

undercurrent

The Private, Exclusive Guide for Serious Divers

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Turquoise Bay Resort, Roatan, Honduras

an easy, pleasant getaway

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Dear Fellow Diver,

Having dived Roatan regularly for many years, I was sorely disappointed on my last trip to Fantasy Island, which was rundown and awash in sewer smells (see my Undercurrent article, August 2015). I vowed this year to find a better resort. After all, I like the convenience of Roatan, the easy diving, and the stress-less week. As it turned out, my visit to Turquoise Bay went about as well as I had hoped -- which it should on this Bay Island with plenty of resorts, dive operators and American tourists.

Saturdays never start stress-less at the Roatan airport, since it's their busy day -- three other planes had arrived in the hour before ours, and with only three immigration officers working the desk, lines were long. I had sprung for a first-class ticket, since the rates were not exorbitant, so I was among the first out of the sun and inside the terminal, although the lack of a/c offered no respite. After retrieving my luggage and meeting the person waving the Turquoise Bay sign, I joined eight others traveling with Arizona dive shop owners for the 45-minute van ride to the hotel. The turquoise waters of Turquoise Bay came into view, then, as I stepped out of the van amid the lush plants and flowers on the hotel grounds, I was entranced by the lovely sweet aroma of banana plants. It would be a fine week.

Let me begin



Lola is one of Subway's Dive Boats



by saying that Roatan diving is without big fish or big surprises. It's about pretty reefs and walls, tropical fish, and little effort. We were on the Northside, where the reefs and walls are a little bit deeper than on the Southside. Off the walls, you might see larger groupers and snappers in the distance, and perhaps an occasional eagle ray. While many reefs were healthy, with good coral growth, some were draped in algae, a result of many factors, including overfishing. From the resort, there is no shore diving; the reefs are too far for a surface swim after three daily boat dives.

I took my gear down to the Subway dive shop, showed my c-cards and stowed my gear in my assigned locker. It would be on the boat in the morning, set up and ready to go. I met Osman, the divemaster, a short, middle-aged man with a bald head and a perpetual smile, who was assigned to our 35-foot boat, Lola. I told him that I might need a little more TLC than usual, since I broke my wrist four months ago, and though the cast was off, I didn't want to strain it. I would need to doff my gear in the water and climb the ladder without the weight. The crew responded well. Each time I reached the ladder, one divemaster grabbed my fins, the other pulled off my weights, and I inflated my BCD and undid the buckles. The boat captain would haul up the BCD and tank, and I climbed the ladder without straining my wrist. Talk about great service!

Some three-tank dives took all day, with lunch between dives two and three. The partially covered boat, which comfortably seats about 20 divers, had no head, but it did have adequate space to store my camera (and strobes) in a dry location. One day we headed to the West End for the first dive on El Aquila wreck, where large snappers and black groupers hung around the wheelhouse. Anthony's Key Resort sunk the 230-foot cargo ship in 1997, and the next year a hurricane broke it into three pieces. It sits at 110 fsw. After checking out the nearby reef, I surfaced to fresh fruit and a bottle of water, and we headed off to Half Moon Bay reef. While poking along the reef, I heard a rumble of what I figured was a very large boat passing overhead. Upon exiting, I provided my depth, bottom time and tank

Stop Using Zeagle Grace and Zeagle Element BCDs Immediately

If the bladder of your BCD were suddenly to split open when you fully inflated it on the surface, the dramatic loss of buoyancy would cause you to plunge to the depths. It seems a Zeagle BCD bladder does just that.

Huish Outdoors has issued an urgent voluntary recall of nearly 1500 Zeagle Grace and Element BCD models due to the risk of the welded seams of the buoyancy bladders splitting and precipitating a sudden calamitous air loss. This would cause a dramatic loss of flotation and obvious risk. The manufacturer has stated (at the time of writing) that it has received only a single report of such a seam failure without incurring any injuries to the user. If you have a Zeagle Grace or Element BCD, **stop using it immediately.**

Zeagle Grace BCDs can be recognized by the logo Z/Grace on the right-side pocket and left shoulder. The words "Zeagle Sport" are featured on the left-side pocket. Similarly, the Zeagle Element has the logo Z/Element on the right-side pocket and the words "Zeagle Sport" on the left-side pocket.

With no option for bladder replacement, Huish is offering owners a free upgrade to an alternative product. Return your recalled model to your Zeagle dealer for a replacement. You can also send your recalled Grace or Element BCD directly to Huish Outdoors (tel: 888-270-8595). More information is available at www.zeagle.com/recall

PSI to Osman and then asked the boat captain about the rumble. There was no big boat, he said; it must have been a minor earthquake! Do I get a PADI Earthquake Diver Badge?

Then, off to lunch at Half Moon Bay restaurant, then on to Overheat Reef, where I got nice shots of several green turtles, which I rendered in B&W since my strobes had failed (batteries last only two dives). The dive day ended with more good service: we boarded a van at Anthony's Key for a ride to our hotel, while the boat took the bumpy ride back. When we arrived, my gear was already drying in the sun. By the way, the September water was 79°F-81°F, and I wore a 1.5mm wet-suit, but it warmed to 82°F-84°F, so I eventually switched to a skin.

My favorite dive, Dolphin's Den, was over a mostly a shallow, rubble area with a swim-thru, but it was covered with macro life: pike blennies, sailfin blen-



Turquoise Bay Resort

Reef Sharks – Are They Over-Valued?

An article by science writer Alex Riley in *Hakai Magazine* asks the question, “Are we over-valuing reef sharks?” He makes the point that the movie *JAWS* made everyone think that all sharks are apex predators with a degree of power over environment that, in the vast majority of cases, they’ve never really held.

He quotes the *New Yorker*: “We’ve been systematically killing off sharks, in spite of evidence that, as ‘apex predators,’ they’re crucial to maintaining biodiversity,” or *Wired*: “Drive keystone predators like sharks extinct and entire ecosystems collapse.”

He says that this is patently not true and cites ecologists Peter Mumby and George Roff saying that the familiar tale of devastating losses of sharks through fishing and finning crippling the wider ecosystem is often just a story, not a conclusion backed by science.

In 2004, researchers from the University of California, San Diego, published a study that assessed the inter-relationships of 208 species of fish inhabiting a Caribbean coral reef. What ate what, and which species got the benefit? The research computer model suggested that by eating mesopredators (grouper and trevallies, for example), sharks that inhabited the reef increased the number of herbivores like parrotfish, thereby controlling the build-up of algae.

Mumby, Roff, and colleagues compiled 11 classic studies on coral reef ecosystems, looking for evidence of the reef shark’s presumed influence, but what they found ignored this conventional wisdom. In areas where sharks were fished, herbivore numbers didn’t fall. In Marine Protected Areas where large-scale fishing is banned, a bounty of sharks didn’t lead to a plethora of herbivores.

Of the 26 key species of sharks on coral reefs, only a few infrequent visitors (namely tiger sharks, bull sharks, and hammerheads) can be placed in the top tier of the food chain. ‘Shark’ isn’t a blanket term for a huge voracious hunter, but a family of cartilaginous fish that encompasses a diversity of diets and lifestyles. The vast majority of species, such as whitetip reef sharks and gray reef sharks, for example, are more akin to large-mouthed groupers and giant trevally in their eating habits. They are all merely mesopredators and less crucial to the ecology of the reef.

Many divers want to see sharks, and in some areas of the world, shark diving accounts for a significant proportion of a small nation’s gross domestic product. For us, they are important indeed. For the reef, perhaps fishermen aren’t such a bad thing.

Turquoise Bay Resort, Roatan, Honduras

Diving for Experienced..... ★★★★★
 Diving for Beginners..... ★★★★★
 Snorkeling.....(n/a)
 Hotel/Resort..... ★★★★★
 Food..... ★★★★★
 Money's Worth..... ★★★★★

★ = poor ★★★★★ = excellent
Worldwide scale

a good TV, a desk and chair, a large dresser, good a/c and a nice bathroom, where hot water poured from a magnificent shower head. The balcony was great for drying my stuff, since it was always sun-drenched when I returned from the diving. Wi-Fi was faster in the hotel, where the main room had a comfortable couch and chairs.

The dining room boasted a magnificent African-style painting of Honduran women, as well as a mahogany screen that covered the doors to the pool area. The pool area, replete with a tiled mosaic of horses running through the water, sported comfortable chairs and lounges adjacent to a covered patio. Before dinner, guests gathered in the bar next to the dining room, which had a good selection of wines, uncommon in Roatan. I might add that a pregnant donkey and her unborn mule's sire wander the property freely, and when I clucked at him, he wandered up to me. As I stroked his nose, he tried to nip me. So, be forewarned.

