

undercurrent

The Private, Exclusive Guide for Serious Divers

October 2018

Vol. 33, No. 10

Olympus Dive Center, North Carolina

sharks and shipwrecks galore, but that tank policy . . .

IN THIS ISSUE:

Olympus Dive Center, North Carolina	1
Divers Who Need to Drop a Few Pounds	4
Siladen Resort & Spa, Indonesia	5
What's the Craziest Thing You've Seen While Diving?	6
Pirates of Papua New Guinea	8
Part I: The Ups and Downs of Ocean Currents	10
Don't Trust the BBC about Diving	11
Was There a Cover-up in this Diver's Death?	13
Why Air Divers Should Also Analyze Their Tanks	14
Who Are You Calling Rude?	15
How Much Should Divers and Dolphins Mix?	16
Shorter Dive Times at Cocos Island?	17
Suunto Finally Settles Its Lawsuit	18
Scubapro Steps Up	19
Flotsam & Jetsam	20

www.undercurrent.org

Editorial Office:
Ben Davison, Publisher and Editor
3020 Bridgeway, Suite 102
Sausalito, CA 94965
BenD@undercurrent.org

Dear Fellow Diver:

It was a picture in a dive magazine -- a bunch of sand tiger sharks hovering above a wreck -- that made me book the trip to a dive destination I'd never heard of. I've been looking for these sharks on multiple dives around the world, but to no avail. I chose the wrong season to go to Mozambique, and the water was too warm in Australia. So I couldn't quite believe it when I read this picture was taken off the coast of North Carolina, in the Monitor National Marine Sanctuary, which holds the largest graveyard of WWII wrecks in the Atlantic. Living in Germany, I had never heard of it, and I thought the ocean north of Florida would be freezing-water dives. But a check of reader reports on Undercurrent said otherwise, with positive reviews of Olympus Dive Center in Morehead City.

Olympus gave me the usual forewarnings: book early because the boat was filling up fast on my July dates, and while sand tigers are normally around, it's nature and they couldn't promise anything. I paid for four full-day and one half-day trips, booked a flight to Raleigh via Miami and a rental car for the four-hour drive to Morehead City.

The harbor bridge crossing from Atlantic Beach, where I was staying, was lovely in the early morning light. It was an easy 15-minute drive to Olympus's shop, located at the harbor. I had checked in the day before at the dive shop, which had excellent rental gear, including brand-new Scubapro BCs. I left my gear in the



One of Many Sand Tigers (photo by Chris Walker)



lockable storage lockers aboard the Olympus, a 65-footer aluminum hull with twin Caterpillar diesel engines that holds 24 divers. But no one had told me then about the surprise purchase I had to make.

Crew started handing out boarding tickets at 6 a.m. Each ticket has a number, which was always checked before I boarded the boat, then given to one of the crew before entering the boat, and then checked again during the double roll call done right after every dive. When I got my ticket and asked for the tanks, I was told to grab them from the shed next to the shop. But at the shop, they told me, "You need chips for the tank, you have to buy them in the shop." Excuse me? Weren't tanks normally included in the package? Not so at Olympus.

So I paid \$32, plus tax, for two steel 80s filled with Nitrox. I brought them on board, only to learn, "You still have to analyze these -- back at the shed." No gear for that on board. Fuming, I carried the two steel cylinders back, wondering if this was one of the reasons North Carolina diving was not talked about much. When I checked the gauges,

I had 3300 to 3500 psi the first days, later it was often just under 2900 psi.

Travis and John, the dive guides, also weren't included in the package -- Olympus charged extra for them to accompany divers. They installed double hang lines underneath the Olympus, with weights and extra tanks, before we started the first dive. They connected these to the anchor line, which Travis took 110 feet down to the USS Schurz, formerly the German cruiser SMS Geier, the only warship captured by the U.S. Navy during World War I, which then sunk a year later after colliding with a freighter. Then they put a red small rope across the wreck for better orientation to find our way back. Travis did this whole job with a full face mask; it looked tough to drag anchor rope with chain across the bottom.

Bait fish hovered above the wreck, a dense cloud so thick, I couldn't see the wreck below as I descended in 78-degree water. As the cloud cleared, I immediately found the view I had waited so long for -- two 10-foot-long sand tigers circled slowly above the Schurz. Whooooaaahh. Their three rows of razor-sharp chompers protrude even with mouths closed, but these docile creatures actually looked cute, and they certainly weren't shy as they swam alongside us. I don't know how many shots I took with my GoPro Hero in the first minute, but with 70-foot visibility in the emerald-green water, they were generally good ones. Nearly all of us were diving Nitrox, with a bottom time of 25 minutes. Time passed too fast -- I could have stayed longer to watch the streams of yellowfin tuna, barracuda and big stingrays sailing past.

