dive adventures and dreams come true !

Gary
Sea Swells Newsletter Editor



Hello Everyone!

I hope you're all surviving the rough Winter we've had so far! Hopefully, Spring will be here soon where we can all come out of hibernation and blow some bubbles somewhere fun!

TSSC has started off the year very lucky! For some who attended LIDA and the Boston Sea Rovers Show this year we walked away with some, if not most, of the top prizes! Of course it took buying raffle tickets to win them. But the money has all gone to great causes. And that means that there will probably be club trips that involve those winning destinations. So it's a win/win situation for all!

The year is just beginning and we have lots planned throughout the year. Please come to the next meeting to find out more or check out our website at www.TheScubaSportsClub.org! As you know trips sell out quickly and are often announced at meetings first for early sign up. So don't miss out!

The entire Board is looking forward to spending the year with all of you and seeing where this year takes us!

Denise
Scuba Sports Club President

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TSSC CLUB OFFICERS and DIRECTORS 2018

(We always welcome our Club membership to join our leadership team !)

President	Denise Blais
Vice President	Jack Ricotta
Secretary	Michelle Memoli
Membership	Nick Lappano
Dive Planning	Jack Ricotta
Treasurer	Sheri Buchman
Program Director	Allan Rios
Director at Large	Gene Miceli
Executive Director	Kenneth Salstrom
Past President	Tom Butcher
Newsletter	Gary Lehman
Environment and Legislative	Judy Dronzek
Education and Safety	Currently Open
Social Director	Melissa Lonquich
Webmaster	Denise Blais
Legal Advisor	Robert Schrager
Founder	Zig Zigahn
Co-Founder	Soliman Shenouda



Editor's Comments: Hey, a special shout out to our contributing writers. *You folks are the best!* Every newsletter editor dreams of having content provided by contributors which is at the same time engaging, informative, relevant — and also which broadens horizons and outlook. How did I get so lucky to have such a team! Thank you to all who contributed in this issue and in past (*and future*) issues!



Club Dive Trips, Deco Stops — Event Planning Calendar for 2018



What's on the radar, More to come!

(We love to hear new ideas!)

Event	Club Contact	Date
47th Annual Wappinger Creek Water Derby	Bob Bak https://www.thescubasportsclub.org/events/aquatic-explorers-canoe-race/	April 28
Bonaire Dive Club Trip	Jack Ricotta	April 28—May 5
Captain Mike's Beach Cleanup	TSSC Directors	May 20
Memorial Weekend BBQ/Dive	TSSC Directors	May 27
Club Dive: Tubbataha Philippines	Jack Ricotta	June 7-18
Club Dive: San Salvador, Bahamas	Jack Ricotta	August 4-11
Annual Seal Dive in Gloucester, MA	Jack Ricotta	September 15, 16
Whale Watch	TBD	TBD
Explorers Club Sea Stories	Gary Lehman	November 10
Holiday Party	TBD	TBD
NYC Christmas Tree / Lights / Store Fronts and Dinner !	TBD	TBD





TSSC 2017 Diver Of The Year: Denise Blais !!

A cherished Scuba Sports Club tradition is to honor our Club's Diver of the Year at the annual Beneath The Sea Expo. And so it was, that on Saturday March 24, our own Denise Blais was thus honored and received her award!

DOY recognizes the outstanding individual who advances scuba diving as a sport; provides cheerful service to fellow Club members and guests; leads all other divers with safe diving practices and is an advocate for our marine environment.

Under our DOY's purvey in 2017, our Club membership has almost doubled -- bringing new faces, new ideas, and new energy. Denise has advanced our Club's social media footprint, inaugurating a new and engaging website; she has overseen our revitalized diving calendar and Club social events; initiated collaborations with other area scuba clubs, dive shops and services providers; has brought professionalism and structure to our Club management processes; supported Club participation in local area cleanup here in our Westchester County home; encouraged continuing dive and Emergency First Aid education and marine environment activism together as a Club by her own example -- and with her fun, warm and congenial manner has attracted a new wave of scuba divers to the sport. And resultingly, we are all having the times of our lives diving together and have an incredible 2018 (& beyond) dive calendar already lined up!

May we present to you the 2017 TSSC Diver of the Year, our Madame President Denise Blais !!





The Scuba Sports Club Safety Series

Please be sure to join the Club General Meetings to take advantage of the Safety Series presentations, which will be given by our Club's Directors/Officers. Keeping safe practices in mind, and mentally practicing and re-visualizing situations - can be crucially important to assuring safe diving always. This is especially the case when multiple circumstances suddenly present at the same time, creating potentially dangerous and adverse situations. Correct and automatic responses are a function of awareness, anticipation, training, practice, and forthright actions. Our reasoning and anticipation are our very best defense!

MONTH

TOPIC

PRESENTER

MONTH	TOPIC	PRESENTER
March 14	Knives and Cutting Tools Review	Tom Butcher
April 11	Service that Regulator !	Gene Miceli
May 9	Buddy System, Techniques and Tools	Michelle Memoli
June 13	Garments Overview (wetsuits, gloves, boots, hood)	Mikhayl Abrahams
July 11	Knowing Your Gear – Practice, Practice, Practice!	Nick Lappano
August 8	Safety Subject To Be Determined	Sheri Buchman
September 12	Zika Update and Tropical Diseases Update for Divers	Gary Lehman
October 10	Optimizing Air Consumption - Tips and Techniques	Kenny Salstrom
November 14	Diving Within Your Limits	Jack Ricotta





2018 Long Island Dive Association Film Festival —

TSSC Gets On The Scoreboard!

Judy Keznord and Denise Blais
(LIDA photos by Christopher Mazz)



Every year the Long Island Divers Association (LIDA) holds a fantastic and much-anticipated film festival as a yearly fundraiser. This year LIDA changed things up a bit. Normally the event is held on Friday evenings. This made for a long day - to travel to Hofstra University and then a long drive home after a challenging week at work. Many attendees from Westchester or Connecticut wouldn't get home until 12am or 1am. But this year the film festival was held on Saturday evening on January 20th. Which most people seemed to strongly prefer! This worked out much better for folks carpooling to Long Island's Hofstra University in Hempstead and avoided having to deal with the staggering Friday commuter traffic on heavily-populated Long Island. Instead, attendees arrived relaxed, well rested, and looking to have a great time -- and we all surely did!!

All agree that it is great to get together with diving friends, enjoy fascinating films and presentations, and make plans for the upcoming dive season. And if that were all there was to it, that would be enough in and of itself... But -- there is another underlying motive for the LIDA film festival – and that is LIDA's service to the entire diving community. LIDA leadership advances the interests of scuba divers on Long Island -and throughout our region- by advocating and petitioning state, local and municipal governments and leaders to open up sites such as Secret Beach in Greenport to divers. Remember also that the Boston to Philadelphia land and sea corridor is one of the most heavily-traveled (if not THE most) on Earth. Thus, these waters are pulsing with the submerged history and culture entombed in the hundreds (or more) of wrecks which dwell for eternity under the waves – testimony to the intensive human activity in our region. So much has been discovered, and so much more remains to be! That exploration is one of the things which LIDA has on its radar, and that is part of their agenda.

But this is only one part of LIDA leadership's mission. A further commitment is to encourage young people to take up scuba diving. Barry Lipsky and the leadership team of LIDA pioneered a program to mentor and dive with scuba-diving high schoolers from The New York Harbor School to Old Ponquogue Bridge at Shinnecock Inlet. Objective was to show them that diving is a lot more than just bearing up under the suffocating stench from dredging up a century of carcinogenic sludge in Brooklyn's Gowanus Canal superfund site, clearing putrefying poisoned dead mussels off drainage filters off Staten Island, and scraping guano off the NOAA buoys... Anyone who has been fortunate to have dived Old Ponquogue Bridge (or heard about it) knows what a wonderful site that is – thanks to LIDA, which was out in front to secure the bridge and the site for future generations of divers. We've seen and met the young people of New York Harbor School and have witnessed the exuberant joy in their faces as they emerge after their dives having experienced the marine life richness of the fish nurseries which surround that



2018 Long Island Dive Association Film Festival — *TSSC Gets On The Scoreboard!*



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bridge! We tip our facemasks to LIDA for their advocacy, and are only too happy to support their efforts via our attendance at the annual LIDA Film Festival !

Now, back to the details about the LIDA Film Festival! The photographers and cinematographers sojourn to Hofstra from all over the world of diving! Below is a list of this year's lineup:

Rick Morris—"The View Through My Mask"
Michael Salvatore & Christopher Weaver—"Greenland - the Vanishing Frontier"
Peter Venoutsos—"Seals of Shoal Island"
Larry Cohen & Olga Torrey—"The Many Faces of Mexico"
John Moyer—"Art Treasures of the Andrea Doria"
Soren Dahl—"Long Island Seagrass: Science and Conservation"
Ryan Christie & Ashley Dacosta—"A Summer of Diving"

These films took us to diverse and spectacular dive locations and explored topics related to our oceans. It's always exciting to see from year to year what great locations we will be able to vicariously experience through the eyes of these exceptionally-talented amateur and professional photographers and filmmakers! And the engaging cultural, historical and marine life learning which accrue to us from these presentations!

After the film presentations concluded we enjoyed a reception where divers and friends mingled with each other and with the presenters. New insights afloat and future dive adventures start to come into focus during these conversations! A variety of sandwiches, pasta salads, chips and desserts were offered buffet-style. For those looking to partake in the alcoholic beverages, beer and wine was available.

Fund raising is in part via the on-going sale of 50/50 and door prize tickets for sponsor raffle prizes. Just ask some of our TSSC members who were winners from prior years! Gary Lehman actually won first and second prize in 2016! But was very kind to put one of them back in to be re-drawn for someone else to appreciate. What a guy! Bob Bak won a trip to Egypt on the Heaven Saphir liveaboard and enjoyed that trip immensely with other TSSC folks in October 2017.

Well -- this year didn't disappoint! We must have had over 20+ TSSC members who attended to help support our friends at LIDA. Almost every TSSC member who attended won at least a little something. Some won big!!! Helen won a trip to the Philippines at Marco Vincent resort, Judy won a trip for two on Egypt's Heaven Saphir liveaboard that she had just been on in October. Jack also won a trip on the Aggressor Roatan! Denise won \$600+ ScubaPro dive computer, and a free CPR/O2 class. We can't exactly remember all the great prizes that everyone won, but needless to say The Scuba Sports Club did very well! We hope that LIDA will allow us to come back next year! The money for these drawings goes to a great cause, and a great group!



**2018 Long Island Dive Association Film Festival —
TSSC Gets On The Scoreboard!**



... continued

As a result of attending this event we now have two club trips that will be planned to go to Egypt again, and to Roatan in 2019! A hugely-valued collateral benefit is that by diving together on liveaboards, we learn from each other and we all become better and safer divers. This in turn advances our beloved sport bit by bit. So we have LIDA to thank for that; by sponsoring these events and generating opportunities for these liveaboard experiences, the entire scuba diving ecosystem benefits. After all, we will all go raid our slush funds for new gear before going on a liveaboard, and get training from services providers in advance of our liveaboard trips! The Scuba Sports Club also has a summer weekend out on Long Island to dive Secret Beach this summer. Secret Beach is a private beach that LIDA has exclusive rights to dive and has graciously allowed us the opportunity to experience it for ourselves. So, we hope you all sign up to go, it will be a great local dive experience!

All in all, the LIDA Film Festival is consistently a great event and welcome opportunity to enjoy together what we all share a passion for - appreciating the ocean and all the wonders it has to offer. And, to support the great work being done on all our behalf by LIDA. Hope to see you all there next year!!!





The Disappearing Ascent Line

Nick Lappano



In early December 2017, I went down to the Florida Keys for a quick weekend getaway and to squeeze in a few last dives before putting away my gear for the winter.

On my first day I went out with Florida Keys Dive Center (Flakeys) on their 42 foot dive boat, the Big Dipper.

There were only three divers on the boat. In addition to myself, Paul and Steve, who knew each other, were diving. Flakeys had provided all three of us with two 100 cubic foot high pressure steel tanks, which would give us significantly more air than aluminum 80s as well as reducing the amount of weight which we would have to add to achieve neutral buoyancy.

Unfortunately, however, they were having issues with their compressors which suffered some damage from hurricane Irma. So while we would be diving on enriched air, our oxygen percentage was only about 26%. This contained significantly less oxygen, and therefore more nitrogen, than the usual 32% mix. This would come into play in this scenario.

The two dives which we would be doing were both wrecks.

We were planning to dive the *USS Eagle* first, but we had to detour to the *USS Duane* instead since a few fishing boats were moored off the *Eagle*. We made an incident free dive on the *Duane*. I recorded a depth of 108 feet with 33 minutes of bottom time. Then we headed over to the *USS Bibb* to make our second dive.

The *Bibb* is the sister ship of the *Duane* and is a 327 foot long retired Coast Guard cutter. Unlike the *Duane* which rests upright on her keel, the *Bibb* lies on her starboard side. Because of this, the *Bibb* tends to be a deeper and more challenging dive. Normally there were two mooring balls attached to the *Bibb* for boats to hook up to. However now there was only one mooring buoy on the surface. It seems that Hurricane Irma had claimed the other one when she hit the Keys on September 10th. Since this was the crew's first trip to the *Bibb* since the storm we did not know which line had survived.

Between dives we had a 54 minute surface interval which is about average in the Keys when doing two deep dives. We geared up and splashed into the water. There was a moderate current and about two to three foot seas, nothing too challenging.



The Disappearing Ascent Line

Continued...



I followed Paul and Steve down the line to the *Bibb*. The three of us reached the ship and leveled off at about 110 feet to begin exploring the wreck, working toward the bow area. We went through a few swim-throughs and after one of them things went a little wrong.

The visibility wasn't great by Keys' standards, probably about 20 to 30 feet on the wreck. After coming out of the swimthrough I spotted the other divers, then looked away for a moment to check out a large barracuda. Looking back a moment later the other two divers had disappeared.

After looking for them for about a minute, my computer was down to 3 minutes of "no deco" time so I turned and headed back to the line. Diving on a more traditional 32% Nitrox mix I would have still had more bottom time. However, diving two consecutive deep dives on a 26% mix had obviously cut down my bottom time considerably.