One two-tank day, we took a 90-minute boat ride to Roatan's East End and Pigeon Cay. During an easy drift dive on Morat Reef, we saw a six-foot nurse shark resting in the open, among small groupers, grunts, sergeant majors, fairy basslets and other typical reef fish. Because it is a marine sanctuary, lots of lobsters hung under ledges, and I photographed a full-grown pipefish. Our drift ended at the moored diveboat, making it an effortless dive.

For the next dive, we motored to Pigeon Cay Reef, where Osman, Jr. and I found heavy string tied to a broken piece of coral, apparently used as a boat anchor. For 15 minutes I carefully I removed it from corals and gorgonians while he rolled it up into a ball. We surfaced into a rain storm, but it passed quickly. Then on to Pigeon Cay, where another Subway crew had arrived to prepare lunch: fresh grilled tuna, mahi-mahi, and grilled pork chops, along with steamed vegetables, fresh fruit, salad, and beans, topped off with a tasty cake covered with dulce-de-leche frosting. After lunch, we started wading to the boat, but the tide had come in, so I, the shortest of nine divers, had to swim the last 15 feet, to some divers' unwelcomed jibes. The boat

nies, seahorse, baby pipefish, banded clinging crabs, Pederson cleaner shrimp, banded coral shrimp, spotted cleaner shrimp, a seahorse, and lots of tiny fire worms. Among the rubble were scores of big lobsters, while grunts and other tropical paraded above. I was aided in finding critters by Osman, Jr., a younger version of his father, with a full head of hair and just as eager to help. Training to become a divemaster, he was developing his chops by helping me out. He does have a knack for finding small critters.

The 26-room Turquoise Bay Hotel is pleasant, well maintained, and quite peaceful, being 15 minutes from the nearest settlement, French Harbour. My garden-view room, 04, had a beautiful view of the bay and a nice breeze, tiled floors, two full-sized beds,



Turquoise Bay Resort

ride home with rain threatening us on all sides was bumpy, but all in all, it was a great trip.

The Arizona divers were a bit of an unskilled bunch. Some swam vertically, their fins stirring up the bottom, which we photographers did not appreciate. One diver paid little attention to his relationship to others and twice dropped on top of me while I was setting up for a shot. He seemed to think that this was somehow my fault, though I was nearly flat on the sand both times. Several were fairly new to diving (I hope), and some always returned to the boat with as little as 300 PSI, and after shallow dives, two older divers ignored making a safety stop. Sure, you can get away with that most of the time, but even on nitrox, I'm a conservative diver, aware of the seriousness of any misstep, especially for aging divers.

The well-prepared food was plentiful. Breakfasts were fresh fruit and then fresh-made omelets, toast, jelly/jam, and cold or hot cereal. Dinners were sometimes buffet-style and sometimes made to order. One night we had steak and lobster as well as steamed vegetables and mashed potatoes. Most other nights it was a choice of chicken or pork (and sometimes fish, freshly caught) and vegetables, rice, beans, and potatoes. Usually, the meat was grilled, but once they made superb fried chicken, the least greasy I have ever eaten. Desserts ranged from ice cream to cheesy pies (not cheese cake, but somewhat similar) or cakes. I rarely eat lunch on dive trips, but the buffet lunches here measured up well to the dinner menu. By the way, one of those Arizona couples -- seems like they had just hooked up -- missed a few dinners and never made an appearance in the afternoons, either on the dive boat or beach. I guess they were shy.

I like to make annual trips to Roatan, so I expect to return to Turquoise Bay and Subway's Cadillac service. They went to places requested if the conditions were suitable. They were concerned about diver safety while ensuring a good experience for the divers. To wit: I was the only diver on one afternoon boat dive and still got the same service. I felt quite pampered, I must say. And, I suspect you will too: it's a very pleasant hotel, fine staff, good food, and a dive operator who makes it easy for you.

-- PS

Our undercover diver's bio: "I started diving in 1999 because I was sure the world would end in 2000, so I figured, 'Why not, I could only drown.' Later, I committed the heinous crime of taking up underwater photography, and, obsessed with capturing critter behavior, I've buzzed around the Caribbean, where I've made most of my very many dives (I've also dived in the Philippines). Underwater photography has helped my fish, critter and coral/sponge ID skills, so now when I'm asked, 'What is that?' I no longer have to say, 'I dunno.'"



Diver's Compass: Turquoise Bay: \$1355 for a week of single occupancy, EANx, all meals and airport transfers. . . . Most people tipped the crew about \$10/dive, but I tend to tip more: \$100 each for the divemaster and boat captain, \$80 for the guide assigned to me, \$50 for dive shop personnel not on the boat, and \$60 for hotel staff. . . . During my six full days, I made 16 dives, averaging a bit more than an hour each, and often returned with more than 1500 psi. . . . They offer a shark dive in 70 fsw with loads of current; the cost is \$140, cash only. . . . Wi-Fi can be spotty; however, it was great to edit my photos in my room or stay in touch with my family via email or Facebook. . . . horseback riding on the beach is available, and they offer a variety of trips -- "rainforest" zipline, monkey/sloth tours, etc. -- but getting to the West End takes maybe 45 minutes (too much for me, so I just dived and relaxed) . . . Any Roatan resident who violates marine sanctuary rules may participate in a program to learn a trade that supports the sanctuary; if they again violate the laws, they are jailed for ten years. The rules are helping larger animals return to the Marine Park. They accept donations. www.turquoisebayresort.com

Managing Dive Trip Expectations

more readers report and tell it like it is

Commercial dive magazines are often full of hyperbole, resolutely promoting diving destinations, many of which happen to be advertisers. We're different — of course, we don't take advertising — and *Undercurrent* subscribers tell us — and we publish — the downside of their diving trips, too. It doesn't necessarily mean a trip is a disaster. Successful travel often involves managing expectations.

For example, the **Riding Rock Inn** of San Salvador in the **Bahamas** was looking a little tired

The Maldives are a long way to go for such gross disappointment.

before the hurricane hit it in October 2015, but this gave the operators a chance to rebuild. That said, it is still not a five-star luxury destination by any means. Tripp Jones (Columbia, SC) visited this August and reported, "The hotel is basic, and this is a diver's resort. Water is a problem here and ice is limited, but we thoroughly enjoyed the food, which was superb. The hotel staff is excellent, with great attitudes, really wanting to make our stay enjoyable. The rooms are clean and certainly adequate. The Guanahani dive operation is superb. The viz was 125 feet, plus with sharks seen on 16 of 17 dives. The overall fish life was really good, although there was some bleached coral."
www.ridingrock.com

There's a risk a change in management does not always bring improvements. **Pirates Point Resort** on **Little Cayman** has been the Cayman's storybook dive resort since Gladys Howard opened it three decades ago. It sure has been my favorite. When Gladys passed in December after a long illness, we expected that it would not miss a beat, and Andrew Bernat (Arlington, VA), there in May, reports, "Despite the change in management (Gladys Howard's daughter, Susan, has taken over), things continue to roll along with the same combination of relaxation, good eating, and quality diving. Unfortunately, my dive buddy/spouse was suffering a sinus infection and could only dive the last day. We had purchased the all-inclusive dive package. It was pointed out that she

could move to the relaxation package, pay only for the dives she did, and we'd save some money. At least that way you aren't being hit twice. Kudos!"
www.piratespointresort.com

To the southeast in the Caribbean, Dale Lachman (Libertyville, IL) had an equally successful stay on **Saba** in August. Still a colony of the Netherlands and subject to the European Union social safety net, there is no overt poverty. Dale dived with **Sea Saba**. "The rainforest hikes are wonderful; you just can't go to the top of Mount Scenery at 3200 feet on the day of the dive without risking DCS. Reef sharks, nurse sharks and turtles seen on most dives," and the concentration of fish raised a smile. "We stayed in a cottage at **Juliana's** that didn't have air conditioning. The first night was rough, we borrowed another fan, but as the week wore on, I acclimated, and it wasn't bad."
www.seasaba.com

Warm nights can be uncomfortable but it's often said that worse things happen at sea. Elizabeth Russell (West Mifflin, PA) experienced a catalog of disasters aboard a liveaboard this August in the **Maldives**. "We spent the week on the *MV Maldives Aggressor*, and it did not live up to our expectations. The boat had many issues, which made the trip very uncomfortable. One of the generators quit working, and the crew switched to the alternate generator, which also broke down, leaving the boat with emergency battery power only. One of the winches that bring up the anchor was broken, and the other was unable to work without the generator. The boat was dead in the water, unable to move because it was anchored. Most of the passengers were out on a night dive when the generator failed, and all the flashlights were on the dhoni. The crew lit candles, which we felt was a safety hazard. My buddy and I, who skipped the night dive, rounded up flashlights and provided them to the crew, who were using their phones to light the engine room and diagnose the problem. No power meant no air conditioning, no water-making capabilities, no tank-filling ability, and no way to move the boat in case of an emergency.