A pod of dolphins escorted us to Spar, a 180-foot-long Coast Guard cutter 30 miles off Morehead City. The water was cooler here, just 73 degrees at the flat, sandy bottom at 108 feet. My buddy, a rebreather diver, touched bottom feet first and nearly landed on top of a sand tiger relaxing underneath him. Thermoclines down at 70 feet made me start shivering in my 5-mil wetsuit, so I vowed to bring my chicken vest with hood for other dives. Fish life here was just as stunning -- huge barracuda, a bunch of jacks and spade fish, thousands of dancing bait fish glimmering in the sunlit waters.

It was a two-hour ride each way, with 90-minute surface intervals, and the Olympus docked around 3 p.m. I brought my own snacks, as they only had water, candy and pineapple in the salon below deck. The marine head was at the right of the stairs. The dive deck was huge, but with 24 divers and their gear, it got crowded sometimes. We jumped into the water from either side and boarded via two ladders at the stern. Seas were calm, but crew still helped me take off my fins and steered me to my seat.

Travis and John, who look like former Army men, gave detailed safety-oriented boat guidelines and were helpful with every detail. They could never stop calling me "Sir," so I gave up trying to tell them otherwise. Captain Robert gave excellent, thorough dive briefings. He always told us to hold onto the rope until we reached the wreck. North Carolina diving is not like drop-straight-down Caribbean diving. Here, you would drift in a moderate current, as the always-anchored boat can't immediately pick up divers.



The Olympus

After using the freshwater tanks and shower next to the shed, I stored my gear and drove back to Atlantic Beach, a small town stretched along a wide sandy beach across from Morehead. Tourist shops, seafood restaurants and pastel-colored houses greeted me as I drove down the harbor bridge. The Sand Dollar Motel was a modest, unfussy place on the main street, and my air-conditioned room was pleasant. For dinner, I just walked or drove down Henderson Avenue, trying a different seafood place every evening -- Oceana Pier House, Snapperz and Clawson among them -- for excellent, fresh clam chowder, conch fritters, oysters and grilled fish.

On my second day, Olympus gave me two black-painted steel 100 tanks; they couldn't find the 80s, but they didn't charge me extra. (They worked excellently, so I asked for and got them on Day 3, but then on my fourth day, they had disappeared and apparently couldn't be found -- what is it with Olympus and its policies on tanks?)

Groupers lounged in the sand at the bow keel of the Indra, a 328-foot repair ship that took two direct hits in Vietnam. Underneath the superstructure, I spotted three sand tigers cruising inside the hold. I held my breath as one swam by, close enough to touch, so I wouldn't scare him with my bubbles. I got a great shot from the shark's underside, a close-up of its open mouth with rows of sharp teeth.

On my wish list was the Caribsea, a cargo ship torpedoed by a German U-boat in 1942, because I had heard up to 20 sand tiger sharks regularly hover there. But Captain Robert said that due to a bunch of dusky sharks assembling there, possibly to mate, it might be too risky. He offered me the U-352 instead. It was impressive, all 220 feet of it, listing to starboard at 110 feet. I poked around the torpedo openings, deck guns, and conning tower with its small open hatch. I wondered, did they use the Seven Dwarfs to operate this boat? I got claustrophobic picturing the 45-man crew packed together like sardines in such a tight space. Now it's home to sea anemones and coral encrusted on the sides, and red barbier baitfish and amberjack swimming densely packed together.

Most divers were American, with a few from Asia, Australia and the Netherlands. Ages ranged from teenagers and young couples to oldies like me. The buddies I was paired with were typically experienced guys who regularly dived the Great Lakes and were used to bad visibility. I got a good sense I could rely on them in case of problems.

During my 10 dives over five days, I visited seven different wrecks and made three repeat dives. My last day was a shallow-two tank dive, starting at the J.J.F. tugboat. John asked me if I would buddy with a guy diving on air, thinking such a shallow dive at 65 feet wouldn't be much difference to bottom time with Nitrox, so I agreed. My buddy was young, just out of

Olympus Dive Center, North Carolina

- Diving (Experienced).... ★★★★★
- Diving (Beginners)..... ★★
- Snorkeling (water is too deep).... ★
- Accommodations..... ★★
- Food..... ★★★★★
- Services and attitude ★★★★★
- Money's worth..... ★★★★★

**= poor ★★★★★= excellent

Worldwide scale

Some Divers Really Need to Drop a Few Pounds

We've all been there. Traveling solo, you get paired with a diver you don't know. All is well until you note he's wearing only a thin shorty and going in for the check-out dive with 30 pounds of weights. I remember well, questioning such a person if all that lead was necessary before jumping from the boat, only to find him flailing around on the sand 33 feet below me with his BCD fully inflated.

