



International Scuba

GETTING YOU THERE... STARTS HERE!

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Will it Rain Again Today?

Howdy Divers,

I think all of us ask this question every morning. Certainly we plan around it these days. We now have a summer time going which is expected for Texas.

Wanted to let you that our charters that we rely on so heavily for travel to Cozumel aren't traveling this fall or winter. That hasn't stopped our super star Travel For You group. We have booked spots for Carnival already so don't wait as the space is limited. Join us February 2-6, 2008 at either Hotel Cozumel or Casa Mexicana for parades and diving! We also have a few spots

left for our Flower Garden trips Aug 18-19 and Sep 8-9. If you need one last hurrah before school and such set in please join us. Remember that to be eligible for this trip you should have a couple blue water trips under your weight belt as this is a fairly advanced diving trip.

Aqualung is giving us a chance to have a blowout in August so watch for details. I believe we get to disregard the rules with respect to pricing that are generally set forth for us. Watch for some really big sales on BCD's and regulators. Now's the time to invest in your own gear. Remember that we still do the layaway plan that allows you to dive while you pay for

6 months interest free.

Looking forward to diving with you soon.

~ Patti



Specialty of the Month—I Feel like a Wreck...

Wow, what an odd summer we are having. The last two years we were begging for water, now it won't stop raining. Oh well, good thing our passion is diving, the rain doesn't really bother us underwater (just sit out while the lightning passes over please). Clear Springs is mostly fed by ground water and doesn't get much runoff so right now it seems to be living up to its name. Anyway enough of the weather let's move on to the August Specialty of the Month. It reminds me of my favorite joke I tell while people tread water for open water classes. What twitches and lives at the bottom of the ocean? Give up... Are you sitting down... A nervous wreck. Yea, I get that same grown in class too. But grown as you might, you'll probably tell it to someone.

So let's talk about the Wreck Diving specialty. Wrecks come into existence for a couple reasons, the ones we normally think of are the unexpected sinkings, but we also have more and more wrecks that are sunk on purpose either for divers to look at, or artificial reefs (or both). The unexpected sinkings could be the WW2 wrecks off the eastern seaboard (mostly German U-Boats, and US Ships that were used in WW2), the Japanese wrecks in Palau, and Truk Lagoon, the barges or passenger ships in the St. Lawrence river, and even the odd pirate ship with sunken treasure in the Caribbean. These ships bring a sense of history and

awe. In many ways its like diving in a graveyard or memorial. There is a sense of respect and wonder about the people who were on the ship, what happened, and the whole story behind it. Often the story is known, but sometimes it is a mystery waiting for someone to resolve.

Then we have the artificial reefs. These could be smaller ships that are retired from service or severely damaged in a storm. Often the owners feel it is not worth the restoration cost, so donate the wreckage to be cleaned up and sunk. The US Navy has gotten into this recently as well. They have donated a number of ships that would normally either rot in port, or be sold for scrap. The two main ones are the Orinskany off the Florida panhandle and the Spiegel Grove in the Florida Keys. There is a new wreck slated to go in near South Padre Island this year, and one off the North Carolina Coast at some point. These wrecks also give a perspective of history. Many of them had uses as War, Cargo, and Civilian vessels. Most had long productive lives as ships, and will continue their use as wonderful reefs.

Wreck diving has its own challenges. There can be dangers from sharp edges to overhead environments. As such there is more planning that should go into a wreck dive. If you plan on penetrating the wreck, be

sure you have the training. There can be hidden dangers that are difficult to see. Even your bubbles can bring down silt and rust and cause visibility to all but disappear. That is were the wreck diving specialty comes in. It gives you a good overview of what is needed to safely navigate around wrecks and do recreational level penetration. (Recreational level is defined as no further than 130 linear feet from where you are to the surface. If you are 60 feet down, you can penetrate no more than 70 feet in. If you are 100 feet down, no more than 30 feet in).

The wreck specialty consists of 4 dives. The first dive is all about observation. Take a look at the wreck, look for potential danger, possible penetration points, and other items of interest (how is it laying, dimensions, name, etc). The next dives you practice techniques for penetration and optionally perform a penetration dive at the end. (We can do the wreck specialty with or without the penetration dive, depending on your desire for the course).

Don't forget that you get a gift from the PADI Diving Society if you are a member and sign up for the Wreck Diving specialty during the month of August. Also remember for July, the specialty of the month is deep diver. Sign up now for your free gift.