"The crew moved the bedding onto the deck for passengers who wanted to sleep outside, since the rooms were terribly hot. Since they couldn't cook, the next day we were provided with lunch at a local resort. We got one dive that day, as the crew

was able to fill tanks by asking another operator to help out. The next day, the part arrived to fix one of the generators. Several hours later, the generator was repaired, meaning that it was limping along. We got very low on water since the boat was not able to make water while the generator was out. We should have been instructed to try to ration water, but the crew was very bad at communicating.” It’s a long way to go for such gross disappointment.

www.aggessor.com

Some might think of the Caribbean as our primary warm water diving destination, but we should not overlook Florida. Jim Garren (Boyton Beach, FL) went with **Loggerhead Dive Charters** in June to dive the east coast of **South Florida**. He told *Undercurrent* subscribers, “There are three offshore parallel reefs at approximately 30-, 60- and 90-foot depths, and many ships deliberately sunk as artificial reefs. DM Nancy will ask which depth you prefer before your drop. All local diving, except some wrecks, is drift diving. Once in the water, divers simply allow the current to take them on a tour of the incredible ledges and reefs.”

He goes on to describe the satisfyingly large gamut of tropical marine life including nurse, hammerhead, and Caribbean reef sharks. “There are plenty of spiny lobsters year-round. Bring some back in season if you have your Florida permit. Spearfishing not encouraged, but permitted by those with the skills to do so responsibly.”

www.loggerheadcharters.com

Much further from home, the **United Arab Emirates**, including Abu Dhabi and Dubai, represent an island of sanity in what could be thought of an unstable part of the world. **Fujairah** is on the coast of the Arabian Sea, squeezed between the main part of Oman and Oman’s Musandam peninsula, and features some especially beautiful hotels. Eileen J Council (Milton, FL) was there last May.

“We love diving in Fujairah, an easy 2-hour drive from Dubai to the coast. **Al Boom** is a great, safe and professional dive organization that employs very chill, kind, fun, experienced dive guides. The water clarity is not great, but the macro opportunities are endless. There is little current and the sites are easy to navigate. The boats are large and not over-packed with divers. There is a great ratio with the dive guides, usually 1:3 or 1:4 maximum. The guides always look for animal life and will specifically search for things that you specify. The dive shop facility is excellent, with lockers, changing rooms, showers, places to sit, places to store gear overnight, a well equipped store if you need anything, and great rental equipment.” Although

the coastal landscape is spectacular, visibility varies greatly, and at times the water can be very green.

www.alboomdiving.com

The **Philippines** are always welcoming. Formerly the *Truk Aggressor*, the *MV Atlantis Azores*, under new ownership, travels to the remote **Tubbataha Reef**. It’s an excellent vessel, with great sea-keeping qualities, twin engines and perfect for travel to such a remote location, with fabulous cuisine, too — but the cabins can be rather cramped as Michael J Millet (Dublin, CA) discovered in May.

Salad Dressing to the Rescue!

Subscriber Michael Wood (Edmonds, WA) wrote to us to tell how a dose of oil and vinegar saved a dive trip while he was in Indonesia.

“I was liveaboard diving the Komodo area in August when my left outer ear canal started hurting, swelling and causing my hearing to be impaired, making it uncomfortable both underwater and on the boat. (I could still clear my ears, thankfully.)

“My dive-mate, Mark from Conservation International, told me that a Navy Seal doctor he worked with once recommended a mixture of olive oil and apple cider vinegar! The olive oil lubricates the ear canal and protects it from seawater, and the vinegar serves as an antibiotic. I mixed the two liquids I got from the galley and put it in my ears with a syringe before and after each dive. It worked! The swelling and pain gradually subsided. He did not recommend alcohol, as it dries out and cracks the ear canal, enabling infection.”

It’s not the only time a salad dressing can come to the rescue.

Those long black sea urchin spines that so easily penetrate the neoprene of a wetsuit can be difficult to pull from your skin, and you risk infection in trying to do so. You see, each brittle spine carried a series of tiny serrations or barbs that make it almost impossible to remove.

People who inhabit Mediterranean shores know of a simple remedy. Soak the site of the skin penetration in vinegar for around 20 minutes. This dissolves the surface serrations of the spines, smoothing them off. Then apply some olive oil. The spines will disappear overnight.

Consuming Sharks May Drive You Crazy?

A new study by scientists at the University of Miami has found high concentrations of toxins linked to neurodegenerative diseases in the fins and muscles of ten species of shark, suggesting that restricting the consumption of sharks can have positive health benefits for humans as well as for sharks.

Fin and muscle tissue samples were discovered to have concentrations of two toxins, mercury and B-N-methylamino-L-alanine (or BMAA). The author of the study, Deborah Mash, professor of Neurology, said, "Recent studies have linked BMAA with diseases such as Alzheimer's disease and ALS (Lou Gehrig's disease)."

That's not good. Researchers at the University of Miami detected mercury and BMAA in the fins and muscles of all shark species at levels that may pose

a threat to human health. While both mercury and BMAA by themselves pose a health risk, together they may also have 'synergistic toxic impacts,' that is to say, it's worse. Sharks live high up in the food chain, and their tissues tend to collect and concentrate toxins.

Shark products including fins, cartilage, and meat, are widely consumed in Asia and within Asian communities. Dietary supplements containing shark cartilage are consumed world-wide.

Mash says, "Our results suggest that humans who consume shark parts may be at risk for developing neurological diseases."

If that doesn't decrease the demand for shark fins, nothing will!

"Boarded the *Azores* liveaboard for a 7-night dive trip to the Tubbataha reef system from Puerto Princessa. My cabin was fine for one person, but would have been quite tight for two. There is no drawer storage space, so all clothes and other stuff went on the top bunk. The cabins have no windows or portholes, and the lighting is dim, so the rather dark environment is best suited for only sleeping.

"The diving at Tubbataha is best suited for wide-angle photography, with lots of sharks (mostly gray reef and white-tip), manta rays, large schools of jacks and barracudas, octopus, turtles and whale sharks. We had two whale shark encounters, each lasting about a minute or so, and a nice encounter with a few hammerhead sharks. We dived the entire reef system, both north and south atolls, along with Jessy Beazly Reef. There are several liveaboards that dive Tubbataha during the limited diving season, so some of the dive sites can get a bit congested, such as Black Rock, where the mantas hang out."
www.atlantishotel.com/azores

A vessel's crew can make all the difference. Two months earlier, in March, Raymond Haddad (Candiac, QC) had been at Tubbataha on the *MV Philippine Siren*. He was less than enthralled with the dive guides. "Our guides aboard *Siren* would just swim in one direction, and once in a while point out things like white tip reef sharks. We saw at least hundreds of them — you don't need a guide for that, as they are all over. They would be obsessed with going out in the blue and waiting for 15 minutes just in case a different type of shark would appear. How boring! While they were doing that, I would be explor-

ing the reef to find critters on my own. Was it worth it to travel so far, along with two 14-hour boat rides, to do 18 dives spread over four-and-a-half days at the cost of a little over \$6,000?"
www.sirenfleet.com/liveboards/Philippines

Alas, it's not only your own crew that can spoil things for you. It was almost perfect for Rose Mueller (Houston, TX) with **Scuba Du** in Mexico's **Cozumel** during July, except for an impertinent dive guide from another operation. "We've always hired a private boat with Scuba Du for our photography. Jose Luis has been our guide for many years. He has a great love for the marine environment. If I were to have one complaint, it would be about [another] divemaster who passed us with ten divers trailing behind. As I had a finger on a sponge to patiently wait for them to pass, the guide chastised me for touching it. I watched as his divers kicked the reef with their fins and grabbed on to whatever was available. No, there wasn't a guide at the end of the line to curtail their harmful activity. I am a firm advocate of reef preservation and using great care in not touching those things that can be harmed, but some guides in Cozumel are becoming too empowered without realizing they need to watch their own groups more carefully."
www.scubadu.com

All vessels have breakdowns at some time or another, and, such is the nature of the animal, it always happens during a charter! Douglas Peterson (Naperville, IL) was impressed with the crew, the facilities and luxury of *MV Dewi Nusantara* in July, embarking from Bali for a trip around **Komodo** in **Indonesia**. He was less impressed the first day

when they were held up due to a breakdown, and instead, dived unplanned locations around Gili Tranangan while they waited for parts. It meant muck diving, something he wasn't prepared for, and he became anxious they would not see the coral reefs he had paid to dive. The vessel soon made up time on the itinerary, and he later saw "a huge expanse of awesomely healthy flatland coral gardens filled with every color you can image and millions of small fish. Breathtaking!" He even came to appreciate the critters found while muck diving: "I was sceptical about muck diving when I started this trip, but the final two dives made me a convert." All's well that ends well.

www.dewi-nusantara.com

Sometimes what you get is not quite what is presented by the publicity or what you expected. However, unless it's an unmitigated disaster, things can come right in the end. Don't let small imperfections ruin your trip because things weren't quite as you preconceived. Manage your expectations, and share your experiences with other *Undercurrent* subscribers, both good and bad. File a Reader's Report by clicking on the link below. www.undercurrent.org/members/UCnow/SubRRTopMA.php

– Ben Davison

Two Groups of Divers Lost Within a Week

it's every diver's nightmare

Coming to the surface and finding you have no boat waiting is probably the most dangerous and frightening circumstance divers can find themselves in. And in the month of September, it happened twice, in different parts of the world, and with different outcomes.