I passed by one line but believed that we had come down on a line closer to the stern so I proceeded further attempting to find that line. Unable to locate another ascent line I returned to the previously observed line and started a slow ascent. Unfortunately the time spent looking for the "other" line and return to the line I was on had put me into "deco" and my computer was telling me I had to do a 12 minute stop at 10 feet. I figured "no problem" it would be like a long safety stop. I had plenty of air and even made a deep safety stop at 60 feet, hoping along the way to reunite with Paul and Steve.

Everything was going well until I got to 35 feet. I had been slowly ascending hand over hand. I reached a small buoy at that depth and reached beyond it continue up the line and there was no line to grab!! The line to the surface just ended in midwater. Oops. I had obviously ascended on the wrong line. We had, in fact, gone down on the stern line and it was the one remaining intact line to the surface. I had not gone far enough to the stern to spot it in the less than stellar visibility. If I had only swam another few feet I would have probably spotted the line and along the way met up with Paul and Steve while ascending. I would have also avoided needing to make a deco stop since I would not have spent additional time at depth swimming back to the "wrong" line.

But here I was, alone 35 feet below the surface still needing to make a 12 minute stop at 10 feet with no ascent line. Not the best situation but I remained calm and figured out what to do. I still had over 850 psi in my tank so air would not be a problem.

I always dive with a safety sausage and reel. I don't necessarily plan to use it but carry it for emergencies such as this. Being so equipped, I removed the reel and attached the line to the sausage. Once this was done I partially inflated the sausage from my octopus and sent it on its way to the surface. Knowing that I would start to drift as soon as I left the ascent line I maintained contact with it for a minute or two, hoping that the boat crew would spot the sausage before I started to drift away in the current. Then I released my grip on the truncated ascent line and dumped any remaining air from my BCD to make sure I was negatively buoyant before starting to slowly reel myself up to the surface.



The Disappearing Ascent Line

Continued...



When I got to 10 feet I stopped ascending and relaxed, hanging on to my reel while completing the required decompression stop. Boy, 12 minutes never took so long. I was hoping the boat would be within sight when I surfaced but I knew that I couldn't go up too soon without risking DCS.

After completing the stop I slowly (Remember, the last 10 feet of ascent can be the most dangerous because of the relative change in pressure) ascended to the surface and popped my head out of the water. I rotated half a turn and saw the Big Dipper about 30 feet away. To say I was relieved was an understatement. I gave them a big "okay" sign and swam to the rear of the boat.

I quickly got onboard, explained what had happened and we headed back to shore.

Even though circumstances put me in a bad situation, keeping calm, having the right equipment and knowing how to use it prevented me from suffering any ill effects. The crew also knew that I was okay since the deployment of the sausage enabled them to spot me. Once they saw my bubbles coming up at regular intervals they knew I was okay, and simply waited for me to surface.

When faced with any unusual or extreme situation, remember not to panic. Panic kills! As long as you have air you are good. Stop, Breathe and Think before Acting. If you do that you substantially increase your chances of surviving any situation without ill effects.

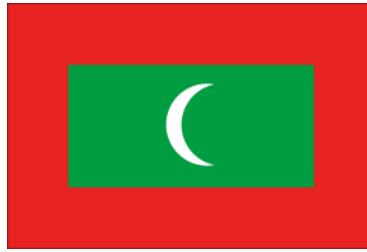


USCGC *Bibb* (WPG-31)

Launched:	14 January 1937
Commissioned:	10 March 1937
Decommissioned:	30 September 1985
Fate:	Sunk as an artificial reef off the Florida Keys on 28 November 1987

Bibb saw service in [World War II](#). The ship fought in the [Battle of the Atlantic](#) serving as a convoy escort. In February 1943, the convoy came under attack and the [SS Henry R. Mallory](#) was torpedoed. Capt. Raney ignored the order to leave the survivors and went back and rescued 202 men from the icy waters. In 1944 *Bibb* provided convoy escort between the United States and North Africa — mainly to Bizerte in Tunisia. In January 1945 *Bibb* left Charleston, South Carolina for service in the Pacific theater where, as an AGC, she served temporarily as the flagship for Commander, Minecraft, Pacific Fleet. *Bibb* is credited with destroying one Japanese kamikaze aircraft in action at Karema Retto.

In peacetime the *Bibb* spent time on ocean station providing weather information and beacons to trans-Atlantic traffic. While on ocean station, the *Bibb* came to the rescue of the airliner, the Bermuda Sky Queen. In the [Vietnam War](#), the *Bibb* transported [John Kerry](#) after he was shot on his Swift boat



My “Beautiful”, “Favorite”, “Good Trip!” — **MALDIVES !**

Jack Ricotta

This past January, a dozen TSSC members traveled to the Maldives for a live aboard diving excursion. A few of us decided to fly to Dubai earlier and tour, prior to departing to Male (in the Maldives).

Those of us leaving from Dubai were encouraged by Jody Deevy, to fly into Male at the crack of dawn, in order to not risk missing the boat and delaying the rest of the group coming in from New York. . Unfortunately, our group outbound from New York arrived two days late, due to a big Nor'Easter storm which hit on their departure day! Obviously, we took the opportunity to rib Jody a bit, being as she was the one counseling us about the potential for delays in our voyage. All's well that ends well, we were all onboard.

As we left Male aboard the *Manthiri* live aboard vessel, Mike Ferrari coined his famous “beautiful”, “beautiful”, comment, as he gazed into the pristine waters!

A typical day aboard the *Manthiri* live aboard consisted of waking at 6am, having coffee and maybe some cereal, then off for the first dive of the day. Upon our return we would be served a large breakfast of eggs, toast and other Maldivian staples. After a gastro reprieve we were off to the second dive of the day, after which, guess what? Lunch! Two more afternoon dives and finally, dinner. The crew would throw lines off the back of the boat and catch tuna and other local fish. The fare was plentiful and delicious! It amazed us all, to see the amount of food that came out of such a tiny galley space! And of course every dish served was our host Moussa's “favorite”.

Moussa was our lead dive master who achieved his 9,800th dive while we were onboard. To his dis-believers, he had dive logs to prove it. It was quite impressive reliving some of his logged dives. Moussa was always attentive to our needs, and arranged for whatever help needed. As for the *Manthiri* crew, what a doting bunch of guys! Our wet suits were rinsed and hung after each dive, cameras carefully stored, and they helped us in and out of the water. You name it, they were there to help. Top notch crew! Especially, Dr. Nitrox -- who mixed and analyzed our tanks before every dive with perfect 32% O₂.



My “Beautiful”, “Favorite” “Good Trip!” — MALDIVES ! continued

Sea life in the Maldives was quite impressive! Especially for some who have never seen a manta ray. Moussa would instruct us to stay low while we approached the manta’s cleaning stations for the best experience. (I figured that after 9,800 dives, he should know the drill!) On one of our earlier dives, we saw seven to eight mantas, hovering - just above our heads - for at least an hour. Mark Mays and I have some great close up shots of each other, surely worth entering in our TSSC photo contest! Many of these great shots were shared on Facebook as soon as we got back onboard. What an amazing experience to have such large gentle creatures, so close as to get a “high five” from their large wing.

Not all our dives were as tranquil! Prior to the trip, Jody suggested buying reef hooks, I thought why? Well, we learned quickly. Have you experienced “G force” current underwater? We hooked into a reef along a drop off, facing the rushing water. Our bodies were like yo-yo’s as the currents changed. We were spectators, as a slew of sharks effortlessly maneuvered the currents, like gulls riding the air. Our cheeks were flapping; we were afraid to turn heads and risk losing our masks. But man, what a ride! As soon as we unhooked ourselves, off we went like a 747!

We did a couple of night dives, allowing us to interact with octopi, rays and numerous nurse sharks. It was on one of these night dives that I forgot to put my camera in the housing before jumping in. (...Later thinking ‘I hope someone else tops this to avoid me getting the Friggin Ziggan award’).

One memorable dive had me, Moussa, Denise and Mike, unknowingly in the midst of 8 whitetip reef sharks. They swam back and forth in front of us, slowly getting closer. Reminded me of a sailboat tacking its way to shore. I remember glancing to Moussa and eyeballing “get the hell out of here”.

All the dives were memorable and forever logged in my memory!

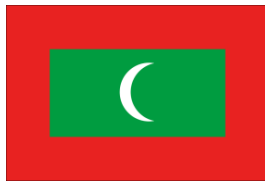
One of the last few nights we celebrated, new member Jim McAuliffe’s birthday. The crew baked him a delicious cake, and we all sang Happy Birthday. Jim’s summarization of the trip, when asked, was always “Good trip, Good Trip”.

On our last dive day, the crew diligently gathered and cleaned our gear, hanging it out to dry on the top deck. Some say looking like a giant scuba garage sale. We had no worries, except when it came to collecting our equipment. Everything looked the same! Especially the safety sausages! I think a few of went home with the wrong size booties.

The seas were a bit rough on the route back to Male. Several of us tried to catch a little sun on the top deck. Sunning oneself on a roller coaster, proved to be a bit of a challenge and comical. At one point Colleen Kiefer went sliding across the deck in her lounge chair, crashing into a lifesaver ring, attached to the rail, splitting it in two. Very funny! We arrived at the Male airport the next day, by boat, because the airport is on an island, accessible by launch. Saying our goodbyes was sad, but encouraged knowing that I will be back.

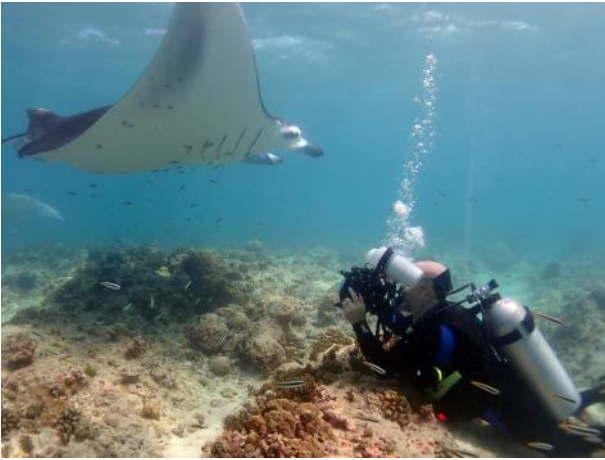
Which brings me to the flight home. Most of us flew coach. NEVER AGAIN! Not enough leg room, screaming babies, and a very long flight. Denise was smart, taking advantage of business class. So as told to me (LOL), “business class was like being treated like royalty, with comfy seats, champagne, and of course a full bar !”T

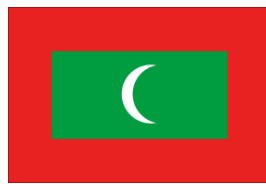
Thanks Denise for helping to write this article. Gary, our Sea Swells editor coerced me into penning this piece. Many thanks and credit to Mike Ferrari, Moussa and Jim McAuliffe for inspiring the title of this article. What a “Beautiful”, “Favorite”, “Good Trip” we had!



My “Beautiful”, “Favorite” “Good Trip!” —
MALDIVES ! continued

Photos provided by Mark Mays, Jack Ricotta and Judy Keznord !

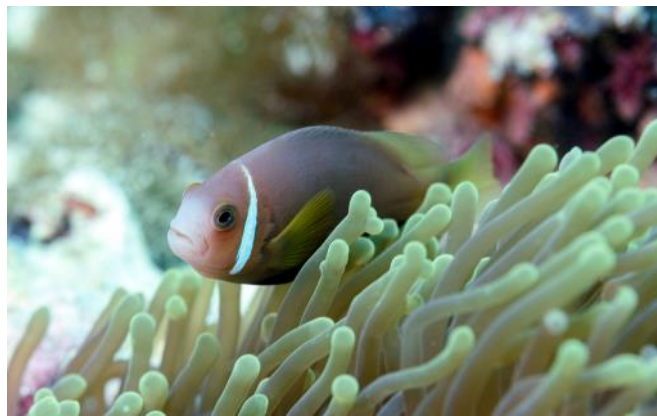


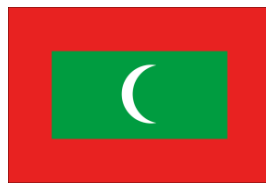


My “Beautiful”, “Favorite” “Good Trip!” —
MALDIVES ! continued



Photos provided by Mark Mays, Jack Ricotta and Judy Keznord !





**My “Beautiful”, “Favorite” “Good Trip!” —
MALDIVES ! continued**

Photos provided by Mark Mays, Jack Ricotta and Judy Keznord !





Diving Dubai's Aquariums

Allan Rios

Aquarium photos by A. Rios

Dubai bldg. photos by J. Ricotta



The Dubai Aquarium and Underwater Zoo is the star attraction at the mega Dubai Mall, one of the largest shopping malls in the world. It has a giant 10 million-liter tank, and is just behind the Georgia Aquarium in size. It contains more than 33,000 aquatic animals. Rising to the third floor of The Dubai Mall, it officially earned the Guinness World Record for the world's "Largest Acrylic Panel". The aquarium is home to 140 species of sea life and offers many incredible ways to experience the underwater world. Visitors can stroll through a 48-metre tunnel, with the aquarium enveloping you from overhead and around. It's a complete fish-eye view, with south African sand tiger sharks, leopard sharks and the varied marine life of the Arabian gulf swimming overhead. There are many opportunities for the public to get closer to the marine life. You can take a glass-bottom boat tour, have a mermaid makeover, get wet in a snorkeling cage, and go scuba diving.