Class Schedules & Trips— at a glance:

WEEKEND:

- JUL 7-8 DEEP WATER
- JUL 21-22
- AUG 4-5 LAKE TRAVIS
- AUG 18-19
- SEP 1-2
- SEP 15-16

WHERE TO:

- JUL 14-21 BLACKBEARDS
- AUG 18-19 FLOWER GARDENS
- AUG 31-SEPT 3 COZUMEL PAMPER YOURSELF
- SEP 8-9 STETSON BANK
- OCT—WAKATOBI
- JAN 08—TURKS AND CAICOS
- 2008—WHERE TO?
- FEB 2010—PALAU

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Our World of Divers Continues to Grow

Junior Open Water & Open Water (White Belt)

Dwight Shewchuk
 Kristen Broyles
 Mike Small
 Jennifer Shewchuk
 Alice Lee
 Yoojin Cho
 Daniel Cho
 Sophia Haid
 Brian Beyer
 Melinda Beyer
 Susan Samstag
 Becky Shewchuk
 Charles Shewchuk
 John Shewchuk
 John Murray
 Jon Power
 Austin McCord
 Bill Langhenry
 Nathan Langhenry
 Rachel Talatala
 Edward Talatala
 Raffy Talatala
 Kelli Kellar
 Nicole Hom
 Natalie Juneau
 Tim Thomas
 Matthew Donnell
 Buzz Ellery
 Chris Vilmont
 Ryan Sellers
 Fran Berg
 John Fechtel

Cynthia Smart
 Taylor Stevenson
 William Berg
 Greg Davis
 McKenna Davis
 Alan Richardson
 Richard Brewer

Adventure Diver

Maryn Gier
 Austin Lynch

Advanced Open Water Diver

Margaret Tully
 Marianne Hostetter
 Chris Hostetter
 Brian Brewer
 Jacob Williams
 Karen Biddinger
 Aaron Biddinger

Enriched Air

Sharon O'Neill
 Deleena Black
 Chris Graves
 Cynthia Smart
 Zach Womack
 Amanda Womack
 Amy McKinley
 Brian Brewer
 Linda Roussel
 Colton Smith
 Billy Langhenry
 Marianne Hostetter

Chris Hostetter
 Elena Perez
 Thomas Barrett
 Roger Smith
 Jeffrey Rolinc
 Matthew Rose
 Adam Whitworth
 Moazzam Ahmed
 Fatma Allam

Emergency First Response

Colton Smith

Oxygen Provider

TC Carroll
 Colton Smith

Rescue

Colton Smith
 Lyle Biddinger

PPB

Margaret Tully
 Amy McKinley
 Cynthia Smart
 Deleena Black
 Jaclyn Magelssen
 Chris Simmons
 Sylvia Gomez
 Ryan Sellers
 Kay Sellers

DPV

Caron Lawrence
 Don Lawrence

Boat Instructor

Chris Graves
 Chris Simmons
 Sylvia Gomez

Enriched Air Instructor

Chris Graves

Night Instructor

Chris Graves

Drift Instructor

Chris Graves
 Chris Simmons
 Sylvia Gomez

S & R Instructor

Chris Graves
 Chris Simmons
 Sylvia Gomez

Wreck Instructor

Chris Graves
 Chris Simmons
 Sylvia Gomez

Navigation Instructor

Chris Graves
 Chris Simmons
 Sylvia Gomez

Naturalist Instructor

Kevin Murphy



Milestones—number of dives recognition

Don't forget to email us your milestones—remember you are working hard!

10 Dives

Tonni Shook

20 Dives

Elena Perez

25 Dives

40 Dives

100 Dives

Tom Baggett

150 Dives

200 Dives

Dave Allen

250 Dives

300 Dives

350 Dives

400 Dives

500 Dives

600 Dives

700 Dives

Just What is a Mangrove?

Recently while enduring a required surface interval before my flight home I decided to spend some time snorkeling the shallow bay and mangroves in Bonaire's Lac Bay. I could only talk one other diver into joining me. I believe the others figured it was boring or mosquito infested and such a shallow snorkel wasn't worth the effort.

On the snorkel we saw some really amazing things. The mangroves are basically a nursery and hatchery for all sorts of fish. Many fish seek the safety provided by the maze of roots that reach up to the surface for air.

My favorite fish were the tiny juvenile barracuda some not more than an inch long and many less than a foot.