On the first day of September, three groups of divers totaling 13 boarded a yacht and journeyed out to Coin de Mire, a group of rocks some dis-

tance off the coast of the idyllic Indian Ocean island of Mauritius. They had no idea that earlier that morning, a boat had capsized in rough seas not far from the dive site, killing a baby and a child.

A dive guide led each group. Christophe Nadaud, 36, a French national, was in charge of one group, and after entering the water, he decided the strong current and poor visibility made

When You're Underwater, You Can Become a Client Scientist

The planet is warming, the oceans are warming, and the scientific community needs your help in collecting data while you are diving.

It's very simple.

You see, most trapped heat goes into the oceans where it drives hurricanes and disrupts fish populations. Satellites can measure surface temperatures, but getting data from below the surface is much more difficult and expensive. A fleet of 3,000 robot buoys provide measurements, but you and hundreds of thousands of other recreational divers could play a role too.

A study published in *Science Reports* shows that sport diver computers could provide accurate temperature data that would be particularly valuable in highly changeable coastal environments — where many dives occur — as well as in areas that are rarely sampled by other methods. According to the UK's Dive Into

Science project, "This extra data could prove crucial in the efforts to understand and predict the effects of our changing climate." The scientists have already collected more than 7,500 dive records from around the world via www.diveintoscience.org

You can add your own data by downloading the simple template on the website before finally submitting it after a dive trip, and really contribute something to understanding what is happening to our planet. www.diveintoscience.org/about

Kieran Hyder at Cefas, who leads the citizen science project, said, "There are millions of sport dives every year. Making use of just a small fraction of those dives will greatly increase our knowledge of what is happening worldwide."

Your help is required. Join in.

diving untenable and signaled to head back to the surface. Alas, when the divers surfaced, they were

As the light began to fade, they began to give up hope of being rescued.

astonished to find their boat had departed without them. Evidently, it had gone to drop off the other divers at a dive site with less difficult conditions. It was around 10:15 A.M.

In the group were three Britons, Brian and Julie Byrne, both aged 52, and Jeffrey Tibbles (50) and German national Mary Patricia Vecchio (51).

Julie Byrne later told reporters, “Panic set in immediately. The dive leader told everyone to remain calm and started blowing his whistle, saying the boat would hear it and come back. But we quickly realized no one could hear us and the boat wasn’t coming back. The instructor was yelling at everyone to swim farther out to sea. It was like the instructor had no safety training. He had no radio, no SOS equipment, no way of calling for help.”

Though only 50 yards from shore, the guide was concerned the divers might be dashed on the nearby rocks, so he directed them to swim away into the open ocean. The strong tidal currents soon drew them out into the wide-open space of the Indian Ocean. As if the strong current wasn’t enough to contend with, the floating divers then endured a tropical deluge that reduced the surface visibility and produced 25-foot-high waves.

Jeff Byrne said, “The skies went gray, and it started to rain. It got so dark that we could barely see each other. Even if anything came, it was never going to find us. That was my lowest point.”

He became sure inquisitive sharks were bumping him. “I got bumped twice quite hard, and it had never happened all throughout the seven hours before,” he said. “It was my left leg first and then my right leg. I had my mask, but I thought I didn’t want to look down there if there are sharks.”

As the light began to fade, they began to give up hope of being rescued. Julie Byrne later said, “We thought we were done for, that we’d perish in the water, and our bodies would never be found. We saw a helicopter overhead, and although we yelled and screamed, they couldn’t see us.” Although Julie

Rumbles of Dissent

In our September issue, I wrote a Diving Computer Postscript saying that modern pressure sensors had come a long way since diving computers were first marketed.

Davis Cunningham (Mansfield, TX) objected to my comments, saying, “My Atomic Cobalt 2 unit pressure sensors failed, registering a constant depth of about 10 feet and a tank pressure of 900 PSI. This occurred during a dive, making it unlikely to be due to salt crystals forming in a poorly rinsed device. Never mind that I am meticulous about soaking my computers after each day’s activity. This is not an isolated incident. A crew member on the dive boat I was on when the failure occurred indicated that he loved the Cobalt product but that he had three units replaced by Atomic in succession before he gave up on their product. I love the computer and hope that the replacement I’m now using does not fail, but I always wear a back-up.”

While the instruction manuals of most computers tell us that we should never use a computer as the sole method of managing a dive — I’m sure that was written by their lawyers — since both the depth and tank

pressure reading were affected, this sounds more like a sinister electronic malfunction than one simply blamed on a single faulty pressure sensor depth-reading.

So, I called around and talked with an industry executive, who wishes to remain anonymous, who told me that within the diving industry there is growing concern with the quality of inexpensive pressure sensors now being supplied. The industry is tight-lipped; there is an ongoing class action against Aqua-Lung for alleged bugs in the software of Suunto computers (See *Undercurrent*, August 2015 and January 2016).

At the same time, there are moves afoot in Europe to legislate for all computers sold to have depth readings accurate to within a few inches. This will cause the retail prices of European computers to escalate, but then we’ll have accuracy. The American dive industry fights any government regulation, regardless of the risk to sport divers, so we will have to wait to see if American-made computers decide to compete on accuracy or simply on price.

— John Bantin

was accustomed to dealing with emergencies in her regular job as an ambulance support center operator, she said she was on the verge of breaking down when the helicopter passed over them without apparently seeing them.

Two helicopters, a heavy duty rescue boat, the Coast Guard rescue boat, a Dornier aircraft and a Defender ship had been sent out to search. It was more than seven hours later before they located the divers, more than ten miles from where they had started.

Jeff Byrne added, “Not all five of us would have made it through the night. Three of us were quite strong, two of us not so strong. The German girl got really sick with the heavy seas. She more or less gave in. She was vomiting all the time. She went very quiet.”

Finally, the crew of a pleasure boat, part of the search group, saw Jeff’s large Day-Glo inflated surface marker buoy. The divers were severely dehydrated and sunburned, but otherwise unharmed.

“We were all in tears. We were elated,” said Julie. “We all just got on the boat, and we were hugging and kissing. Even the two lads who rescued us were in tears. We’re just so grateful to everyone who joined the hunt.”

Stephane de Senneville, director of DiveSail Travel, which contracts out its scuba business to a third-party company, DiveSail Consultants, claims: “The mistake was the decision by the divemaster to swim away from the protection of the cove and into the currents that dragged them out to sea.”

Pending a full investigation by local authorities, the company has had its license suspended. The divers had their fee for diving waived but little else so far in compensation. Julie Byrne says she is suffering post-traumatic stress disorder. The skipper of the boat and the dive guide were questioned by local police to determine if either was guilty of negligence.

But wait, there’s more

Only one week later, five divers from a Colombian-based liveaboard, *MV Maria Patricia*, were lost off Malpelo Island when they became separated from their vessel and swept into the open waters of the Pacific Ocean.

Malpelo Island is a lonely outpost 320 miles off the coast of Colombia and part of the famed golden triangle for shark-diving enthusiasts, which includes Darwin and Wolf Islands in the Galapagos and Costa Rica’s Cocos Island.



Malpelo is a wild and lonely place

It’s not a trip for the faint-hearted, but subscriber David Marchese (Hummelstown, PA) braved rough seas to visit aboard *MV Yemaya II*, embarking in Panama, in May. He wrote, “The diving was excellent but on the advanced end. The schools of silkies were impressive, we saw an average of one whale shark each day, and the schools of hammers were pretty thick at times. However, there was a lot of surge, the visibility was poor, and the hammers were more shy than we found them to be in Cocos. This made photography challenging.”

It was more than challenging in September for Australian Peter Morse, diving from *MV Maria Patricia*. He was found clinging to the rocky cliff wall nearly 16 hours after starting a dive, by the Panamanian-operated *MV Yemaya II*.

He said later, “They saved my life by being there. I am also afraid that if it were not for them, no one would have raised the alarm about the other four missing divers.”