I had emailed the Dive Safety Officer, Francis Uy beforehand for a possible aquarium behind-the-scenes tour and reciprocal dive. The reciprocal dive wasn't possible (as dive operations for the public are done via an outside contractor) but he was more than happy to show me around this impressive world-class aquarium. The aquarium runs as a well-oiled machine with a very dedicated dive team. On the tour he revealed a cryopreservation lab where aquarium researchers are trying to find a method of propagating sand tiger sharks via artificial reproduction. They are trying to create a set of scientific protocols involving sperm collection in combination with ultrasound monitoring and hormone analysis of female sharks to assess their reproductive cycles. The eventual goal will be the ability to breed these animals in captivity. Mr. Uy also showed me a device used to clean the aquarium windows via remote control. As a longtime volunteer diver for the New York Aquarium who has spent a good amount of time cleaning aquarium windows, I was a little bit in awe. I was impressed by the overall professionalism and knowledge of the staff. The aquarium itself was surprisingly very educational and marine conservation oriented. There were impressive exhibits on ending shark finning and shark conservation. I admit I was expecting an aquarium that would be more entertainment focused, but that was not the case here. The aquarium also runs a conservation program at 'The Ocean School' which brings attention to a variety of global issues such as habitat loss, pollution, climate change, poaching and overfishing. By focusing on how these events affect animals and their environments, students aged 6 to 18 years learn about various conservation principles which build awareness and inspire action to protect, promote and preserve our planet.

The dive day began with a brief intro course that amounted to a video introduction to the aquarium. I signed the traditional waiver. I was provided well maintained gear from the clean and well organized dive locker; I just brought my prescription dive mask that day. The dive itself was great. You are given a safety diver to guide you. As it was known I was a visiting diver from another aquarium, I pretty much explored the tank at my leisure. The vast majority of the marine life in the giant 10 million-liter tank was specific to the Arabian gulf and so was completely new to me. The animals were used to divers. I had the opportunity to observe zebra, bowfin, guitar, gray reef, and South African sandtiger (raggies) sharks up close. There was one large inquisitive Humphead Wrasse. Several large potato cod allowed the local blue streak cleaner wrasse to clean their open mouths. They reminded me of our Floridian Goliath groupers. Schools of batfish, unicornfish, and giant trevally swam alongside spotted eagle rays in the center of the tank. Leopard and black blotched rays hovered along the acrylic sides or lay on the top of the aquariums clear acrylic tunnel for visitors to gaze at. There were many vantage points to wave at the visiting public. The whole dive was outstanding and I would highly recommend it to visiting divers in the region.



Diving Dubai's Aquariums continued



The other major aquarium in Dubai is located at Atlantis, The Palm; a luxury hotel resort located at the apex of the Palm Jumeirah resort area in the United Arab Emirates (created on an artificial island). It was the first resort to be built on the island and is themed on the myth of Atlantis but includes distinct Arabian elements. The aquarium is known as the Lost Chambers Aquarium and comes with a complete backstory. According to the hotel's "myth," a series of passages and ruins were uncovered as the resort was being built -- ruins that were later determined to be the Lost City of Atlantis. As you walk through the different marine exhibits, you'll not only read information on the marine life but on Atlantean history and culture as well. There really is not much of an educational component to the place; but the overall design and look of the place was so fantastic I really didn't care. A mix of steampunk and antiquities architecture is the best way I can describe it.

As before I reached out to the local DSO, who was happy to allow me a reciprocal dive at the aquarium. I arrived at the resort at 8am. I was met by the Dive Manager at the Aquarium, Oliver Barredo Ramos. You are immediately struck on arriving by how impressive the whole layout is. Diving takes place in The Ambassador Lagoon, a 11-million-liter marine habitat and one of the top ten largest aquariums in the world. There is actually some rivalry among the two Dubai aquariums as to which is the largest. It is also the largest open air aquarium in Africa and The Middle East at just over three million gallons. I once again signed the traditional waiver and was given gear from a clean and well organized dive locker. The staff were professional and well experienced. This was another outstanding aquarium dive. This is a great collection of some of the most dramatic marine life of the Arabian Gulf. I moved among large schools of Golden Trevallies, Cobias, and Crescent Angelfish. The animals appeared totally unafraid of divers. I was able to closely observe guitar sharks, zebra sharks and white tipped reef sharks. For visiting resort guests there is the opportunity to stay at an 'underwater suite' where your window is the marine life of this aquarium. Afterwards Mr. Ramos was kind enough to give me a behind the scenes tour of this impressive facility. I learned about the 5.9km of pipe work need to filter the lagoon. I visited the fish hospital and nursery where newborn animals were being raised for future display. The whole facility was impressive and modern.





Diving Dubai's Aquariums continued



To learn more about the Lost Chambers Atlantis..
https://www.youtube.com/watch?time_continue=16&v=6ey99o35hRA

To learn more about the Dubai Aquarium and Underwater World check out all the videos on their Facebook page. <https://www.facebook.com/Dubai-Aquarium-Underwater-Zoo-121229854597645/videos/>

A recent episode of Tanked is actually a great guide to the two locations. Check it out here.
<https://www.animalplanet.com/tv-shows/tanked/full-episodes/special-fish-out-of-water>

Happy Diving! Allan



Seven Days of Adventure Aboard *Bahamas Aggressor!*

Gary Lehman



Returned home a week ago from our fantastic week aboard *Bahamas Aggressor* (BA); had to deal with laundry, deferred “honey do’s”, sorting /drying dive gear, repairing a misbehaving home computer, etc. All sorted out now, and I finally have some time to reflect back on our week aboard and write my story!

Divers aboard *Aggressor* have the option of purchasing a video of the cruise on the last night aboard; the video includes heart-stopping still photography by *Bahamas Aggressor* crew member Ben, along with terrific video and extremely professional arrangement/editing by crew member Rachael. I recommend that you purchase your trip video! What a terrific touch for the crew to create this video, making it available for a small fee to divers. Honestly, I watched that video, watched it again (and again) - and wanted to leave my wife a note that I had an important meeting for a week, and go back. Watching the video, all the great memories from the trip surfaced. *Aggressor* gets on the score board for that!

The crew gets a shout out for pulling it together. (More on them later). At the start of this cruise, Rachael was new to Final Cut Pro, an advanced image editing/video preparation software package. First time using it can be confusing. Yet Rachael really hit it out the park by the time she finished and polished up that video show for us. And I observed Captain Blue (his real name is Dave) helping her out a bit with the software functions early on in the cruise. Which says it all. The Captain is leading from the front, bringing his crew up to perfection, cross-training each crew member in every job aboard the good ship *Bahamas Aggressor!*

Why go on a liveaboard? What Preparation Is Necessary?

This is my second liveaboard in six months, so the wide-reaching benefits of liveaboards are coming into focus. I am definitely down for another one! A successful liveaboard experience actually starts well before you roll your dive gear bag to the airport – it should start with a visit to your local dive shop to talk about your trip! You are likely to either ‘gear up’ and/or at minimum gain the benefit of your dive shop team’s experiences in that area. Of course, your gear should be serviced, and skills/gear use refreshed. Human dimensions change (hopefully for the sleeker), and gear has improved a lot since 2007. So, for me a big gear refresh was in order - a new dive computer, new integrated octo-inflator, one-size smaller 1mm and 3mm wetsuits, and second mask and snorkel (just in case...). I also headed to Dutch Springs with my dive club buddy Nick to practice deploying a surface marker buoy from safety stop depth (thanks Nick! -this can be a bit tricky the first time through... and I am GLAD that I did that, because I almost needed my SMB on this trip!).

People cite different reasons for enjoying liveaboards. We had a small group of divers together on the last night having dinner in town, and some pesky investigative reporter provoked the group into kicking around some thoughts on this. We went around the table, and when it was all said and done, everyone agreed with just about all these reasons:



Seven Days of Adventure Aboard *Bahamas Aggressor!*



Continued...

- Liveboards are a great way to not only have a ton of fun adventure diving and watching the sea life, but also an 'immersive' (ahem) experience to develop and enhance scuba diving skills
- On a liveboard your boat moves around to dive different sites: reefs, walls, underwater attractions (such as a cobia fish farm), visit wrecks, do shark dives, snorkel with the swimming pigs of Eleuthera, as well as various shore excursions
- Speaking of skills, many liveboards including Aggressor offer onboard classes with divemaster instructors cracking the whip and testing students before granting their certification. We had a couple of students aboard who gained new skills. (And it was fun to listen in occasionally to refresh our own knowledge!)
- It is fun to meet people at all different skill levels, who hail from all over the world; everyone shares a love of diving and shares their photos, swapping experiences. We really bonded aboard Bahamas Aggressor, and stayed up late into the night relating with each other in the lounge/dining room
- Being an international group, it is fun to hear about different worldwide diving experiences, as well as other non-diving travel experiences
- Liveboards can be a great place to undertake new diving experiences; in my case, first night dive (and I liked it so much, that I dove the next night, too!)
- The best liveboards offer insight into the history/geology of the sites to be dived, and in our case, our dive briefer Captain Blue explained the origin of the Lost Blue Hole; and Blue also lead a discussion with us one evening about pernicious lionfish, raising our awareness of the daunting scope of the problem
- The mobility of the dive boat is a big advantage! Captain Blue skillfully reconfigured our dive itinerary in accordance with fast-changing local wind conditions and maximized our dive opportunities – and we hit all but one of the major sites!
- Plenty of practical skills are there to pick up as well, as when fellow diver Bill helped me out with a hairline leak in my Ikelite camera housing. He had a larger version of the same housing and showed me how to properly air blast it to maintain the seal. Thanks Bill! And on my first liveboard, fellow dive club member Bob advised that while in the Zodiac, it is good practice to hold onto your regulator - just in case you are bounced out into the water. We also had a chance to see new kinds of gear in action. Jennifer had a great video light which doubled as her night dive light, and she got some fantastic photos of two lobsters in an apparent territorial dispute (among many other forms of marine life). I have a strongish feeling I will be raiding the slush fund and purchasing one of those lights very shortly!



Seven Days of Adventure Aboard *Bahamas Aggressor!*



Continued...

- A good liveaboard will have opportunities for FUN, as with Jennifer from London who celebrated her 100th dive. Her initiation into this elite membership was convened by Captain Blue, who was thoroughly enjoying the proceedings! The initiation was a bit over the top (ummm, literally...) and sweet Jennifer was so good natured about the whole ordeal, exhibiting classic stoic English fortitude! We also had a ton of fun with Blue's drone, which added a new perspective (ahem) to the time aboard the ship!
- Speaking with the crew during their downtime (which is scarce) is terrific -- and what a crew we had, each and every member! Their collective experiences before joining and while with Aggressor were all spellbinding. For example, Ben had experience with the vibrant marine ecosystem off the continental shelf east of Nantucket Island, and there is a huge and engaging story out there, just waiting to be explored and written by some pesky Dive News Network reporter!
- We had some discussion on the different approaches taken by liveaboards. In some cases, divemasters lead 'underwater tours', and keep close tabs on all the divers (especially the less-experienced). On Bahamas Aggressor, the approach is different; dive buddy teams are free to explore the sites described on the dive briefing, although dive master(s) do accompany each dive. The first approach may be preferable in some ways to novice divers. So, it is important to know what you are looking for, and have the conversation
- Another obvious distinction between land-based dive resorts and liveaboards is that with the latter, it is 4-5 dives/day and with the former, there is enhanced opportunity to mingle with locals, learning about the local culture and history, and also have access to other activities such as botanical gardens, hikes, ziplining, mountain biking, ATV'ing etc. It's all good, but it is incumbent to think through what you are most looking for.
- All agreed that it is great to just be out on the ocean, with the sea and salty air and breeze – and the magnificent sunsets!
- And it is fun to hang out on the top deck or in the hot tub, soaking up the sun and snoozing!
- And for me, another big highlight was just hanging out with my long-time topside buddy and dive buddy Ken!

How was Life Aboard Aggressor and the Crew, Weather and Food?

During our March 3-10, 2018 cruise, we had some windy days and chop. And it was not in the 80's. For the most part we were comfortable in our 3mm wetsuits. Some wore a cap or hood to keep warmer during repeated dives (up to five a day, including a night dive). Topside the night dives were a little cold in our wet wetsuits in the wind – almost as cold as being wet and NOT being in the wet wetsuit in the wind!



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Continued...

One enduring impression of the crew was their exemplary seamanship. BA is a 100' former oil rig service vessel, exceptionally seaworthy, but needs a good crew topside and down below to drive it. The BA crew, each and every one, did that and more, exhibiting great skill in all ship maneuvers. Everyone noticed that straight away, especially the boaters and Navy veterans. Captain Blue assiduously checked many different wind and weather forecasting sites and inputs in order to figure out the weather we were dealing with. Blue crafted a revised itinerary which enabled us to hit all the main sites (with one exception, the 'Washing Machine' - where the water and currents were too rough to dive safely, so discretion was the better part of valor for that particular dive site).

Another top impression was the driving commitment to customer service. No job was "below" anyone. Blue was picking up wetsuits after dives, turning them inside out, bringing them to the fresh water rinse, and hanging them up to dry. Ben from Nantucket has confident, self-reliant ingenuity and seamanship cooked into his DNA from generations of seamen plying the treacherous and unforgiving New England waters. He was in the water with us taking incredible pictures, running classes with students, in the water helping anchor the boat, sharing his prodigious knowledge of fish behavior with us and relating his experiences as Divemaster at an Asian island resort, and always hustling to quickly refill Nitrox tanks. Exec Officer/Engineer Dave was poetry in motion. I saw him sweep down with noteworthy agility to pick up a piece of rubbish on the deck before it blew overboard. Loading up for one of the dives, I was struggling with a twisted BCD strap. Suddenly the BCD with weights and tank lifted UP. and the strap was untwisted (ahhh...) and – it was Dave who spotted me struggling and silently bounded over to fix me up. Dave was also a greatly skilled photographer. And former Isle of Man Fire and Rescue staff member. And was responsible for the generators (if they went down, no electricity); the water system (if broke, sick crew and passengers with horrific consequences); and engines (without them, Sea Tow - in potentially heavy weather). A lot on that guy's shoulders! It was amazing to think that one minute he is tearing down generators and the next minute he is intricately reassembling tiny components in a heads-up display data mask! All with a welcome positivism in his piercing eyes, which seemed to take it all in with a glance.