Maybe it's the safety of the roots but the fish were fearless along the edge of the tree lines. The curious barracuda came right up to check



out the strange visitors. At one point 2 microscopic sergeant majors came bouncing up to the lens on my mask. It seemed they were playing with their own reflection in my mask. Both fish were no bigger than the nail on your pinky yet they had the unmistakable markings of their older relatives.

In Bonaire there are three distinct species of Mangrove tree (Red, White and Black). Each type has its own area that it inhabits. The most common is the amazing Red Mangrove Tree. The red mangrove tree makes its home in the shallow waters fringing the bays and tidal areas generally near shallow reefs. The most obvious clue to its identity are the arching aerial roots that bring air to the tree where it thrives in oxygen depleted mud and salt water, conditions that would kill any other tree. The mangrove tree is unique in the way it takes salt water and thru the process known as reverse osmosis creates its own fresh water. The Red Mangrove tree acts as a bridge between land and the sea. If the tree is stressed by poor conditions it will send out roots far and wide to escape the intolerable conditions. The root system it creates is what brings the wide diversity of fish and invertebrates to the shelter of the forest. The water that flows thru and surrounds the Mangroves is a thick soupy brackish water often times the water has a yellowish brown tint from the tannin released from decaying plants and from the trees. Mangroves lose approximately 3 tons of leaves a year per acre. When the leaves fall they release the stored energy into the ecology of the mangrove. Tiny fish and invertebrates along with worms and other micro life eat the decaying leaves. Birds, snakes and insects feast on the teeming life in the mangroves.

Life for a Red Mangrove starts with a flower pollinated by insects. The long thin seedling then falls to the water to fasten itself to the

bottom and will grow up to 3 feet the first year. Sometimes the roots will float for as long as a year before taking root and spreading the species. Each seed is equipped with it's own high energy nutrition to help it get a head start when it begins to grow. After one year the tree will begin to spread roots and another bridge between land and sea is built.

The next tree is the Black Mangrove Tree which makes it's home closer to land and protected by the Red Mangroves. The Black Mangrove Trees have dense pencil like roots that shoot straight up into the air out of the shallow salt water. When the tree takes on excessive salt from the water it will excrete the salt on it's leaves which sometimes bare a salty residue. The black mangrove is less tolerant to submersion in salt water and is almost always found very close to land in water that is only inches deep.

Finally there is the White Mangrove that is found closest to shore and has no aerial roots at all. It leaves are small and waxy with 2 small glands with slits on each leaf.

The calm conditions of the shallow bays allow open ocean algae to join together and settle to the bottom. This algae is very important to the make up of mangroves. It provides another rich source of food to the many marine creatures. The variety of algae is staggering. There are algae that create a float or balloon like bubble to hold gasses or water filled chambers. Sea pearls are one of the many bubble like algae. Mermaid's Wineglass is a beautiful algae that looks like a cup. This algae while tiny has one of the largest single cells found in the world. Some of the other interesting Algae include fern and feather algae.

Sponges also find a home in the shallow waters of the mangrove attaching themselves to roots, broken shells and even live crabs. Sponges are on the diet of some of the reef fish that migrate to the trees to lay eggs.

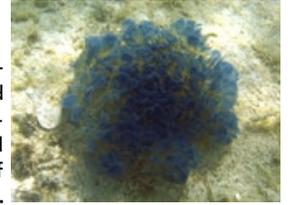
One of the coolest things I saw in the Mangrove was the upside-down Jellyfish. These jellyfish make their home on the bottom of the deeper areas of the bay. They settle to the bottom in an upside down orientation to allow the sun to reach the symbiotic guest algae growing among the tentacles that help contribute to their nutrition. The jellies come in many beautiful colors blues, purples, browns and many patterns and shades. There is no danger of the jellies attacking as you pass over them as long as you are careful not to kick them up into the water column.



I found several varieties of anemones that I haven't found names for yet but are worth researching. Watching the anemones catch the tiny prey

with their tentacles is a great show and a fun subject for pictures.

Other creatures found include flatworms, and nudibranch of many colors.



Baby lobsters were scurrying along the bottom hiding among the turtle grass blades. Strange crabs were everywhere.

I enjoyed watching huge schools of tiny fish flash by from time to time. It turns out the fish are called mosquito fish and feed on the larvae of mosquito. I have read that there are studies to control mosquito thru the use of these little fish.

In addition to the many marine creatures there are plenty of birds that make the mangroves their home. Some of the more common birds include pelican, Heron, Egrets, Double Crested Cormorant and even the beautiful Pink Flamingo.