He’d been swimming for nearly 14 hours and through the night, unable to get ashore anywhere before finally being washed up on to a rocky ledge. Five divers had originally gone missing from the *MV Maria Patricia*. Two Colombian divers Jorge Morales and Dario Rodriguez endured a 48-hour drift in the open ocean before being rescued by Colombian naval ship *ARC Punta Ardita* 39 nautical miles from Malpelo.

These two divers later told how they had urinated on each other to keep warm as they huddled together during their ordeal, sometimes curling up in the fetal position while silky sharks circled them. However, it was the numerous Portuguese Men-of-War jellyfish that proved their greatest test, as the two endured continual and intensely painful stings from their long tendrils.

Morales said that the first nightfall was the hardest, but it made them realize they had to stick to their survival training, tying themselves together with a buddy-line to avoid being separated. By the second day they were delirious and shivering with cold, even as the sun burned their faces just above the surface and left them dehydrated. “Thinking about our families kept our hope alive.”

They were finally spotted by a search plane, which dispatched a navy vessel to pick them up.

Two other Colombian divers, Erika Vanessa Diaz and Carlos Jimenez, were less fortunate. A body, later confirmed as that of Diaz, the only woman in the group, was later discovered 140 miles south-east of the island, while Jimenez, an experienced

instructor who was leading the group, is thought to have perished after a search effort that continued for another four days failed to find him.

While the relevant authorities may regulate many liveaboard vessels, you can take your life in your hands if you assume that any vessel abroad is operated safely. When we disappear beneath the surface we abdicate responsibility to those left on board and assume they are keeping a proper lookout for us. Sten Johansson, the dive guide aboard *Yemaya II* was scathing about the absence of safety procedures of *Maria Patricia* and the tardy response of the Colombian authorities in effecting a search.

Here’s his account:

Lost Divers at Malpelo

a first-hand report by Sten Johansson

We arrived as usual after a very windy and bumpy sea crossing from Panama to Malpelo, Colombia.

As usual, we tied up on the mooring at *Altar de Virginia*, a dive site on the northeast side of Malpelo. As it was bumpy on the way in, we had decided to postpone setting up the dive gear. Just when I was on my way to gather our guests for the briefing, a guest asked me, “Who is that in the water?” Our skiff was out there, so I thought it was Juan, my colleague, checking the dive site. It was not Juan. It was Peter Morse, an Australian, a lost diver from the Colombian dive boat *Maria Patricia*. Lost since around 4:30 p.m. the day before, and it was about 7:30 a.m. when we spotted him...

As soon as we got him onboard, we alerted the Navy and the person in charge of the marine park of Malpelo. When we arrived earlier, our captain reported in to the park ranger and the navy guys stationed on the island, and they said they were busy, and they didn’t mention anything about lost divers. However, when we informed that we had found a diver in the water, we suddenly got the news that four other divers were missing, the guide, Carlos Jimenez, a Colombian woman, Erika Vanessa Diaz, and other Colombian nationals Jorge Morales and Dario Rodrigues.



Sten Johansson

They knew we were coming in *Yemaya II* at dawn because they had the schedule of the boats, so why did they not call us at least 5-7 hours earlier, as soon as they could establish radio contact? Or before that, through our satellite phone, to tell us to keep our eyes open in case the divers had a flashlight?

According to Peter, they did not have lights or *Nautilus Lifelines* with them on the dive. Later, the captain of *Maria Patricia* said, on the other hand, that they had them onboard, but the divers never brought them on any of their dives... Why not?

They started the dive late. The captain of *Maria Patricia* said later it was all a rush; they entered the water around 4 p.m. They dove outside the main island of Malpelo, at *Three Musketeers*, specifically by



Maria Patricia alongside *Yemaya II*

Cathedral, a swim-thru cavern. According to the captain, the current was strong, and the leading south-east wind was also strong at the time. Their skiff was a 4-meter inflatable dinghy with a 15-hp single outboard engine.

The dive guide was supposed to be very experienced. He should have canceled the dive and chosen a safer site, especially since it was the last dive of the trip. Worse, the skiff driver was waiting for the divers in an area where he would least expect to find them surfacing. The *Maria Patricia* was just in front of *Three Musketeers*, three rocky outcrops to the north of Malpelo, and any responsible captain or crew member would have kept an eye out for the divers on the last dive, in hard weather conditions. Obviously, they did not.

Peter was diving with the others, including the guide, with sausages up, drift diving in the blue at a depth of about ten meters. This is common practice in Malpelo when you have a good skiff driver and a good spotter.

[Peter Morse later said he didn't understand why their dive guide Jimenez, curtailed the dive early because of the strong current, yet made a five-minute safety stop. It transpired later that he had been moving some mooring blocks earlier in the day at more than 165 feet deep and probably needed to make a mandated deco stop.]

When they surfaced, they could hardly see the skiff, so they started to swim toward the island and became separated. Peter managed to get to the island after about three hours of swimming hard and ditching his dive tank. Carlos, the guide, would have made it for sure, but sacrificed his life for the Colombian woman and stayed with her, I believe.

Three to four hours later, when Peter was just a few hundred meters away from *Maria Patricia*, the boat released the mooring and headed out to *Three Musketeers*, then turned east. They never saw him. He swam to the ramp, where there was a rope ladder to climb on to get to the Navy station, but it was drawn up. He tried to get on the rocks but got shredded by the barnacles. He swam back to the mooring place of *Maria Patricia*, but there was no boat, so back to the ramp. A big wave eventually washed him up on the rocks, where he managed to hold on and wait for our rescue. He commented, "It was like they did not care — like they were not looking for us!"

The Captain told me he sent out three skiffs to look for the divers. The "biggest" skiff was the four-meter inflatable with a small 15-hp engine... But, Peter never saw any skiffs looking for him. A



***Yemaya II* where she usually moors**

park ranger told me they sounded the alarm the moment they lost them. So why did they never seek our help until we rescued the first diver?

We canceled our diving and started a search pattern from around 8:00 a.m. until dark; we stopped when darkness set in, as according to Peter, no one had a light.

If I remember right, we had a plane searching overhead in the late afternoon, but too close to Malpelo. Why were they not here first thing in the morning if the alert was done in the afternoon the day before? Where was the Navy? Malpelo is almost 300 nautical miles from Colombia. If the alarm was raised, why did we not see them until more than 40 hours after the call was sounded?

That evening the Captain (of *Yemaya II*) and I went to visit the captain of *Maria Patricia*. They did not participate in the full-day search for their own lost divers because they didn't have enough fuel to continue the search. [They only carried sufficient fuel for the round trip.] Sailing to a remote destination with insufficient fuel for unforeseen circumstances is beyond stupid.

We received news that the Navy and planes were on their way, so we started to do what we came to Malpelo for: to dive. The Colombian Air Force, U.S. Coast Guard and private planes financed by families and divers in Colombia would be conducting the search and rescue, although I still wondered — *where were you yesterday when it mattered?*

When we got back on the mother boat after the dive, the captain informed us that we were forced by the Navy to participate in the search and rescue.

Our guests had a lot of patience, and everyone pitched in to help.

Suddenly we were part of the team, together with two navy boats, the U.S. Coast Guard, *Maria Patricia* — to whom we gave a thousand gallons of fuel, oil and water because they were out — and numerous planes buzzing around.

Just before dark, the U.S. Coast Guard plane spotted two live divers in the water. They survived two nights and a day at sea. The plane dispatched an inflatable life raft; the Navy and our boat reached them more or less at the same time. They were brought onboard the navy boat.

We knew we should be in the area where the other two divers were found. Three days into the search, Vanessa Diaz's sausage was found. But

no diver. If the sausage was found without a reel attached to it, the person who lost it would be upwind and up current, because your sausage would always travel ahead of you unless there was extreme current. But the Colombian Navy kept on with the search pattern planned for the day before. They did not listen, and they did not make any adjustments based on recent events and information that came in. We continued to search blindfolded.

I knew where to search. I wasn't sure I would find them, but there was a much bigger chance to find them alive by listening to us old, experienced divers.

The two missing divers were never found alive.

Pre-Dive Diver Negligence

when equipment failure is diver failure

The possibility of equipment failure haunts every sport diver, but the annual DAN report regularly reveals poor maintenance is the cause of most equipment failures. For example, here are a few recent cases with a range of equipment failures that show even the most experienced divers can make a life-threatening error if they fail to check every last element of their gear.

Some dive shops do not maintain their rental equipment well and some regulators [intended for training] do not perform well at depth, even if they are perfectly maintained ...

Two cases involved divers using doubles. In one, a very experienced diver found that one of the two screws that secured his wing to his backplate was not tightened sufficiently, causing the whole rig to risk coming apart at depth. Another diver using doubles dived with the manifold closed. While his pressure gauge was attached to his left tank and constantly showing almost full, save for what he used to inflate his BC, he was breathing from the right tank.