And POSITIVISM! Rachael from a small fishing village in East Anglia (about 100 miles northeast of London) personified that. She did the intake when we first boarded the boat in her lieutenant's uniform and cap and, yes, she stole our hearts! While on a safety stop she showed me some insider tricks with my new dive computer. Rachael is an extremely skilled diver-- and what a great job she did taking the videos so professionally, and then compiling the video, interspersing the still photos! Her irrepressible good humor and cheerful disposition set the tone for the entire wonderful week. All the crew took turns during mealtime and were always right there whenever we needed another Schweppes Club Soda or Kalik beer. And the food? Wow. Master Chef Caleb from New Hampshire scored for Aggressor on each and every meal. They were all delicious, diverse, enough for seconds, and always healthy (ok the desserts, while delectable and irresistible, not so much...). The food was always perfectly prepared at the exact amount of 'doneness'; the pasta always al dente, lots of fresh fruit always and fresh produce perfectly prepared. (And the hot cocoa and Baileys did the trick after the night dives). The afternoon snacks always vanished (no, not just by me!). How Caleb made all that happen in a small galley is astounding, and a testament to his cooking prowess. And breakfast was COOKED TO ORDER; I had my egg white omelets with swiss every morning and was very happy! The breads were freshly- baked every day - and dietary restrictions were carefully respected.



Seven Days of Adventure Aboard *Bahamas Aggressor!*



Continued...

You just could not ask for a better crew! I earnestly hope to host members of the crew for 'a day in NYC with Gary' whenever they might touch down in NYC in the future.

The main passenger lounge/dining room was not luxurious, but had everything needed, including comfortable seating and a wonderful big screen TV. The boat was festooned with wonderful marine life photos from all over the world of Aggressor: Galapagos, Palau, Raja Ampat, Bahamas, Belize, Maldives, etc. The boat has all the latest safety equipment as we expect, including two AED's (always good to have a backup of a piece of equipment like that...) and plenty of oxygen. The morning 'room tidy' service, linens/towels/supplies replenishment and afternoon 'turn down' service were nice touches. Each bunk had a power bank and USB charging station. The mattresses were comfortable. Great air-conditioning. Private toilets and showers with warm and hot water and good water pressure. Each cabin had an entertainment system (which was rarely used, owing to the joy of interacting with other divers and the crew, not to mention, for me, the exhaustion of multiple daily dives!). Loved the warm, fresh water showers after exiting the water on the wide, easy to climb dual ladders, and that the crew had a stern policy of providing warm towels to each diver upon return to the boat. Appreciated the safety stop chain off the stern of the boat, along with the spare regulator down at safety stop level, and the fact that the Zodiac was always read to go to pick up divers if they strayed and surfaced at a distance from the boat deploying their safety sausages (which happened once during the cruise, and the crew was prepared and leapt into action to retrieve same). The cabins were not large; I won the coin toss and got the larger, lower bunk. But there was NOT enough room for two dive bags and two duffels under the bed, so I kept my duffel on my bed, and had plenty of room left over for me.

And the Diving??

There were so many highlights that is it impossible to list them all. But some certainly stand out. Visibility was up to 100'. The Zen-like easy grace and sleek form of nurse sharks and reef sharks cruising was beautiful to see. In the past I have seen sharks but only a few and at a distance. Our shark dive was terrific! The curious cobia farm structure (a delicious Caribbean fish) was interesting to examine. Snorkeling with the pigs of Eleuthera was a real oinker, so much fun, especially the piglets! Night diving was a mysterious thrill for this first-timer. They "like the night life, baby" and the colors are vibrant at night -- because WE are bringing the daylight color temperature to the party. Watching the lobsters in a territorial dispute like something out of Blue Planet! Unfortunately, in several peoples' opinion, the number of fish was fewer than expected. This was due to the lionfish infestation. Still there were numerous parrotfish, jacks, turtles, rays, barracudas, angelfish and sergeant majors looking for a handout, and tons of little invertebrate creatures (which I had trouble spotting - somehow the youngsters picked those out like radar!). There were always new things to see, for example, we followed a ray with two black jacks escorting it as if they were remoras. And a drug smuggler's light aircraft in pieces on the ocean floor.



Seven Days of Adventure Aboard *Bahamas Aggressor!*



Continued...

I do have two suggestions for Bahamas Aggressor. Divers come with different levels of experience; I requested a 100-cubic foot Nitrox tank because I tend to use a lot of air. I was issued a steel tank which I had never used before - and it was heavy. While my weighting configuration seemed to check out at my buoyancy check, I believe looking back that I was over weighted, which led to depth issues, reduced speed, and excessive air consumption. My suggestion is that closer review by the divemasters of the novice divers on the first couple of dives at least might be useful. Additionally, I took the dive briefing map literally and imprinted it in my mind for the dive. That works well, if the boat is where the map says it is! On one of our wall dives, the boat was not where it was purported to be on the briefing map. My dive buddy told me later that it was discussed that on the second dive, the boat will have moved, but I missed it. So, it was a little unnerving on the return leg of the dive to not see the boat where I thought it was going to be. But through some dead reckoning and following the reciprocal compass bearing, suddenly the (very welcome) dark hull of the boat appeared above! The crew takes the dive briefings very seriously, and conducts them only when everyone is present, and that is an excellent practice. Some people (like me) just have to be enjoined to listen harder!

Between the Devil and the Deep BLUE...

Captain Blue is a rascal, and unique individual of varied personal and professional background. Every part of his prior work and adventures have been building blocks to his exemplary Captaining of the good ship Bahamas Aggressor. He has been a mountaineer in the Nepali Himalayas; search and rescue team member in the Canadian Rockies; ran an orca-watching boat for many years off the town of Victoria on Vancouver Island; Divemaster, and other pursuits. He has over 4,500 dives in thirty-two countries and has visited over sixty. For this trip, he distinguished himself in our estimation by driving the boat safely and carefully around tricky weather patterns to maximize the number of dives and hitting as many as possible of the main dive sites. He cross-trains the crew to perform each other's primary tasks, which is wise because things can happen and you can have unexpected, temporary crew downtime. The crew works seamlessly as a team and no one needs to tell them what to do; they do it and no one rests until all the chores are completed and squared away. That is Blue's leadership model. There is a unifying theme in the crew to maximize customer service, which supersedes all considerations other than safety of passengers and crew. Blue will present topics after dinner while everyone is assembled together, and his perspectives are certainly thought-provoking. During rare spare moments, Blue will offer thoughts and observations far afield from diving, and this animates and enriches the experience of all divers aboard. If there is something going on that Blue thinks the divers will want to know about, he ain't shy about it - as happened when dolphins were riding the bow wave, or a beautiful sunset was about to happen. Bravo Zulu Blue, for making this a great trip for us -- and cast off for all future trips safely, and with max adventure for all aboard!

(PS: if you get to Nassau a day early and discover that you have left something behind, don't sweat it. Just take a taxi to the Mall at Marathon, and you can pick up anything you need. The Sports Centre is a well-stocked sporting goods store which has a wide selection, and you will find whatever you need.)

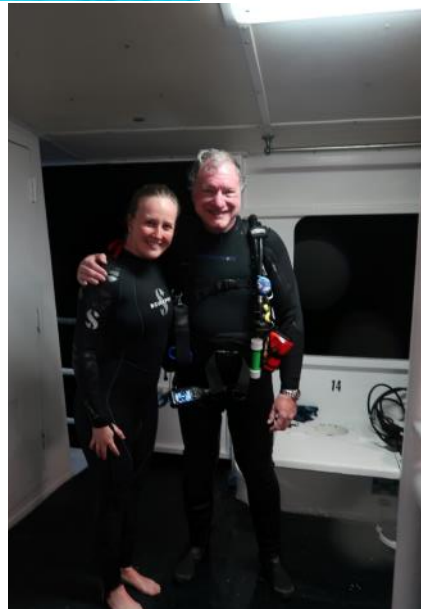


Seven Days of Adventure Aboard *Bahamas Aggressor!*



Continued...

(Photos on this page courtesy of Jennifer Clark)





Seven Days of Adventure Aboard *Bahamas Aggressor!*



Continued...

(Photos on this page courtesy of Ben P. of Aggressor)





John Hargrove: Raising Awareness for Orcas in Captivity Worldwide

Gary Lehman

On November 16, TSSC had the unique opportunity to attend an interview with orca (“killer” whale) activist John Hargrove, given by ‘the voice of Westchester’ WVOX radio talk show host Melissa Lonquich on her weekly show “Dive into Life”. Hargrove is also the author of New York Times Best Seller in 5 separate categories for his book, *Beneath the Surface: Killer Whales, SeaWorld, and the Truth Beyond Blackfish*.

During the interview Hargrove offered listeners new insights: into the deplorable conditions of orcas at SeaWorld, the intense public relations campaign against him by SeaWorld management, and his views on a variety of issues surfaced by Lonquich.

While the interview with Hargrove was ‘the main event’, radio talk show host interviewer Melissa Lonquich gets a vigorous shout out for her engaging rapport and incisive conversation starters with John Hargrove. Lonquich – owing to her style and presence -- brought to light many new aspects and the challenges encountered by Hargrove in his campaign.

Before turning to the Hargrove interview, let’s circle around with interviewer Melissa Lonquich! Her style (expressive Italian handwaving and rapid-fire questioning) offers no quarter, yet her empathy suffuses the interviewee - gaining access to her subject’s thoughts and feelings, and those of her audience. Lonquich ‘gets it’, and she gets inside. Her weekly program quickly became a staple feature at Westchester NY’s WVOX radio programming. A Philosophy major and Theology minor from St. Johns University, she now also holds two Masters degrees in Childhood Education and TESOL (Teaching English to Speakers of Other Languages). She has a storied history: while a student at Saunders Trades and Technical High School in Yonkers, NY she was the first female to graduate with a major in automotive technology, and was also the first female ice hockey player to play for the city of Yonkers on an all boys team. By day she is a beloved NYC middle school teacher (Da Bronx is her beat, rough and tumble), with English As A Second Language (ESL) as her specialty; her social media portals are plastered with heartwarming notes from her students. She is a PADI Master Scuba Diver, and on the leadership team of The Scuba Sports Club of Westchester. She is also a rising star in the Coast Guard Auxiliary, passing challenging exam after exam! (So, how did that Coast Guard thing happen? Melissa’s friend has a boat that she was on often; there were some boating safety requirements; so... never one to let a learning opportunity pass, Melissa dove in. Her Coast Guard team was taken with her and recruited her, and she is now their Staff Officer of diversity, an instructor for Coast Guard boating safety courses, a certified vessel examiner, and she is finishing up her boat crew qualifications this Spring ~ a truly intrepid ‘Coastie’!).

Lonquich is also a long-time volunteer at the Maritime Aquarium in Norwalk Connecticut, where she attracts (generally benign) attention from the seven huge sand tiger sharks and a lemon shark which call that aquarium home. She spent a lot of her life as a competitive fighter and now trains and competes in “strong(wo)man” competitions through NY Strong in Mamaroneck, NY; just the photos of her exploits are enough to result in herniated discs... With a ‘larger than life’ background/credentials like that, Lonquich is well-positioned to successfully engage in even the most challenging interviews!



John Hargrove: Raising Awareness for Orcas in Captivity Worldwide

continued



'Larger than life' also describes John Hargrove! When interviewed in the film *Blackfish*, he indicted SeaWorld for its immoral actions of keeping orcas confined to what amounts to concrete backyard pools – with the result that some orcas developed aggressive behaviors (something like a psychotic break); separating mother orcas from their calves with a lifelong, shared bond-- inflicting terrible emotional damage on them both (particularly egregious because orcas have an arguably larger and more advanced emotion-processing brain function than humans do); and worst of all, setting the blame for the death of SeaWorld senior level orca trainer Dawn Brancheau on Dawn herself – when she was no longer able to defend herself. The trainers all knew the truth. Hargrove and *Blackfish* director Gabriela Cowperthwaite – along with seven other SeaWorld trainers interviewed in the film, have achieved positive change in SeaWorld practices, and have resulted in improved safety for orca trainers in aquaparks featuring orca shows.

Hargrove revealed that as a child he had marveled at the orca called Shamu at SeaWorld, and resolved that this was to be his life's work – an orca trainer. He proved greatly proficient at this work, and advanced up the ranks of orca training rapidly, ascending to the pinnacle of this elite profession, working at SeaWorld for fourteen years. There are only about twenty orca trainers qualified to be in the water with orcas at any given time worldwide. However, the higher he rose, the more frustrated he became with the decisions being made by SeaWorld senior management, which put the parks' needs above the welfare of the animals.

John is all about honesty – and spoke about the joy of training orcas and just being in the water with them. The photos of Hargrove with the orcas reveal this deep joy. John also discussed the depth of the relationship which develops between trainer and orca. Day in, day out, performing for audiences creates a complex bond – and reciprocated love – between the trainer and the orcas. Emotional intimacies develop – being a sensitive person, John sensed the daily moods of the orcas he trained with; they in turn intuited at some level the daily rhythms of his life. In fact, during John's presentation two years ago to The Scuba Sports Club, he reported that female orcas would know when their female trainers were pregnant – often before the trainer themselves -- and would not engage in vigorous training regimens with them for fear of harming their trainer's fetus. (Make no mistake - these orcas are huge and heavy, weighing between 8,000 and 12,000lbs - and immensely powerful. Trainers sustain bad and even terrible injuries during their routines with the orcas under the best of circumstances, with no malice by the orcas...). His intense emotional connection with the animals lead him to his terrible personal dilemma – leave SeaWorld in frustration, or stay at SeaWorld -- where he could at least advocate for the animals' wellbeing and possibly prevail in whole or in part.

However, after the egregious behavior of SeaWorld – blaming Dawn for the incident in 2010 which resulted in her gruesome death - and the outrageous claim by SeaWorld that it had no knowledge of any risk factors to orca trainers (despite trainer deaths and many serious injuries to orca trainers), Hargrove made the decision to leave. He then devoted himself outside the SeaWorld corporate system to protecting orcas at SeaWorld and elsewhere. Effecting change in these corporations for the improvement for conditions for orcas became John's mission; John is a warrior in the fight for orca wellbeing, and his book *Beneath the Surface: Killer Whales, SeaWorld, and the Truth Beyond Blackfish* is a manifesto for positive change and both a challenge and inspiration to zoological parks worldwide. Many zoos are divesting of large mammals such as rhinos and elephants for the very reasons advanced by Hargrove – that these species are not emotionally suited to a confined existence, and many suffer emotional trauma.