Next time you have some needed off gassing break out the mask and snorkel to visit a truly different dive site. Like any new environment there are some considerations to make it safe and as rewarding as possible. It was recommended by a veteran mangrove explorer to not use fins, the reason being that fins might stir up the jellyfish. I have always used fins but can see the wisdom in the advice. Check the local tides before going. Even though the tides in Bonaire are measured in inches we found it hard to reach some areas due to the water being too shallow. Move slowly in the water because the fish here are tiny and it takes a moment to spot the cool babies hiding in plain sight. Don't forget to wear a t-shirt or skin. The sun can be brutal in the shallow water and bad sunburn is sure to make the flight home uncomfortable. There is also the chance of small stinging cells attached to turtle grass blades that you are sure to brush against from time to time. When adventuring into the mangrove go in a small group. The bottom of the mangrove is easily kicked up and viz can drop quickly. I have found buddy teams to be the ideal number. If more than two are in a group try spreading out to see different areas. Don't go deep into the mangroves with out a guide. The path out might be confusing as all the trees look alike. Check to see if a mangrove snorkel is available. The guides have excellent eyes and will provide tons of information on how the ecosystem works.

Give it a shot sometime and don't forget your camera there are plenty of photo ops to be had.

Enjoy,
Rich

Please visit our website. We do our best to keep it up to date. Let us know what you think about the site and the newsletter. An important part of our success has been the friendships developed among customers and staff. That's part of why we dive.



Getting You There... Starts Here!

2540 Marsh Lane
Suite 128
Carrollton, Texas 75006

Phone: 972-416-8400
Fax: 972-416-8507
E-mail: patti@internationalscuba.com

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CD Corner — Are You Prepared?

Howdy Divers,

I know I talk a lot about CPR and First Aid but just recently I had the opportunity to begin teaching a new class called Basic Life Support for Dive Professionals (BLSPRO).

I finished and EFR Instructor course a couple of weeks ago where we were discussing scene assessment and safety. I also helped one of our own, Fender, who took a tumble down the stairs. How many of us who are alone at home whether we are single or our family members are gone keep a phone nearby. It is a good idea to carry your cell phones on you while you are anywhere alone. If Fender hadn't had his phone with him when the cats sabotaged his casual walk down the stairs he would have laid in a crumble at the bottom of the stairs for a long time. He had a concussion on top of everything which we all know is dangerous if you pass out without medical attention. My EFR Instructor candidate made a mental note as well because she lives alone in a two-story house. She now carries her cell or phone with her.

Do you have the desire to share your passion

of the medical world with others whether they are divers or not? You can be an EFR Instructor.—just ask us how. With today's office population getting a little older it is a good idea to know how to take care of yourself and fellow co-workers.

As some of you might know by now, Suzanne had an incident a couple of months ago and if it hadn't been for some quick responders in CPR and Oxygen her outcome might not have been such a good one.

We now offer a course that is meant to take the lay person's knowledge to the next level and be even more prepared should we come across an accident during our daily lives.

The moral of the story these days is **BE PREPARED!** Keep your phone charged and handy. That is only the first step—if you want to learn more please call or come by to talk with Rich or myself.

~ Patti



Creature Feature — Coral Spawning



Where to begin. The Flower Gardens are best known for Coral Spawning trips in August. We look at coral and understand the basics like birds pollinating flowers that fish help out but really coral does it's own thing.

Corals use lots of reproductive strategies, but it seems that nearly all large, reef building species release millions of gametes once a year, in precisely synchronized mass-spawning rituals. These spectacular displays allow the stationary animals to mix genetically and to disperse offspring over great distances. Such a copious delivery system is also believed to maximize the chances of fertilization, and at the same time overwhelm predators with more food than they can possibly consume. The exact cues triggering the annual phenomenon remain unclear. They are generally believed to be linked to water temperatures as well as the lunar, tidal, and twenty-four hour light cycles.

Fertilization, which is possibly aided by sperm attractants, produces planulae larvae that are able to free-swim by day two. Now, in the grasp of tides and currents, the tiny new coral embarks on a grand voyage that can last for months and carry it hundreds of miles from its origin. If the speck of life somehow survives the ever-hungry mouths of plankton-pickers, filter-feeders, and jelly plankton, it will one day mysteriously sense suitable hard substrate below, settle, and begin producing a tiny calcium skeleton – the genesis of a great coral colony that could live for hundreds of years.¹

Join us for the Flower Gardens and watch new coral get its start on life.

¹—Ned DeLoach and Paul Human
www.fishid.com