And then there are self-induced hose problems. During a dive, a diver found that her 13-year-old high-pressure hose had developed a hairline crack

along its length. Since there is a restrictor in the high-pressure port of a first-stage, the gas loss was not as dramatic as with a regulator inter-stage hose failure. But that happened to another diver who discovered the problem only when his regulator hose ruptured close to the second-stage. His buddy reported it had not looked right before the dive, but they had done nothing about it.

One diver turned her tank valve off, then opened it a quarter of a turn, the result of having been taught a bad habit that came back to bite her. The pressure gauge fluctuated as she breathed, and breathing became more difficult as she descended. At 55 feet she couldn't get air, resulting in an air-sharing ascent with her buddy. It's a problem that has been reported more than once. Always open a tank valve fully.

One diver had to abandon a rented regulator and resort to sharing air to make an emergency ascent from 141 feet. Marty McCafferty comments on behalf of DAN, "Some dive shops do not maintain their rental equipment well, and some regulators [intended for training] do not perform well at depth, even if they are perfectly maintained."

Another diver had an O-ring fail on an inexpensive third-party swivel connection to his regulator's second stage, with a consequent dramatic loss of air.

When a diver had regulator problems during his first dive of the day, he used another regulator

for the second. Both regulators had computers attached, and the second computer had no way of tracking his nitrogen absorption from the first dive. He thought that because it was an identical computer, it wouldn't matter. So much for understanding computer theory.

Casualness leads to error. A diver reported starting a dive with an empty tank, thanks to no pre-dive check — a page one mistake.

Air sharing can have unintended consequences, too, as two divers found out when their hoses became entangled when one diver with a Hogarthian [long hose] gear configuration helped an inexperienced diver deal with a free-flow. Instead of having the donating diver pass the hose over his head, the less-experienced diver pulled on it, causing the donating diver's secondary regulator to become entangled and difficult to reach.

A diver had a BC inflator stick open, resulting in a rapid ascent, luckily without ill effect. Another had a similar problem while diving under ice, and the cold prevented him from disconnecting the hose. He suffered a ruptured eardrum. A corroded auto-inflator stuck open and caused another diver's involuntary ascent.

A diver made an unexpected rapid descent when the inflator control became separated from its corrugated hose, thanks to a defective single cable tie. Any air he blew into the hose simply siphoned out.

In these cases, the divers handled the problem and survived. Divers who can't handle the problems and panic don't survive. As Peter Buzzacott observed in the DAN case summaries, "Rarely does a single issue lead to a near miss."

— John Bantin

What Do Fish Know? More Than You Can Ever Imagine

On my last trip to Little Cayman, a Nassau grouper and I danced back and forth, eye to eye. When I turned to leave, he moved in front of me, swimming backward, continuing the dance, eyeing my every move. Fish aren't fed here, so why is he interested in me? Why not the five other divers in the water, in which he shows no interest? If I lift my hand, he seems to look at it, but then he looks back at my face. When I chuck him under his chin, he stays close for a minute, but then backs off, keeping his distance. As I swim away, he stays by my side. What could that fish be thinking? Or feeling? Or is he thinking and feeling at all?

Thanks to Jonathan Balcombe's recently published book — *What a Fish Knows: the Inner Lives of Our Underwater Cousins* — I have learned the fish I encounter are no slouches, and perhaps nearly as complex as I. They think, remember, recognize — damsel fish, for example, recognize the faces or color patterns of their neighbors — decide, plan, and socialize as much as many mammals. Some fish even use tools. Their emotions range from stress to joy, and yes indeed, they feel pain, Balcombe shows.

As we have our complex lives, so do fish, forming relationships, parenting and creating social order. And these conclusions are not just speculation, for Balcombe has gathered scores of fascinating scientific

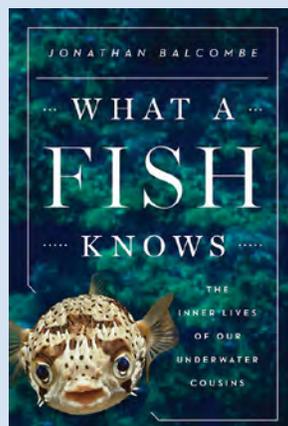
experiments and observations to show us just how fish are on a parallel evolutionary track in their own liquid world.

If you're a serious scuba diver, inquisitive about the lives of the fish you swim with, this is your kind of book. You'll learn about bait ball behavior, shark stroking, stingray problem-solving, how fish deal with optical illusions or respond to music — they can recognize the commonality between John Lee Hooker and blues artist Koko Taylor (No Kidding!) — and how a grouper signals a moray, or a lionfish signals another lionfish, to pair up for hunting.

What Fish Know is a well-researched, well-written and fascinating read that will turn your beliefs about the underwater world upside-down. When you turn the last page, you'll have a new and profound appreciation of the magic we see when we swim with the fishes.

What Fish Knows retails for \$27 hardbound and is available in Kindle. To get Amazon's best prices, [click here](#), and *Undercurrent* will get a commission for the sale of the book and anything else you buy while you are there. We contribute our Amazon proceeds to saving coral reefs.

— Ben Davison



Bad Weather Can Happen

but should you pay for dives so canceled?

Nobody can control the weather, and dives can get canceled. It's how the dive operator handles the business side of things that can make the difference between the client feeling merely disappointed or totally cheated.

Chip Wright (Hebron, KY) and his wife were at Brac Reef Resort on Cayman Brac for four days of diving with Reef Divers in early August when a tropical depression formed to the east of the island.

This incident clearly identified the need to continue to focus on training our staff on circumstances like we experienced as a result.

On what was supposed to be the third day of their diving, the morning dives were canceled due to the weather. The decision didn't surprise them and was easy to agree with. That said, the shop told them that there were no refunds for dives canceled by the shop. Chip was told to claim the missed dives on their travel insurance. Chip thought it morally wrong to keep money for a service that was not provided, and contacted the resort's U.S. office a few days after he informed *Undercurrent* of his dismay.

"The fellow I spoke with, Jason Belport, apologized for the lack of a faster resolution while we were on the Brac. He reiterated that they normally do not offer refunds for weather-related cancellations. I didn't push for more information, but I still don't understand how this can be considered by anyone to be an acceptable practice: the money is collected, no expenses are incurred, no service is provided, yet the business keeps the cash."

For his trouble in contacting the U.S. office, Chip was offered a \$273 refund for the lost dives (based on the discounted rate of the package), or credit to be used on a future stay on any of the islands of \$1000 total, to be used within the next year."

This raises a question: If the dive center does not normally offer refunds, why did it do so, albeit belatedly, in this case? Was it the threat of the oxygen of publicity? There appears to be some confusion among its staff as to which is the correct procedure, so we asked the boss.

Undercurrent contacted Reef Divers, which has dive operations at Little Cayman Beach Resort,

Cobalt Coast on Grand Cayman, as well as Cayman Brac. Bradley Barnett, its chief operating officer, wrote a comprehensive answer explaining that staff [initially] erred in refusing compensation [to Wright] for the lost dive days. "It has always been our policy to provide guests with a credit when diving is canceled due to weather conditions or other circumstances that are no fault of the guest. This is what should have happened as a result of the schedule disruption due to Tropical Storm Earl.

"This incident clearly identified the need to continue to focus on training our staff on circumstances like we experienced.

"Our policy for missed dives is two-fold. First, if we are forced to cancel diving due to circumstances outside our control (as was the case with Earl), we make every effort to make up the missed dives. In the event we are not able to make up all of the missed dives, the guest can elect a refund for the value of the missed dives, or they can select a future credit that is twice the value of the missed dives."

Mixed Experiences

Gary Rippendorf (Redwood, CA) was also diving with Brac Reef Resort during the first week of August and reported a very different experience than that of Chip Wright. He wrote that "It was too rough for the boats to go out on the 2nd August. The dive staff at Brac Reef Resort/Reef Divers drove us by truck and rental van to the other side of the island on the following day and provided us with two shore dives. On the 4th, they also added a second afternoon boat dive, thereby making up for one more of the lost dives.

"The net effect was we missed one day of diving, despite two full days of very rough seas when the boats clearly could not go out. Reef Divers made an extraordinary effort to minimize the impact on us."

We asked for the experience of other *Undercurrent* readers regarding missed dives: some operations don't give credit (yes, they take your money, and you stay home), and others rightfully refund or give credit (though having to take the credit on a return visit seems manipulative, indeed). And many divers are philosophical about it all, as was Sandy Ruffin (Tempe, AZ) when the same thing happened to her in August at the Little Cayman Beach Resort, where Reef Divers is also located: "To us, it is understandable a dive resort is

Will You Fund a Wrap-Around Mask for Peripheral Vision?