John Hargrove: Raising Awareness for Orcas in Captivity Worldwide

continued



The corporate machine ramped up to fight Hargrove tooth and nail: outrageous, personal, disingenuous (and utterly ineffective) smear campaigns were directed against him by SeaWorld. John prevailed: due to his efforts and those allied with him, SeaWorld's captive breeding program, export/import of whales, and separation of mothers from their calves was ordered stopped by the Orca Protection Act in 2016. The Orca Protection Act was signed into law after John and team soundly defeated SeaWorld and their lobbyists by a 12-1 vote in 2016. SeaWorld should be ashamed at their duplicitous actions in professing concern over the wellbeing of their orca trainers knowing full well the risks they faced, and should be humiliated by their abject failure to discredit Hargrove (which merely resulted in monumental blowback). John's bottom line message to us: follow the money and don't accept at face value claims made by big business, especially when lives (in this case, orca trainers and orcas) are at risk. Wise advice and important successes -- from a self-admitted rascal when he was in high school student! Despite these attacks by SeaWorld, John's crusade is being taken up by new generations who are now becoming responsible for animal well-being; they are launching to the task just as John once so majestically did in the SeaWorld pools, propelled skyward by his orca companions. Hats off John, and we all wish you every success going forward!





**Amos Nachoum: "Follow Me - Acharai"
.... Big Animals !**

Gary Lehman



Amos Nachoum (L) with Larry Cohen

Northeast divers generally concur that our 'cold-green' diving is more challenging -with different rewards- than warm-blue water diving. Divers who live in the NY greater metropolitan area benefit from another aspect – a buzzing dive club scene! The winter months offer many engaging scuba diving events – including the Long Island Dive Association (LIDA) Film Festival, the Boston Sea Rovers show, Beneath The Sea Expo, and many other events dotting the diving calendar. And each month, local clubs conduct meetings with terrific speakers, keeping those scuba fires lit! These meetings always surface new local diving opportunities, sites, adventures, providers and happenings. Gets the diving year off to a roaring start! For example, on January 29 TSSC attended a NY Underwater Photography Society (NYUPS) session (NYUPS is actually a special-interest group which is part of the NYC Sea Gypsies Dive Club; TSSC was sitting near (diver-top shelf photographer-pediatric ENT physician) Mike Rothschild; before the meeting started, Mike was showing a few of us at our table some of his macro photos of nudibranchs in New Hampshire's Piscataqua River tidal estuary near Portsmouth, New Hampshire (for details see Mike's blog on Tumblr, <http://mikesdiveblog.tumblr.com/post/140587909056/newhampshire> "Live Free and Dive".) Wait, hold the phone... Nudibranchs? Here in our local waters!? (YES – and not only that, but Mike's dive was during the first week in March! Hats off to intrepid Mike for diving in 30F-something waters...).

So... now we shift from little invertebrate animals to BIG ANIMALS!

NYUPS invited storied photographer/explorer/diver Amos Nachoum to present to the group; Amos was in town after presenting at the Polar Film Festival at NY's Explorers Club. The session was extremely well attended by over sixty people from a diverse network: Explorer Club folks, various dive clubs, NYUPS members, LIDA members, Sierra Club, B&H Event Space people, and walk-ins too! But before we turn our focus on Amos and his Big Animals presentation, a shout out is richly due to ... Larry Cohen! Larry is a former President of NYC's Sea Gypsies dive club, and the leader at NYUPS and as such, he has relationships and friendships with many other leaders in the scuba community (including Amos). Larry is the heart and soul of everything having to do with underwater photography at B&H (a leading NYC photography/electronics retailer). He is always available to assist with gear questions, and can be contacted at uw@bhphoto.com (or log into chat and choose 'underwater!'). Larry – both individually and via the group workshops he leads -- helps aspiring underwater photographers in their quest. He is an important part of the fabric of diving life in the northeast by the programs he facilitates with legends like Amos. Heartfelt thanks to you Larry, for all that you do for all of us!

If you were not able to attend the January 29th session, don't despair -- Larry and collaborator photographer Olga Torrey will be joining Amos Nachoum on March 26th at the B&H Event Space for another joint presentation. Details will be posted at <https://www.bhphotovideo.com/find/EventSpace.jsp> We don't want to miss these three together! If you are not familiar with B&H's Event Space, it behooves you to learn about this terrific resource for all kinds of photography! Experts, professionals, and photography leaders in NYC - the media capital of the world – sojourn to Event Space, teaching and sharing their knowledge, experience and skills to spellbound audiences. And, these sessions are livestreamed as well. Larry can offer additional details!



**Amos Nachoum: "Follow Me - Acharai"
.... Big Animals !**

continued



Amos Nachoum (L) with Larry Cohen

Amos might object to the following because he is a rough and tumble 'big animal' kind of guy (not a nudibranch guy), but we will say it anyway... he is a teacher. Most of us understand that apex predators are not mindless killers looking to create misery and death, and we believe that they will not indiscriminately attack anything that moves just for the enjoyment of it. Amos proves this to us by diving/venturing into their spaces, both topside and underwater, and documenting his experiences with them. He stakes the position – by swimming outside the cage with white sharks – that we must respect natural law and be aware of animals' predatory behavior. His discussion also covered the use of underwater equipment – specifically the use of the 50mm lens which yields correct 'normal' angle of view, so as to not distort the relative size of animals. His many resulting head-on images of 'smiling' white sharks - with their fearsome, serrated triangular teeth - are nothing less than electrifying. He thinks creatively about species behaviors, seeks unusual angles and situations, and then he and his team of Sherpas or porters or local Inuit or local fixers – relying on their instinctive knowledge and animals' ways and means, goes out and gets the shots. It is important to understand that his images frequently capture behaviors for the very first time in human history!

"First time in human history" – is this exaggeration?? No, my friends, it is not. Can you imagine being inside a bait ball of herring and capturing an image of the herring inside the mouth of the sailfish after the sailfish has stunned it with its bill? Amos got that shot! Or can you imagine photographing snow leopards snuggling in the mountains of Ladakh at dusk, after being on the go since before dawn and lying motionless in snow and wind for hour upon hour?? (This writer spoke with novelist Peter Matthiessen and vertebrate biologist George Schaller about their failed attempt over two months in the early 1970's to spot elusive snow leopards in the Nepali Himalayan plateau some years ago at The Bodhi Tree Foundation. Like Nachoum, they spotted tracks and heard them, but they never actually spotted them. Amos heard them, sensed their presence, got his team up out of bed in frigid weather way before dawn, tracked the leopards, and twelve hours later not only observed one, but photographed TWO together! We've all seen videos of orcas hunting cooperatively on television, but Amos and his clients have witnessed this personally. We've all seen eagles snatching fish out of the water, but Amos brings us for the first time the underwater view of this raptor predation, while it happens! We all know that African crocodiles take down wildebeest crossing the Mara River during the annual Serengeti migrations, and we gasp at the power and fearsome visage of these lunging dinosaur/crocodiles tearing apart the wildebeest and zebras. Who in their right mind would chose to dive with these known man-eating crocodiles, which snatch humans at the river's edge as an afternoon snack? Amos would -- and did and does, because he applied human thinking and knowledge of animal behavior – he understood that crocodiles attack only at the surface, and do not attack at the bottom of the water. Stay on the bottom, and you are safe. Linger at the surface, whether it is a white shark or a crocodile, and you become prey -- in a case of mistaken identity.

Amos also brings with him an encyclopedic knowledge and understanding of marine biology. Forty years of diving and his passion for marine life has thrived and expanded within Amos. This is combined with his emotional connection with his marine subjects. He grieves along with the mother orca, who carries her dead calf for a week before letting go. John Hargrove (formerly of SeaWorld) speaks eloquently about the emotional capacity of orcas, and how the part of their brain governing emotions is 50% larger than that of humans. Nachoum's emotional connection can be readily seen in his photography of so many species. People continually underestimate the emotional lives of animals. Mountaineer Rick Ridgeway in his book *In The Shadow of Kilimanjaro* wrote about the grieving elephant standing guard over her dead calf's body, and the tenderness with which she thanked Ridgeway with



**Amos Nachoum: "Follow Me - Acharai"
.... Big Animals !**

continued



Amos Nachoum (L) with Larry Cohen

an embrace by her trunk after Ridgeway brought the grieving mother a bucket of water in the blazing Tanzania sun. Why did the orca calf die? In fact, there is a 30-40% mortality rate, because of the toxicity of the mother's milk in which so many poisonous chemicals collect, and the catastrophe of plastics in the Earth's oceans. Amos showed breathtaking photos of resting, nursing blue and sperm whales. Amos is a fierce warrior for environmental activism to protect our oceans; he sees the dread results first hand too often. He has a fiery antipathy towards the media, Hollywood and politicians for propagating myths about white sharks and for trivializing or ignoring the grave concerns over the marine environment, and he is on a crusade to do his part to correct that.

Humans ARE on the menu for polar bears. This we know. This the Inuit (indigenous inhabitants of the Arctic regions) know. AND that polar bears have no fear of humans. In Churchill, Manitoba it is against the law to lock your front door. Why? Because on occasion polar bears will range thru town looking for garbage – or humans. A locked door can result in mauling or death. Polar bears will hunt collaboratively to pull belugas up OUT of the water through the polynya (breathing holes and open water) in the frozen Arctic. So, with that in mind, what kind of 'meshuganah' (crazy man, head case) would scuba dive with polar bears?! When Inuit were asked the question "Would you dive with polar bears?", the answer is delivered with characteristically-Inuit politeness, reserve, modesty and careful attention to not offend -- with a simple "No". So, what do these Inuit know that Amos doesn't? The truth is that Amos knows when to dive with polar bears and when NOT to. The poignant underwater photo of a mother polar bear cuddling her cubs close to her to avoid the strange animal with air tanks below her in the water, to protect her cubs, is utterly unprecedented in human history. He has seen firsthand how convincing locals that the eco-tourism potential of the wildlife in their habitats far exceeds harvesting potential is a true win/win.

Amos had the flash of understanding, realizing that retreating from a 12' 500lb leopard seal invites a predatory attack, just as advancing on a territorial leopard seal will trigger a defensive attack. Why is a leopard seal potentially aggressive towards a human in the water with a big DSLR camera? Because when the leopard seal LOOKS at the camera dome, what do you think the leopard seal SEES reflected? It sees a mirror image of itself, and cannot be faulted for believing it to be an intruder on its territory. (This is the analogous behavior shown by mountain gorillas in Uganda and Rwanda; eye to eye contact is perceived as a challenge). Amos knows that when he does not retreat and does not advance, the leopard seal does not know what to do -- but does not attack. Paul Nicklen of National Geographic had a similar experience with a large female leopard seal some years before Amos did, in which the seal attempted to teach Nicklen how to feed on a penguin. Paul might have been one of the first to dive with leopard seals, however Amos extended and expanded our understanding of this species and its behaviors. (Of course, sometimes things do not always go exactly according to plan, and Amos was once chased to seventy feet by a male polar bear. The 'conventional wisdom' was that a polar bear would not dive below thirty feet in pursuit of prey – although of course, this begs the question: HOW could anyone actually know that to be true? And of course, no one told that to the male polar bear which attacked Amos, obliging him to beat a hasty retreat downward in the water column at high speed to seventy feet, just inches from a most horrifying death [if you have ever seen the ten six-inch claws of adult polar bears...]).



**Amos Nachoum: “Follow Me - Acharai”
.... Big Animals !**

continued



Amos Nachoum (L) with Larry Cohen

Jacques Cousteau reportedly was most concerned about the unpredictability of oceanic white tips which are opportunistic feeders and maximize predation potential at their pelagic few-and-far-between prey opportunities. He thought they were by far the most dangerous shark species. But is this true, or just melodrama? Amos sought the answer to this question by diving with oceanic white tips at Cat Island and in the Red Sea, and observed that here again, conventional wisdom was wrong. While he has a healthy respect for oceanic whitetips, they are not unpredictable scourges intent on attacking humans. Rather, it is for us to understand their behavior, respect the natural law, and by doing so we avoid attack, are able to observe their ways and means, and can marvel at the sleek, powerful rhythms of their underwater patrols!

Nachoum concurs with Dr. Sylvia Earle about hope spots, and believes that there is still time to avert disaster and collapse of marine ecosystems. Dr. Earle’s example is that Asian youth are rejecting shark fin soup. Amos’s example cited was the rebounding of gray whales and other species due to changes in shipping lanes to redirect commercial tanker traffic to protect migrating whales. This we have also vividly seen right here off NY/NJ as well. And participation in a Big Animals expedition (www.biganimals.com) is a great way to join forces with Amos to rally together and make a positive difference on behalf of our oceans – to which Amos calls out ACHARAI, FOLLOW ME!

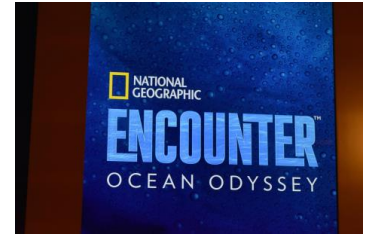


Amos Nachoum Presenting at B&H Event Space on
PHOTOGRAPHING BIG ANIMALS



The Scuba Sports Club of NY Dives into... National Geographic's Encounter: Ocean Odyssey!

Gary Lehman



On November 18th The Scuba Sports Club of Westchester NY launched the 2017 holiday season with a big expedition of members who sojourned into Manhattan NYC to experience the *National Geographic Encounter: Ocean Odyssey* exhibit. We all heard great things about the exhibit, and were so excited to attend together as friends, divers and avocational naturalists! Virtually all of us - at one point or other during our collective years – have been captivated by articles in National Geographic, and for two+ generations have enjoyed NatGeo television documentaries. These fired our interest in the undersea world, brought us to scuba diving, and ignited our environmental awareness. Hats off to National Geographic for incorporating continual technology advances. NatGeo has succeeded brilliantly integrating the public's visual awareness (due to the internet/ social media/BBC's *Blue Planet* series, etc.) with multi-sensory experiences – *way beyond* two-dimensional print media -- into their mission! *This exhibit certainly succeeded in that!*

Nat Geo's Encounter: Ocean Odyssey is a multi-media, interactive virtual reality/film/static display and educational underwater-themed experience -- right in the heart of Times Square, New York City. It costs more than going to the movies, but offers way more in return! Some of the proceeds are directed towards NatGeo's work in conservation, exploration, research, and educational outreach. So we can feel good about that.

First a little background on the event space. Formerly this *vast* multi-level interior space was occupied by the New York Times newspaper printing presses. Technology changed, the presses obsoleted, and were replaced with the new stuff which was relocated to College Point, Queens (a NYC borough). Over the years this space was operated by Discovery Zone (and is currently run by The Schubert Organization). Descending down the escalators into the bowels of this vast space, you can sense that you are in for an experience... Over the years this space has hosted many amazing exhibits illuminating the greatest human history and stories ever told, among them: Treasures of King Tut; Genghis Khan and Mongolia; The Vikings; The Dead Sea Scrolls; Da Vinci's Workshop; The Pompeii Exhibit; The Rolling Stones In Action ; Treasures of RMS Titanic; Body World; Star Wars experience; Harry Potter's World, and now... Nat Geo Encounter: Ocean Odyssey!

At the risk of stealing the exhibit's 'thunder', we'll offer up some of the highlights of this unique experience! (So -- if you plan on visiting this experience and if you want it to be a total surprise, you can skip down to the final paragraph! □) One of the first hints that you are in for an unusual experience is that upon arrival into the first event, you are aggressively attacked by an enormous screen-sized Humboldt squid with its vicious beak tearing apart everything in sight – including other Humboldt squids, armed with up to 35,000 razor sharp teeth. (Ummm... note to self, NEVER, EVER dive in any ocean which has among its residents Humboldt squids...) Things ease up a bit fortunately, because then we are 'up close and personal' with a humpback whale mom, gently snuggling and nursing her calf.



The Scuba Sports Club of Westchester NY Dives into... National Geographic's Encounter: Ocean Odyssey!

continued

The exhibit highlights marine environments by geography; at one point we were <virtually> diving in the South Pacific's Solomon Islands (east of Papua New Guinea and northeast of Australia's Great Barrier Reef). Sea grasses were flowing to and fro in the gentle current, water temp was around 80F, we were around 60' down, my one mm wetsuit worked out just fine, <ok, so that is my imagination running amok>; skates and rays of various kinds were flitting about under our feet, and the soft coral seamounts were all around us. Suddenly -- a huge tiger shark with its broad, blunt snout swims past us (with a whussshhh of its wake enveloping us; fortunately, it was not interested in us...) -- it was stalking a baby dolphin with Mommy next to it, both grazing on the sea grasses. "LOOKOUT!" we all silently yelled out! The mother dolphin sensed the danger, and together Mom and calf took off like a shot -- leaving the tiger shark frustrated and having to make another predation another day.

Then we ventured into the waters of Hawaii at dusk to marvel at the vivid bioluminescence on 3D 360-degree display in the soft corals, fish and invertebrates. One of the most captivating and intensively interactive displays was next, in which we were interacting with curious seals who came over to say hello to us. Borrowing motion sensing technology, these seals would sense our movements, responding reciprocally with big, questioning, and friendly eyes. No wonder that we were as fascinated with them as "they" were with us! (Those of us who have dived with seals off Gloucester Massachusetts or elsewhere recognized the seal's virtual behavior as startlingly authentic, to the extent that in the wild, seals do come over to say hello, and hang out for a while. Had we had been wearing fins, they would have been nipping at them! And these virtual seals did swim away to other pursuits when no one was at the viewing station). We then proceeded to the California coastline near Monterrey to try to walk (i.e. "swim") through the dense kelp forests. (Luckily, we did not encounter any white sharks known to frequent the edges of these forests making predations on inattentive seals. Not that I was watching for one or anything like that...)

The 'Grand Finale' was just spectacular! (Note: if you want to be surprised, skip this paragraph...)
We were provided with 3-D glasses, and went diving off South Africa during the height of the sardine run! We were virtual participants in the resulting feeding frenzy! This is an example of how NatGeo successfully and skillfully leverages the collective public's preexisting knowledge at various levels... many of us have seen BBC's Blue Planet, and thus have some familiarity with what bait balls entail and the predations that result. This preexisting image base -- accelerated by our own diving knowledge and experiences -- intensifies and enhances this exhibit (and actually, this is the case for each exhibit in Encounter -- Ocean Odyssey). The still frames and motion video image memories in our minds surface quickly, and we are suddenly in the middle of the bait ball -- watching dolphins herding the sardines together -- which form up into swirling balls in futile collective defense. We see, hear (and feel) the bait ball with darting, stabbing frenzied penguins, gannets, dolphins, mackerel, tuna, and fur seals slice through the swirling sardine masses. And then came the sharks... duskies, oceanic white tips, bronze whalers, blacktips, spinners and thick massive bull (Zambezi) sharks. (Just glad that I wasn't in the water in a black wet suit, smothered in sardine oil and blood, looking like a large, wounded, vulnerable seal...)



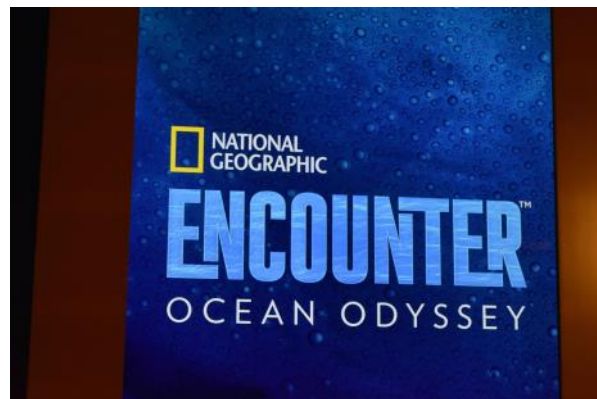
The Scuba Sports Club of Westchester NY Dives into... National Geographic's Encounter: Ocean Odyssey!

continued

And then... a low but rapidly building vibration through the floor announced the arrival of the humpbacks... which blew curtains of released air, further concentrating the sardines up and down in the water column. And we know what comes next: we watched and felt the humpbacks surging up through the water straight into the middle of the frenzied, panicked sardines! And then... there were none left, just floating shards of sardine parts and glittery floating sardine scales...

The exhibit concluded with both static and interactive displays with educational kiosks and panels highlighting additional undersea marvels, threats to the oceans of the world, and admonishing us all to do our part preserving our marine habitats. Quotes were provided by revered, guiding lights in the world of marine biology and exploration world such as James Cameron, Dr. Sylvia Earle, NatGeo photographer Brian Skerry, and Bob Ballard to name just a few. (Nat Geo Encounter: Ocean Odyssey is not just for adults and divers, but it is also a terrific middle school and high school field trip.)

Hats off to the TSSC team who pulled together this great Club trip! This is a 'high recommend' for all who live in this area or who will be visiting NYC. if you want to take pictures you can, just don't use flash - and boost your ISO way up if you can with your camera. You may have some questions about this NatGeo experience -- the website does a great job. There is a Frequently Asked Questions (FAQ) page with answers located at <https://natgeoencounter.com/visit/> Go, Enjoy, and by all means, bring your your bcd and fins – because you are going to feel like you are right there with the sardines in the bait ball!





The Scuba Sports Club's Annual (2017) Sojourn to The Explorers Club's Sea Stories

Gary Lehman



Every year before Thanksgiving The Explorers Club in Manhattan holds a full-day convocation called "Sea Stories" for those interested in marine history/archeology, technology, film-making, exploration, marine biology/fishery management-- and exciting places to travel and watery things-to-do! This year Sea Stories was held on Saturday, November 11th. Over the years many spellbinding presentations have been enjoyed by those lucky enough to attend. This year was no different, and each presenter and presentation held special draw for us!

Attending from The Scuba Sports Club were Tom Butcher, Vreni Roduner, Amanda Slatery, Judy 'Dee', Melissa Lonquich, Allan Rios, Denise Blais, and Al Miller. Of course - as is always the case at The Explorers Club's Sea Stories - everyone in the NYC metropolitan area diving community who attends is delighted to connect up again with divers and friends from so many different area clubs and organizations. It was our pleasure to find friends from the Wildlife Conservation Center's Coney Island (Brooklyn) Aquarium dive team, Sea Gypsie's President Renata Rojas and several members of her great club, Jamie Pollack, the venerable Joanna and John Lentini, as well as the creative juggernaut team of Olga Torrey and Larry Cohen! With all the yacking going on 'between and betwixt', it is hardly a wonder that the staff at The Explorers Club had to bang the bell real loud at the end of the coffee breaks in order to accelerate the resumption of the presentations!

First a few words about The Explorers Club (TEC) HQ. The building was formerly the home of Lowell Thomas, who was portrayed in the film *Lawrence of Arabia* as the obnoxiously persistent paparazzi reporter/photographer from the *Chicago Tribune*, getting ad hoc interviews and photo grab shots of Colonel T.E. Lawrence. As HQ of TEC, the building is brimming with inspiring relics of the golden age of exploration at the turn of the 20th century, and mementos celebrating the famous 'firsts' achieved by its members: first to the North Pole (Robert Peary, 1909); first to the South Pole (1911, Roald Amundsen); first solo flight across the Atlantic Ocean (1927, Charles Lindbergh); first to summit of Mt. Everest (1953, Sir Edmund Hillary & Tenzing Norgay); first to deepest point in the ocean (1960, Don Walsh & Jacques Piccard); first to the surface of the Moon (1969, Neil Armstrong, Buzz Aldrin & Michael Collins); and first recovery of an authenticated pirate ship - Whydah Galley (1984, Barry Clifford). TEC's photo 'hall of fame' features all the 'movers and shaker' of exploration over the past 100+ years. The paintings by William Leigh are breathtaking; if they seem familiar, it is because Leigh also painted the display dioramas in the American Museum of Natural History. There are treasures all over the building - including the globe used by Thor Heyerdahl to plan his Kon Tiki Expedition, and the table used by Teddy Roosevelt and team to devise the Panama Canal. The artifacts in the top sixth floor 'Trophy Room' include a lion skin owned by Teddy Roosevelt; a sperm whale phallus; photos and reliquaries of the Dalai Lama; African tribal drums; a cheetah and ponderous walrus head (and other ungulates); mammoth tusks and other astounding treasures reminiscent of those at the Museum of Natural History (which is just across Central Park). Visiting TEC while in NYC is a "must do" for our visiting friends and family with a connection to adventure, geography, and exploration!



The Scuba Sports Club's Annual (2017) Sojourn to The Explorers Club's Sea Stories



Continued ...

Dr. David Freestone kicked off the day with a presentation helping us to first understand, and then want to protect the Atlantic's Sargasso Sea. Probably not many in the audience had a substantial understanding of Sargasso before Dr. Freestone's presentation, but by the end we were all advocates. Even something as seemingly "good" as radically-increased ocean shipping over the past thirty years is hazardous to Sargasso, due to maritime pollution of these floating rain forests (compounded by global climate change, ocean acidification, and even harvesting for these grasses for fertilizer and animal feed). Sargasso is a critical nursery area for the fish and wildlife of the Atlantic (and of global importance) and it is alarmingly threatened; and given that it is defined to be in 'deep ocean', there is no one nation under whose jurisdiction it can be protected. Our heartfelt thanks for Dr. Freestone and the staff at Sargasso Sea Commission for every success going forward.

Lars-Fristian Trellevik provided a studied discussion of the challenges of deep sea tasking, whether that be ship salvage, oil exploration/rig repair, deep sea mining and the like. Being in a remote location, the team has to make do with whatever they have on hand. McGyver, report to the bridge! Lars offered harrowing explanations about the risks of entanglement of the umbilical cords attached to ROV's at depth. In short, key to success is cross-training, spares, checking/double-checking/buddy checking and finally checking one-last time to improve outcomes when working with complex systems!

Eric Higuera followed with an enchanting presentation about the burgeoning biodiversity of the Socorro Islands and other iconic Mexican dive locations. We all came away thorough committed to putting Socorro on our travel plans for future diving! It is one thing to show "pictures" of sea life, but Eric captured the essence of these environments. Any photography done by a photographer with an emotional connection to the subject will be most impactful, and so it is with Eric's underwater photography and filmmaking. Masterful job, Eric giving hope that endangered species like the mantas can be restored to healthier status through committed stewardship, and heartfelt thanks for bringing Socorro, Guadalupe, and Magdalena bay with all their sea life to us!

Videographer Evan Kovacs then embarked us aboard the sunken ship Antikythera, about 20 miles northwest of Crete – under the watchful eye of the Greek Antiquities Authority, that is! The location of this wreck is not revealed, but its most intriguing treasures were discussed and shown – astounding bronze and marble statuary, jewelry, and amphorae, as well as the Antikythera Astrolabe – a 2,000 year-old analog mechanical computer used to predict the positions of the stars. Modern CT scans were used to peer through layers of encrustation, revealing gears, sprockets and inscriptions which described its operation. The undisturbed wreck offers archaeologists the rare opportunity to study it in context. Thank you Evan for bringing this Antikythera wreck to us in Manhattan and sharing its treasures.



The Scuba Sports Club's Annual (2017) Sojourn to The Explorers Club's Sea Stories



Continued ...

So – why does everyone love Jennifer Hayes? Her ability to connect right into the hearts and souls of her audience? Her accessible, easy, animated, entertaining style? Her human empathy and passion for the oceans, and marine environmental advocacy? Her spellbinding photography? The fact that she speaks for us, feels what we feel; her connectedness to real people? Answer: YES! Jennifer's presentation Islands to Ice held us captive for an hour in Garden of the Queen (Cuba); American crocodiles and the mangroves there; Tubbatana in the Philippines featuring the explosive biodiversity in that UNESCO World Heritage site; the Mesozoic-era sturgeons of the Canadian Maritimes/St. Lawrence (and restocking with the cutest little baby sturgeons!); the life in the waters of Western Brook Pond and the Gaspé and the Bay de Chaleur; the adorable harp seals; how Jennifer was 'adopted' by a seal mom; and more! ...But then our day at Sea Stories had to end....