All divers know that underwater objects look one-third closer or one-third larger. Our angle-of-view narrows, a sort of tunnel vision caused by the refraction of light when it passes from the dense medium of water to the less dense medium of air within the mask.

Years ago HydroOptix produced a mask that attempted to address this problem, but far-sighted users needed to use corrective contact lenses to focus properly on the virtual image made by the mask. It was doomed to commercial failure.

For snorkelers, a new generation of full-face masks with a built-in snorkel offers a wrap-around effect with a wide field-of-view. Such masks include the H2O Ninja mask from Hawaii and the Italian-made Ocean



Reef (marketed under several well-known dive brand names).

For divers, there is a new mask on the horizon, the AAK 180, which the creators are trying to fund through IndieGoGo. It features a one-piece multi-layered curved optical-quality polycarbonate lens, said to provide 180 degrees of distortion-free vision underwater so that divers can see what's off to either side without having to turn their heads. The internal volume of this mask must be such that a leaky mask would take a lot of clearing.

AAK Diving, a small Mexican company, is attempting to raise \$23,000 to launch the mask. If you invest \$120 on IndieGoGo by August 10, you will get the mask if and when it is in full production. Care to gamble?

not able to credit dives under such circumstances. They tried to add additional dives to the remaining days to make up for lost dives. However, we were scheduled to leave and were not able to make up our missed dives.”

She received no refund.

In early January 2015, it seems as if Reef Divers wasn't refunding money. Sandra Maruszak (Meredith, NH) at Little Cayman Beach Resort told *Undercurrent*, “They demanded pre-payment for dives at the time we booked the trip. They had to cancel an afternoon dive due to wind, which I understood, but when I asked for a refund they said their policy was no refund for dives canceled due to weather.

“I had planned on taking my last day off from diving and asked if I could make up the missed dive on that day. They agreed, but said I could not make up the dive in the morning because those were two tank dives. (I wanted the morning to allow 24 hours before flying). The woman behind the desk said I could only swap an afternoon dive for an afternoon dive. I offered to pay for the second morning dive. She wanted to charge \$65 each (for my husband and myself), and I felt I should pay the same as I was paying for the group package (if you dive multiple days, you have discounted dives vs. the single dive rate, and we were there for ten days).

“I offered to sit on the boat during the second dive, and she again refused, saying they did not allow people only to pay for one of the two morning dives — they were a set. I asked to speak with her manager. He was lovely, and allowed us to dive the two-tank morning trip for no additional cost. While it had a good resolution, if I had paid for diving every day of my trip, they were not prepared to refund my money.”

So, while there has been confusion at Reef Divers — this Little Cayman tale is confounding — you've heard the policy from the CEO. If Reef Divers has to cancel for any reason, you get other dives or a refund. Reef Divers needs to get its act together.

Most dive operators do refund unused dives. Chris Karrer, the owner of Sardinia Divers in Italy and Herradura Divers in Costa Rica, was emphatic. “Not refunding customers because the shop canceled the dives for whatever reason is not acceptable.” And, *Undercurrent* agrees.

And it shouldn't take a confrontation to bring such matters to a satisfactory conclusion. Mark Miller (San Antonio, TX) reports a splendid resolution from other Cayman operators. He says he had pre-booked dives with Conch Divers on Little Cayman and In-Depth Divers on Cayman Brac.

“My wife and I had our trip canceled [while] in flight to Little Cayman due to a tropical storm that became a hurricane. Everyone was great, and all

money/deposits were refunded promptly. We were able to find accommodations and a dive shop on Grand Cayman. Happy ending!”

That’s proper service: kudos to In-Depth Divers and Conch Divers. (In-Depth Divers has since relocated to Grand Cayman).

They said their policy was no refund for diving canceled due to weather

Bob Gerzoff (Atlanta, GA) fared much better in Curacao when a tropical storm appeared to be approaching. He told *Undercurrent*, “Not only did they not charge me for the dive, they bought me a beer at the bar while we sat and watched the horizon!”

Playing Hardball

It doesn’t happen only in the Caribbean, as D. Jonathon Blake (La Verne, CA) reported, and he had to play hardball to get a refund. “I purchased a six-dive package via the web site of One World Dive shop, located at our resort hotel in Zanzibar. I checked and the next morning, I and another diver from Germany, plus two snorkelers showed up. The dive guide said the waves were a little choppy, but we went anyway. It wasn’t too bad. The visibility wasn’t very good. The next morning, the dive guide said he didn’t want to go out because of bad weather. I saw other boats going out.

“The third morning, the dive guide again didn’t want to go out because of bad weather. Still, other boats were going out. The fourth morning, it was the same story. I told the store owner that I wanted a refund for the four dives I didn’t make. At first, he refused, saying it was due to bad weather. What

Deaths the Result of Too Many Students for One Instructor

Bret Gilliam has written eloquently in these pages that in any training class with only one instructor, the students are at risk if left alone while the instructors leaves to help another student or take that student to the surface. He argues that two instructors should always be present. And here are two cases supporting his view.

A young woman, Patricia Flores-Perez (22), went missing and was later found dead during a scuba class at West Seattle’s Seacrest Park on August 28. She was one of three divers under instruction when the water got murky and the instructor decided they should surface. Only when the other students and the instructor reached the surface was Perez missed.

The instructor went to shore to call 911 and get fresh tanks in order to belatedly search for her. Another diver found her in 69 feet of water. Fire crews pulled her out and performed CPR. She was rushed to Harborview Medical Center, where she was later pronounced dead.

Meanwhile, the family of a man who died while on his very first scuba dive near Panama City in the Gulf of Mexico has filed a lawsuit against PADI and the business that instructed him. Fifty-two-year-old Kevin Michael Kimbley died on July 1st, when he became separated from a three-trainee dive, only to be found floating lifelessly half an hour later.

The lawsuit filed by Anna Kimbley, wife of Kevin Kimbley, names Coast Adventures LLC, Diving PCB, and PADI as defendants. The 25-year-old dive instructor, Gentry Hewitt, is not named as a defendant in the lawsuit.

Kimbley, his son and his nephew had never used scuba gear before, and Diving PCB advertising was directed at nondivers specifically, with a slogan, “Try Scuba Diving.” The suit claims that the defendants were responsible for both equipment and procedures to ensure the safety of their customers, including assigning dive buddies for the group.

The lawsuit alleges that the instructor, Hewitt, swam in front of the group of novice divers, and by failing to provide a proper lookout, Kimbley disappeared without the instructor knowing he was gone. His unresponsive body was found by other divers 30 minutes later. He was without fins, perhaps because they were inappropriately sized. It is reported that the instructor, Hewitt, checked each of the divers every minute during the dive, but at the last inspection of the deceased, he was having fin trouble, which the instructor helped him resolve. One minute later he was missing. Both Kimbley’s son and nephew corroborated this. When found, he was unresponsive.

Mike Luttrell, the manager of Coast Adventures, said, “It’s awful. It’s hard for me. I created something a man died from.”

To Feed or Not to Feed? That is the Question

Shark feeding by divers is an emotive subject. Everyone has an opinion, usually based on nothing more than emotion. With all the debate engendered by the Federal proposal to make shark baiting to observe sharks (by divers) illegal in U.S. waters (apart from the purposes of their destruction), it could be time to look at research undertaken by scientists at the *University of Miami* regarding ecotourism and sharks.

Given that humans have put enormous pressure on the environment and the planet's natural resources, there's a growing impetus for their non-consumptive use, such as viewing sharks instead of killing them.

Sharks are normally elusive, so shark dive operators use bait to attract the sharks. Despite the conservation and economic benefits, people are worried that it could provide a safety threat to humans where sharks learn to associate people with food and that long-term changes in shark behavior could have ecological consequences.

The shark tourism industry is a highly lucrative and booming global market. Does it affect shark populations, such as concentrating them in one location and making them reliant on hand-outs of food from humans?

Until now evidence has been largely rhetorical due to lack of sufficient data to derive any conclusions — good or bad. Five researchers from the Rosenstiel School of Marine and Atmospheric Science (University of Miami) conducted the first satellite tagging and telemetry study to examine the long-term and long-range movement pattern of tiger sharks (the largest apex predator in tropical waters) in response to shark diving tourism. They studied two separate populations of tiger sharks: One that originated in Florida, where shark feeding has been illegal for 15 years, and the

other in the Bahamas, where sharks are regularly fed and observed by divers in an increasingly popular scuba activity.

The team hypothesized that the Bahamas' sharks would exhibit restricted movement around the dive site, especially when compared with those not regularly fed in Florida's waters. They were wrong. Instead, the Bahamas population occupied an area over 8,500 sq. km, almost five times greater than that of the unfed Florida sharks. The Bahamas sharks spent months at sea.