With all the above in mind, we hope to catch up with you next year at The Explorer's Club Sea Stories 2018! Just beware of that bell at the end of the coffee breaks!





Featured Creature

by Rick D'Amico

The Sulfur Sponge *Cliona celata*

As might be surmised from its name, the sulfur sponge is yellow in color. It is often seen attached to shells or limestone, as it uses acid to bore into calcium-based material. The sponge uses a shell only as a place to live. While it does not consume the shellfish onto which it bores, the shellfish generally dies because its covering has been breached. For this reason, *Cliona* is an enemy to the shellfish aquaculturist/farmer. It is capable of encrusting on a hard surface, even if it doesn't bore into it.



The sulfur sponge is found worldwide, and is common in New England and Mid-Atlantic waters. They are generally found in embayments or on reefs. They're often found on creatures with calcium shells, such as bivalve mollusks (i.e., clams, mussels, oysters).

It has two distinct forms. One is the boring form, which is characterized by rounded protuberances (papillae) sticking out from a calcium-based substrate (e.g., shells, limestone, etc.). The other form is more massive, with flattened papillae. It generally develops into the massive form when it has outgrown its habitat or is on a substrate onto which it cannot bore. Its massive form frequently develops a thick plate-like structure up to 1 meter across and 25 centimeters thick.

The sponges are filter feeders and eat small food particles brought into their bodies by seawater. Their diet consists of plankton and detritus.

In terms of biological classification, sponges belong to the Phylum Porifera. As such, they are some of the world's simplest multi-cellular organisms. They do not have a central nervous system, or a brain. While a number of organisms, such as jellyfish, have nerve networks, sponges have no nerve cells. They also lack a heart or other organs and they do not have a digestive system.

White Shark Azlyn Pinged to Say “HELLO” !!!!!!!!!!!!!

Gary Lehman

Some of you may recall reading in our last issue that I was aboard the RV OCEARCH research ship last summer off Montauk Long Island. The mission was to catch, tag and release a juvenile white shark to build data points regarding the suspected white shark nursery which exists in the New York/ New Jersey bight, basically stretching between Montauk and Point Pleasant, New Jersey.

Sharks of course are apex predators and as such, crucial to maintain a balance in the ecology of our marine areas. They keep the seals under control, and influence seal behavior. Without the prospect of predation by white sharks, seals would rapidly destroy the fish stocks in our Massachusetts/NY/NJ waters and we wouldn't be able to get the blue plate scrod special at our favorite fish restaurants. So the point is, if you like to eat fish, save a shark. Which is exactly what OCEARCH is trying to do... save sharks and thus save our OCEANS ...

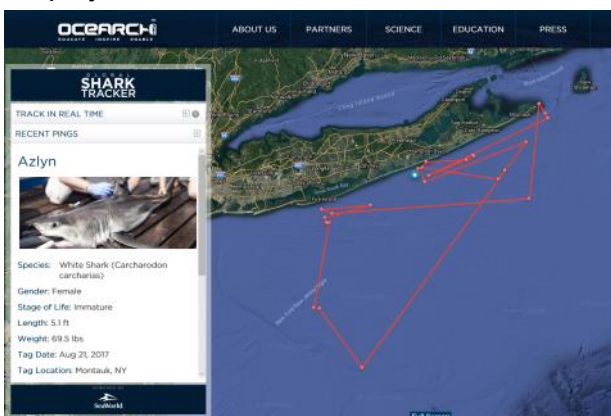
Those of us who were aboard, which included scientists, marine biologists, NOAA scientists, environment activists, educators, journalists, philanthropists, veterinarians, Dive Safety Officers and several other colorful characters were all thrilled when a juvenile white shark was caught and brought aboard the OCEARCH floating laboratory. A team of veterinarians, marine biologists and the like descended upon the shark, which was kept cool and wet with towels during the installation of both internal temperature tags and external GPS pinging tags.

“Azlyn Grey was named by our great friend and colleague, Alisa Newton (Harley), Head of Aquatic Health at WCS' New York Aquarium. It has been a pleasure working with Harley over the past few expeditions. All the hard work and dedication she has poured into the future health of our world's oceans has made the decision to have her name this shark an easy one.” <http://www.ocearch.org/profile/azlyn/>

After the appointed twelve minutes (12 minutes only!) concluded, the white shark was returned to the water. (...I might add that the shark was QUITE HAPPY to return to be free in the ocean...) And...*none the worse for the no doubt harrowing experience.*

OCEARCH has been criticized for ‘harming’ sharks by pulling them up out of the water and tagging them. Well, here we have some pretty compelling evidence that nothing of the kind is happening. This shark not only had external tags attached, but an *internal* one as well — to measure and document her metabolic rates...

Azlyn pinged at the surface on March 23, 2018! Her location was not able to be determined since her dorsal fin was not at the surface long enough to transmit/receive the GPS coordinates. However, it is great to know that she is doing fine, and doing whatever it is that white sharks do... which is what this project is all about !





Chasing Dreams, Near Far – Wherever They Are... Renata Rojas and Her Quest for Her Titanic

Gary Lehman



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Photo Courtesy Michael Rothschild, 2014

Renata Rojas is the former president of NYC's venerable scuba dive club The New York City Sea Gypsies™, and banking executive, as well as member of NYC's Explorers Club. She is also one of the mission specialists aboard submersible research vessel *Titan*, which will be diving on and documenting *RMS Titanic* in July 2018. *Titan* was built by OceanGate, a company based in Everett, Washington. OceanGate builds submersibles for undersea industrial, scientific, environmental, military and historical/exploration missions. OceanGate's objective in diving their submersible to *Titanic* is to create an accurate and immensely-detailed 2018 baseline model of the current structure of *Titanic*, using state-of-the-art photogrammetry and laser scanning capabilities. *Titanic* has been on the bottom in 12,500 feet since it sank in April 1912, about 300 miles southeast of Newfoundland.

RMS Titanic Today

The wreck was located in 1985 by a joint American–French Expedition led by oceanographers Dr. Bob Ballard (Woods Hole Oceanographic Institute) and Jean-Louis Michel (L'Institut Français de Recherche pour l'Exploitation de la Mer) in collaboration with the US Navy. The wreck has been inspected and photographed many times by personnel aboard submersibles and by remote-operated vehicles (ROV's) since the wreck's location. There is damage on the wreck, resulting from submersible landings on it. Artifacts have been removed from the site. The structure is degrading due to corrosion and biological processes, which are deteriorating the ship's iron. *Titanic* split in two during the sinking. The stern section broke apart and is collapsed into a massive debris field on the bottom. The bow section is some distance away and is still largely integral. However, it will at some point - in the eternal darkness and under the unimaginable crushing depth - collapse, presumably with a massive subsurface plume of rust dust and particles. That will be a sad occurrence; and there is nothing that can avert that biomechanical inevitability.

OceanGate's photogrammetry mission involves combining many thousands of high definition photographic images. This creates a virtual geo-spatial map of the structure which can be used as input to an engineering model. Having such a model will serve as a baseline (point-in-time) and provides the capability to accurately detect changes (that is, degradation) to the structure over time. Combining a geospatial model with metallurgical (specifically, metal decay) estimates, and using blueprints of *Titanic*'s internal structure and ROV-based internal photogrammetry can help predict the timing and characteristics of the inevitable collapse. Having the capability to predict structure collapse has immense commercial, environmental, military and scientific applications. For example, at some point in the future *USS Arizona* in Pearl Harbor – containing 500,000 gallons of bunker fuel – is going to collapse. Similarly, for British battleship *HMS Royal Oak* off the town of Kirkwall at Scapa Flow in Scotland's Orkney Islands. And for thousands of warships sunk during WWI and WWII worldwide (... and for many of Russia's decaying nuclear submarines, abandoned and left to rot at various Russian navy bases).



Chasing Dreams, Near Far – Wherever They Are... Renata Rojas and Her Quest for Her Titanic

...continued...



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Why Bother Mapping the *RMS Titanic* Wreck? What is the Point?

Industrial, environmental, scientific and military benefits of understanding multi-dimensional engineering performance of submerged structures under stress are incalculable; NOAA states that 95% of the Earth's sea beds are unexplored. OceanGate's CEO Stockton Rush rightly asserts that we know more about the Earth's moon's surface than about the Earth's subsurface topography! Clearly, we are still in the infancy of undersea exploration and understanding. In our lifetime and in next generations, humans will be spending a lot more time (and investing a lot of money) under the sea, to explore and discover the inner universe, and mine the Earth's sea beds. Which reveals OceanGate's underlying business model – it is decidedly not mere tourism at *RMS Titanic* (which was apparently the driver for the predecessor Russian Mir submersible "tours" of *Titanic*). For OceanGate, mapping *Titanic* is a high-profile, marketing-driven exercise ("the sizzle sells the steak"). The mission to *Titanic* in a broader sense is a skill-building entry point to future commercial, scientific, environmental and military missions based on *Titan* submersible architecture (and OceanGate's follow on submersible technologies) – for missions which are far larger in scope, reach, range, financial return and consequence for humanity – indeed, for all life on Earth.

Titan will have a pilot, a content expert, and three mission specialists aboard. The descent from the surface to *Titanic* will take approximately 2 hours. The craft will be on station for approximately three hours, and the mission specialists will be using the complex instrumentation, telemetry, multi-dimensional sonars, multiple redundant safety systems with real-time monitoring, and laser scanners. It is also unknown which section of *Titanic* particular mission specialists will deploy on (due to evolving objectives during the expedition), so all mission specialists must prepare for all contingencies. The International Space Station has nothing over *Titan*! Then, about 2 hours back up to the surface.

Renata's *Titanic* and Her Journey There

Renata's mission to *Titanic* has been in the making for a very long time. *Titanic* has been on her mind for many years, even as a girl growing up in Mexico. Renata glows when speaking about diving in her native Mexico and has always had a special affinity for wrecks. (Now we clearly see the connection -- what could be a more monumental wreck than *Titanic*!). She is a technical diver and has been diving since the age of twelve. She provided surface support for the 2016 mission to *Titanic*'s sister ship *Britannic*, which sits on the bottom at 400' off the coast of Greece. During that time, she also had the opportunity to be inside the submersible, beholding the spectacle of the almost 1,000' ship lying on her side. Renata also participated in the 2016 OceanGate mission to the *Andrea Doria*, where she was mission specialist aboard a submersible. She has also dived on mixed gasses to the *Andrea Doria* which lies on the bottom at 250'. All aspects of her diving life have been combining, flowing like a river in the direction of her being a mission specialist aboard submersible *Titan*, bound for *Titanic* 12,500' under the North Atlantic surface. There was thus a growing assurance to her being selected over her competition as mission specialist!

Renata recently concluded a very successful two-year term as President of The New York City Sea Gypsies™ club, the largest dive club (one of the leading scuba diving clubs) in the northeast. Sea Gypsies members include a great many highly-experienced divers, as well as a growing number of those learning and enjoying diving in the northeast and worldwide. All of the shining stars in the con-



Chasing Dreams, Near Far – Wherever They Are... Renata Rojas and Her Quest for Her Titanic

...continued...

constellation of scuba diving have intersected at one point or other with Sea Gypsies; Sea Gypsy presenters at last week's Beneath the Sea Expo dominated the lineup. Renata's objective as President was not only to advance the sport of scuba diving and for members to enjoy each other's company while doing a lot of diving, but also to increase outreach to the community - both as a Club and also via affiliation with Manhattan's venerable Explorers Club. Renata is also a leader of the Sedna Epic Expedition, a team of women from a professionally diverse group whose vision is to snorkel the Northwest Passage. The Sedna Epic team has multiple objectives: to bring awareness to the realities of global climate change, and most importantly, engaging with girls and women of the traditional Inuit communities along the way, encouraging and empowering them to fulfill their dreams and to not let anyone or anything block their progress to achieving their personal best - in whatever their chosen field of endeavor!



Photo Courtesy Michael Rothschild, 2014

TSSC asked Renata what she liked to do for vacation! The response was unequivocal – she dives, here, there and everywhere! Diving is thus cooked into her DNA. We also asked her whom she must greatly admire. Renata quickly named her mentor and teacher, Jill Heinerth, who is Explorer in Residence at the Royal Canadian Geographical Society, educator, environmental activist -- and the BTS 2018 Diver of the Year for Education! Taken together Renata's persistent progress, dedication and intensity of spirit undoubtedly all contributed to her selection for the *Titan* team.

Renata's training for the *Titanic* mission has been intense. It has included not only training for her own mission-specific tasks, but also building relationships with OceanGate staff and *Titan* crew members and learning about their tasks. Characteristically intrepid, Renata wants to interlock with them during the mission and be able to provide assistance and 'pinch hit' for them during the mission if such should be needed. She has gained significant experience in submersible operations to date due to her prior expeditions and is therefore in excellent position to provide depth of support. Her preparation and training has also included the use of cold water immersion survival suits (affectionately known as 'Gumby' suits). To save transportation time and maximize time on station over *Titanic*, mission specialists will be flown by helicopter out to the support ship about half way between shore and the wreck. (Anyone who has flown in a helicopter knows that helicopters are characteristically unstable and perpetually in a 'controlled crash' compared to fixed-wing aircraft). Thus, the necessity of training for escape from a downed helicopter in the ocean, wearing those bulky gumby suits! (... Just imagine being in a heavy swell, in 45F water, potentially in a heavily overcast day, being inside an overturned helicopter, which is starting to sink fast and being jostled by heavy swells -- and once outside the sinking craft, trying to then figure out which way the surface is! That is what Renata's helicopter escape training prepares her for...).



Chasing Dreams, Near Far – Wherever They Are... Renata Rojas and Her Quest for Her Titanic

...continued...



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Far Across the Distance, and Spaces...

Renata admits to an obsession with *Titanic*. She is not alone. The film *Titanic* was one of the world's all-time highest grossing films, ever. There is a pull and draw to the human side of this tragedy that transcends time and space and engulfs all humans, touching all cultures and peoples. In Boy Scout and Girl Scout camps, The Titanic Song is sung around campfires. If you attended summer camp in the US, you too sang the song about how "It was sad when the great ship went down, to the bottom of the... Husbands and Wives, little children lost their lives...". This song was authored reportedly in 1915 by an African American songwriter somewhere in rural Alabama, and the songwriter's name is long-lost to time. (Ironically, this black songwriter would never have even been allowed to board *Titanic*, owing to his race...).

When asked what is next for her after *Titanic*, she wistfully and tentatively offers... a return to *Titanic*. And yet, as human beings, can there ever really be a return? There is a first time for everything under the sun, but by definition, it is singular. Is it not the human condition that "you can't go home again"? Then again, Renata has transcended so many barriers that there is little doubt that her direct involvement with *Titanic* will continue, grow and expand in future missions! Her "heart will go on"! *Titanic* mission control will plan for on-scene submersible mapping operations and wreck orientation/familiarization time to build experience; and the first dives will also include a margin for 'emotional encounter' personal observation for the crew. Subsequent dives will be more task-oriented, taking advantage of the crew's earlier dive which built a base of both wreck familiarity and fluency with mission tasks.

Renata is a banking executive with a major European bank. Fortunately for her, her responsibilities in the lead up to and during the *Titanic* expedition will be assumed by co-workers and management while she is on her mission; her management is very understanding. But will that/can that continue? And, will her drive to professional excellence in banking - which has propelled Renata high into the stratosphere of that world – over time begin to supersede her *Titanic* preoccupation? And, what about being "in the moment" near *Titanic*? The three or more hours that Renata will be over *Titanic* are very likely going to vanish in the blink of an eye because she will have a long list of mission specialist responsibilities preoccupying her. But at some point during the dive, she will make the opportunity for personal reflection on the lives lost – and she will feel the human connection across time and space ("far across the distance")– and imbue the spirit of the all-too-real human victims of the hubris of *Titanic*'s captain and in particular, the White Star Line leadership... Will Renata fulfill her *Titanic* obsession obligation? We shall find out in a post-dive interview, because Renata has graciously agreed to sit with TSSC again -- after her mission to *Titanic*-- to review these considerations...

In the meantime, TSSC, The New York City Sea Gypsies™, and the entire dive community earnestly and warmly wish Renata and OceanGate *bon chance* for the final preparations for the mission to *Titanic*, extend every wish for full success on the mission, and wish a safe return to family, friends and community. This will be an auspicious launch of OceanGate's submersible technology, which is destined to improve the lives of all humans and other inhabitants of Planet Earth!



Confederate Submarine H.L. Hunley Resurfaces –Reaching Out Across Time and Space

Gary Lehman



In December 2017 TSSC had the privilege of touring the restoration of the *H.L. Hunley* and *H.L. Hunley* Museum at the Warren Lasch Conservation Center in the former Charleston Navy Yard. Heartfelt thanks to Friends Of The Hunley Executive Director Kellen Correia and lead conservator Joanna Rivera for their time and devotion of the preservation and study of *H. L. Hunley*.

What is the Hunley ? Where Is It Today?

The *Hunley* has an important place in history because it was the first submarine to sink an enemy vessel. In the 1600's-1700's, European countries tried to develop a submersible vessel capable of sinking enemy shipping. The United States conducted a subsurface attack during the Revolutionary War using a rudimentary one-man submarine against a British ship in Boston harbor. The attack failed because the explosive charge could not be successfully attached to the British ship. Fast forward to The American Civil War: several submarines were constructed by the Confederacy and tested successfully against target vessels in training attacks. On February 17, 1864, the *Hunley* was the first submarine to conduct a successful attack, against the Union ship *USS Housatonic* serving as part of the Union fleet blockading the strategic harbor of Charleston, South Carolina. (In fact, the Civil War officially started on April 12, 1861 in that same port, when Confederate artillery opened fire on Fort Sumter in Charleston Harbor). However, following her attack *Hunley* and crew never made it back to Charleston's shore that night. This prompted a 130+ year mystery as to what happened... Clive Cussler and team found the ship in 1995; she was raised in a complex, flawlessly-executed salvage on August 8, 2000. She is currently undergoing restoration/preservation at the Warren Lasch Conservation Center. The project is a joint venture between Friends of the Hunley, the South Carolina Hunley Commission, [Clemson University Restoration Institute](#), Naval History and Heritage Command, and the [Charleston Naval Complex Redevelopment Authority](#).

On the bottom for 130 years, *Hunley* and crew were buried by silt and mud. Chemical processes and rusting created a kind of concrete (known as concretion). Crew remains were protected from sea life; skeletal remains were preserved due to the anaerobic environment inside the submarine. Today's conservation efforts involve removing concretion on and inside the vessel, employing the latest, painstaking archeological processes to glean every bit of data from the wreck and contents. The ship is immersed in a 75,000 gallon tank of chemicals with an electric current running through the solution to preserve the iron and assist in removal of concretion, and is periodically drained, allowing conservators to work inside the hull. Crew members were identified with certainty (in one case through DNA); and moving vignettes about the crew's lives have been revealed through analysis. The crew were buried with full military honors on April 17, 2004 in Magnolia Cemetery in Charleston; descendants of two of the crew were present.



Confederate Submarine H.L. Hunley Resurfaces –Reaching Out Across Time and Space continued



The Hunley and Scuba Divers

Humans have an impulse to visit places of great moment: geographic locations, and sites of tragedies, disasters, triumphs and battles. Thus the enduring interest in The Great Wall, Taj Mahal, Pompeii, Niagara Falls, Mount Everest and so many others; and Normandy (D-Day landing beaches and cemeteries) and the Civil War battlefields. Many interested in history still hear the guns in these places.

Divers are not exempt from this impulse either, with industries built around scuba/submersible diving to the *Vandenburg*, Truk Lagoon, the *Andrea Doria*, Scapa Flow in the Orkneys, cruiser *USS San Diego*, various East Coast merchant ships (and the German Uboats which sank them which were, in turn, sunk), *RMS Titanic*, German battleship *Bismarck* and Japanese battleship *Mushashi*, carrier *USS Yorktown*, cruiser *USS Indianapolis*, *U869* off New Jersey, and Salem Express in the Red Sea. **No less than thirteen members** of the Women Divers Hall of Fame have participated in dives to the historic first-in-class Union *USS Monitor*, a Civil War ironclad, most famous for the stalemated battle against *CSS Virginia* (formerly, *USS Merrimack*) off Hampton Roads, Virginia. Recovery of components of this vessel were funded by the US Navy, and divers undertook many dangerous missions to salvage parts of *USS Monitor* for display in the Mariners' Museum at Newport News. NUMA (National Underwater and Marine Agency, a non-governmental, not-for-profit organization dedicated to preserving the nation's maritime heritage founded by Clive Cussler) would have prohibited recreational divers getting anywhere near *Hunley*. Nevertheless, divers are bonded to *Hunley's* crew across time and space, as fellow maritime sojourners potentially In Harm's Way, in solidarity with "those in peril on the Sea..."

The Civil War Context of Hunley

By early 1864 the South was losing the Civil War. Unless the South could encircle Washington DC early in the war (which was attempted repeatedly, but was never successful), Lincoln and the industrialized North would ultimately win the war of attrition inevitably to follow. Colonel Joshua Chamberlain's 20th of Maine regiment held off the boys in gray at Little Round Top at Gettysburg in July 1863; that action arguably was the beginning of the long, tortuous death of the Confederacy taking two more years of brutal, most lethal battles before the Confederacy lay dying at Appomattox -- although no one could have known that in 1863. In 1864 Charleston (along with other Southern ports) was blockaded by the Union, interdicting delivery of military hardware essential for the South to continue fighting. The South was getting desperate. In war-time, desperation spawns radical measures; in this case, the development of a submersible vessel-- to stealthfully approach and destroy the blockading Union ships.

Hunley was the last iteration of submersibles – each generation correcting the weaknesses of the predecessor. Initial results in training with *Hunley* were positive. However, the ship was cursed. Twice during advanced testing *Hunley* sank, losing five crewmen on the first and the entire crew in the second sinking. The reasons are unknown; it depends on who you ask. It was either procedural error by the crew, or it was mechanical failure – or some combination. Twice the submarine was raised and restored to operating condition. But after the second sinking, the commanding general for Confederate forces in Charleston, General Pierre Beauregard, prohibited future submerged attacks by the *Hunley*. It could still serve as a warship, but NOT conduct attacks while submerged.



Confederate Submarine H.L. Hunley Resurfaces –Reaching Out Across Time and Space continued



The Fateful Night...

At 7pm on February 17, 1864, *Hunley* and crew set out on their mission to sink a Union blockade ship. They had trained hard and successfully with trial attacks- they knew the drill. The crew strained at their crankshaft to approach *USS Housatonic* stationed about six miles offshore; she was a 200' heavily armed sloop with a crew of about 160 sailors and officers. *Hunley* was spotted by a lookout upon approach, but too late for *Housatonic*. *Hunley* charged with a burst of speed, placing the explosive torpedo against *Housatonic*'s hull, then started backing off away from the target, and detonated the charge. The explosion blew a hole into *Housatonic*'s starboard hull just aft of the mizzenmast. There were no watertight compartments. The ship sank quickly, although with minimal loss of life due to rescue operations and crew having plenty of floating debris to help them stay alive until rescued.

What Happened to Hunley after the attack on USS Housatonic?

There are theories about what happened that night after the attack... we will probably never know for sure... Did the crew open the hatch(es) while on the surface to let in more air, perhaps because of the exertion required to escape the sinking *USS Housatonic* (resulting in the boat being swamped by an unexpectedly large wave)? Did the crew and/or submarine get incapacitated or damaged by the blast because they were too close? Did the boat submerge following the attack to avoid detection and capture by Union ships on the surface, resulting in suffocation because they were unable to surface? Did a Union ship get off a lucky shot which sank *Hunley* or did a Union ship ram or collide with *Hunley*? Was the return journey too difficult against the outgoing tide, with the crew asphyxiated by remaining submerged too long to avoid Union ships swarming in to rescue the *USS Housatonic*'s survivors? Did the dive plane get stuck in the 'dive' position? Was it something entirely different? Some combination of these? All crewmembers were at their stations, and not bunched up at the exit hatch; they did their duty to the end. If any of the crew's soft tissue had survived, there might have been a way to determine whether the concussion blast and shock wave at close range might have resulted in fatal brain whiplash and destruction of lung capillaries. Conflicting conclusions on the role concussion may have played have been drawn following simulations by the US Navy and Duke University. Thus, the answer(s) may never be known.

Forensic archaeologists (borrowing techniques from forensic crime analysts) can discern astounding levels of details about the humans and the machinery. But what can be deduced is qualitatively and quantitatively overwhelmed in many cases by what cannot now (or perhaps ever) be known.

What Lessons Does Hunley Hold for us Today?

The fundamental take away here – in the shared opinion of the conservators and all thoughtful visitors to *Hunley*-- is that the specifics of the sinking of *Hunley* and what killed the crew are less important than our duty to honor their memory and sacrifice, and that of their loved ones back home. They were sailors. They, and the



Confederate Submarine H.L. Hunley Resurfaces –Reaching Out Across Time and Space continued



designers/builders of *Hunley*, changed human history. It was the first successful submarine attack in history. It was a stunning technological achievement, presaged by none less than Leonardo Da Vinci in the 1400's. Da Vinci never shared his invention publicly, fearing that (like the atomic bomb in the mid-1940's) it would fundamentally change the course of human history and radically increase the lethality of warfare (and like the atomic bomb, it did ...). It is interesting to consider that the war to liberate black Americans from slavery, fulfilling the promise of the new country of the United States - founded in human dignity - would also open the Pandora's box of submarine warfare -- which very nearly enabled the darkest forces in human history (Nazi Germany) to strangle the United Kingdom by denying the UK of the means to resist. Nazi Uboat submarines are what kept Winston Churchill awake during catnaps in his bunker underneath Whitehall.

Think about this... *Hunley's* crew crawled into this four-foot high cylinder (resembling a coffin which it had been, and would in fact become once again-- only this time, theirs...); and this boat would then submerge (using the mysterious concept of buoyancy); and approach and attack its target. Then (as now) crew procedural error or equipment malfunction can quickly doom the vessel. She could get swamped and sink quickly, with the crew in terrifying, total blackness into the watery grave to which they were headed without hope, the hull ultimately crushing under the pressure of the water on the hull. How terrifying to be a crewman aboard such a scarcely-proven vessel! When we look upon the eerily-reconstructed faces of *Hunley's* crew, let us not think about how they died, but rather of how they lived -- the human endeavor, valor, intrepidity, scientific achievement, human spirit, and devotion to duty which beat in their hearts.

And those attributes extend also to today's dedicated conservators, and to so many friends and supporters of the *Hunley*, working hard to fund and preserve the *Hunley* and advance understanding of her circumstances. Team Hunley invites all of us divers here at TSSC to join them in this important and unfinished mission (details on the *Hunley* website www.hunley.org ...) and be part of the effort to preserve and tell the story of Hunley and her crew. What better way to honor these sailors --and all American submarine sailors who are on eternal patrol. THESE are *Hunley's* lessons for us today!





Confederate Submarine H.L. Hunley Resurfaces –Reaching Out Across Time and Space continued



And Around The Dive Shop.....

LOCAL DIVE SHOPS.....AT YOUR SERVICE!

Looking for dive-related gifts? Need to upgrade your gear?

Here is a list of shops that may just have the right one for your best dive buddy or for yourself!

 <p>Ski and Scuba Connection 26 Saint Roch Ave Greenwich, CT 06830 Tel. 203-629-4766 www.skiandscubaconnection.com</p>	 <p>SCUBA NEW YORK 2037 Central Park Ave Yonkers, NY 10710 Tel. 914-779-2966 and 2672 Gerritsen Ave Brooklyn, NY 11229 Tel. 718-769-0099 www.scubany.com</p>
 <p>Abyss Scuba Where the fun begins! www.abyss-scuba.net (914) 244-3483 29 Marble Avenue, Pleasantville, NY 10570</p>	 <p>Captain Mike's Diving School 530 City Island Ave City Island, NY 10464 Tel. 718-885-1588 www.captainmikesdiving.com</p>
 <p>Oceanblue Dive 108 Bedford Street Stamford, CT, 06901 www.oceanbluedive.com</p>	



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