"Not only did we discover that ecotourism provisioning had surprisingly little effect on tiger shark behavior, we found that tiger sharks undergo previously unknown long-distance migrations up to 3,500 km into the open Atlantic," said Jerald S. Ault, professor of marine biology and fisheries. "These apparent feeding forays follow the Gulf Stream, an area of high biological productivity that concentrates shark prey."

Neil Hammerschlag, a research professor and director of the RJ Dunlap Marine Conservation Program and another of the five researchers, said, "Rather than rushing to make conclusions based on fear, we should do the science and make policies based on data. We showed that for tiger sharks, the shark diving ecotourism taking place in the Bahamas does not impact [their] long-term and large-scale movement and swimming behaviors. Given the economic and conservation benefits, we believe managers should not prevent shark diving tourism out of hand until sufficient data were to demonstrate otherwise."

www.miami.edu/index.php/features/ecotourism_study

was clear to me was there were only two divers, and it wasn't worth it to him to make the trip out. He finally agreed to give me a refund, but tried to charge me full price as if I had only purchased two individual dives. I told him no way, and that he should charge me for each dive at the prorated six dive package price. We argued back and forth, and I finally told him I would advise my credit card company that he did not provide the service as agreed and he would get nothing!"

Package refunds are tricky, as Jim Tullos (Flower Mound, TX), the owner of a small tour company, pointed out, "When a person pre-purchases a dive package, generally it is at a cheaper rate than if you were to purchase a-la-carte. It is difficult to refund part of a package. And many packages include

lodging and sometimes the meals. How much of the discount applies to the diving vs. the lodging or meals? The only fair way to refund a portion of a package would be to cancel and refund the entire package and re-charge it at a non-discounted rate. Most packages state that there are no refunds."

What if You Bail?

When bad weather strikes or is just forecast, some people voluntarily bail. Is a refund justified?

Phyllis Nitzkin (New Orleans, LA) stayed at the Palau Pacific Resort in 2012, pre-booking her dives. "We had to leave as Typhoon Bopha was making dead on for Palau. We had only three days of our five-or six-day trip. Requests for refunds were refused. I did get a refund from my trip insurance,

Dive Shop Tank Explosion

On August 24th, dive shop employee Mattias Lock, 26, was severely injured at Pro Dive near Sydney, Australia, when he was walking toward a customer's aluminum tank he was filling in a workroom at the back of the premises and it exploded. He was alone in the dive shop, and one leg was so severely damaged, it had to be amputated above the knee. His other leg was broken, and he sustained head injuries resulting in a swollen brain.

A bulletin accompanying an appeal for donations to help the young man who is now recovering reads, "It is too early to say what caused the explosion of the cylinder as the investigation continues. However, it is widely known that problems exist with older cylinders

manufactured from certain compositions of aluminum alloy such as 6051."

Legislation in Australia requires scuba cylinders to be hydrostatically tested every 12 months. *Undercurrent* has been told that the tank was out-of-test and was not intended for use with scuba, but for paintball games. Earlier news stories that reported the tank was being filled with oxygen were incorrect. Although some filling stations use water jackets or protective cages, there is no requirement to fill scuba cylinders behind any sort of protective barrier in Australia, just as there is no requirement in the USA.

Further reading: www.undercurrent.org/UCnow/dive_magazine/2000/AluminumTank200008.html

but that is not the point. The dive shop and the hotel acted as if we did not want to stay."

But, some people just chalk it off to experience. That's your choice. Paul Martin (Arlington, MA) took it on the chin in St. Croix two years ago when the dives he'd pre-paid at the Dive Experience in Christiansted looked to be too difficult, thanks to the weather. He chose to move to Frederiksted on the lee side of the island and dived there instead. There was no refund.

"We decided that St. Croix was in a slump and the shop was probably desperate enough to have done the dives if we had showed up and insisted, so we took our lumps and just agreed to pay as we go in future trips with this business."

And, a word of advice

William and Judy Shepherd (Satellite Beach, FL) recommend: "While we have had dive operators attempt to refuse refunding dive trips they canceled, we have found the following advice very helpful.

"First, have them put their refusal in writing to include the circumstances for the trip cancellation.

"Second, inform them that you subscribe to *Undercurrent* and they can expect to see their name in print in the near future as well as in your trip report. If they still refuse, do the previous and report them by name. Word-of-mouth reports are the surest means we divers have to spread the word about such practices."

Flotsam & Jetsam

Lethal Italian Dive Kit? A Palestinian man from Gaza was indicted on September 4th at a court in Israel on multiple counts of aiding the Hamas terrorist organization by allegedly importing dive equipment for an elite Hamas naval unit. Abd Saqallah purchased the equipment from the Italian company Cressi, and the shipment included hundred of pairs of fins, masks, and wetsuits. During the 2014 Gaza war, a team of five Hamas frogmen entered Israel before being spotted and killed.

Voodoo Dive. Cristian López, a 22-year-old diver from Les Basetes diving center in Calpe on the

Spanish coast, made a spooky discovery when he came across a human skeleton in a bag, together with a doll wrapped in a sheet. Apparently, it was used in ritualistic Santeria, a religion popular in Cuba that combines Christianity with West African cult practices. Investigating divers from the Guardia Civil found a second package containing human bones, feathers, leaves, twigs with names scratched on them, as well as more dolls. Forensic tests have established that the bones constitute almost three complete human skeletons, but found no signs of violence. They were buried for up to 40 years before they were cast into the sea.

Aqua Lung Power Inflators Recall. Aqua Lung is conducting a voluntary product update of select

Powerline inflators. Powerline inflators are found on all Aqua Lung Buoyancy Compensators and the Apeks Black Ice Buoyancy Compensator. If you have purchased an Aqua Lung BCD/Apeks Black Ice since January 1, 2015, it will need to be inspected to determine if it meets the specific criteria and requires updating. Aqua Lung is concerned that a failure may occur during a dive, causing the Powerline to continue inflating after the inflation button has been released, increasing the potential of an uncontrolled ascent. www.aqualung.com/constant_contact/2016_powerline_c.html

Rings True. A Spanish couple has been reunited with their lost wedding ring after 37 years. Diver Jessica Niso spotted the engraved ring glinting in the water off the coast of the popular holiday resort Benidorm and posted a picture on Facebook that was shared 80,000 times. She did not reveal the content of the inscription to avoid scammers and was delighted when Juani Aliaga (60), from a town near Zaragoza, got in touch.

Dacor Reborn. One of America's first diving brands, Dacor products disappeared from dive shops more than a decade ago, not long after the company was bought by Mares. Now West Marine, with more than 250 retail locations and a thriving on-line business, has relaunched Dacor as a brand with the Dacor Pacer Pro, an integrated regulator with first- and second-stages, an octopus rig, an analog pressure gauge with compass and direct-feed hose for a BCD. Look for a price under \$900.

Wonder Why Hammerheads Swim on Their Sides? If you have been lucky enough to encounter great hammerhead sharks underwater, you might have noticed that when not searching for stingrays under the sand, they spend a lot of time swimming on their side. *Nature* magazine reports research by a group of international scientists who believe that

they swim more efficiently on their side. All sharks are negatively buoyant and use their pectoral fins to generate lift, while using their dorsal fin to aid propulsion. The great hammerheads reconfigure the function of these structures by using their super-sized dorsal fins to generate lift as they swim on their sides, thereby decreasing the effort needed to swim and stay off the bottom.

Photo Op. *Underwater Photography Guide* wants your best shots for its 2016 Ocean Art Photo Competition, with 16 different categories and more than \$75,000 worth of prizes. Judges include Tony Wu, Marty Snyderman, Martin Edge and Scott Gietler. www.underwaterphotographyguide.com

Underwater iPhone? Mobile phones have killed the compact camera market, which is a pain for would-be underwater photographers who don't want to sell a kidney to pay for a bigger camera. Instead, people are putting the iPhones into waterproof housings. But, apparently Apple is working on a watertight model that has a color-correction system for underwater pictures. The market for underwater photography is tiny, but a waterproof iPhone might be a boon for those who tend to drop their devices out of their hip pockets when using a toilet. The new iPhone7 is watertight only to three feet deep.

Faster, Daddy, Faster! The Seabob F5S is a high-performance diver propulsion vehicle (DPV) for the man who wants something better. It has a jet power system with six power levels and weighs in at 77 pounds. Full power sends the diver along at 12 mph, but we wonder if anyone could hold on to their mask at such speed, let alone counter the problem of a current-induced regulator free-flow. Likely only to be seen installed on big private yachts, the German-made Seabob will be exhibited at the next DEMA show. If you need to know the price, you can't afford it! It's more than \$12,000.

undercurrent

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