Why do we need weights? The human body is more or less neutrally buoyant. The weights counteract the buoyancy in our equipment, mainly our wetsuits. If you start neutrally buoyant at the surface (allowing extra lead for the weight of gas we will consume during the dive), you should only need to add air to our buoyancy compensating device to compensate for the loss of displacement of our wetsuit as it gets compressed while we go deeper. That doesn't seem to stop some divers from going in over-weighted.

Remember that buoyancy test? At the surface, you should have your eyes above the water when you breathe in, and sink only when you exhale. Add weight to compensate for the air you'll use during the dive. Eighty cubic feet of air weighs about seven pounds, but hopefully you won't use it all. (You should come back with some air left in your tank.)

When it comes to over-weighting, drysuit divers are among the worst culprits. I often hear one say that she only puts air in her suit to take off the squeeze, then uses the BCD for buoyancy control. The auto-dump valve of a drysuit used to be called a constant-volume dump. The clue is in the name. If the drysuit diver is neutrally buoyant at the start of the dive, she will need only to put air in the suit to compensate for its compression as she goes deeper. Maintaining the suit at constant volume keeps it at constant buoyancy because it displaces the same amount of water. The BCD becomes redundant. If a single-tank drysuit diver needs to use her BCD as well, it's probably a sign she's over-weighted.

Some divers say "why worry about too much weight -- you can always put extra air in the BCD to compensate, right?" Besides using more energy and having your tank run out quicker, Ken Kurtis of Reef Seekers Dive Company (Beverly Hills, CA) points out that rescuing a diver in distress is more difficult if he is over-weighted. The deeper the rescue that has to be made, at, the riskier it becomes, with the degree of difficulty increasing exponentially.

So it's worth your effort to gently encourage those over-weighted divers you see to shed a few pounds and have a better and safer dive - for everyone.

-- John Bantin

the Army, had his Advanced Openwater certification, and seemed to be in good shape. He had rented his gear from Olympus, but I found it strange he had no computer, when normally Olympus insisted on that. We planned to meet down where the hang line is connected to anchor rope. I hung there for 10 minutes when he finally arrived, his Hero already filming but his mask totally fogged up. I showed him how to fill and clear his mask, but he did nothing and finned on with his foggy mask. At 35 minutes, he showed me 700 psi, so we slowly ascended.

Immediately after climbing on board, he threw up several times. I asked if he had tried to save air and now had a bad headache. Nope, he confessed, he had partied heavily the night before, drinking into the wee hours. The worst thing: He had done only 12 dives, none of them in the past three years. I was pissed. How could Olympus allow such a guy on these dives? They had obviously checked his credit card, but had they looked at his filled-out form, and asked about his former dives and not using a computer? Totally irresponsible. Any ideas I had for tipping went down the drain. How dare they give any diver such a buddy while giving the same dive safety lecture every day about the self-reliance we must have for our own diving issues.

Fortunately, for my last dive, I was buddied up with an older couple who knew how to use their gear. I didn't expect to see any sand tiger sharks at the Indra, which was fine; I had already received a bounty of sightings and photo ops. Still, rounding the wreck, I saw a school of spadefish come out of one torpedo opening, a lovely stream of silver. Then, inside the superstructure, grey shadows loomed. Sand tigers, between six and ten feet long. I stayed still, and the guys came over, close enough to touch. I got the best shots and footage of the whole trip. As I ascended, I looked down to see baitfish being chased by amberjack above the wreck and saluted my farewell to this majestic graveyard and marine sanctuary.

Back on the boat, my dive buddies kindly praised my skills and grace on the dives, but I couldn't return the compliment to Olympus. It was a lovely five days of spectacular fish life, and of course, finally seeing my longed-for sand tigers. For experienced, self-reliant and adventurous divers who are comfortable in bad visibility, thermoclines and tight-quarter wreck dives, it's a great experience. But Olympus definitely needs to do a better job of making sure all divers are qualified and capable enough for its trips. And for God's sake, just include the price of your tanks in the total package.

-- M.J.

Our Undercover Diver's Bio: "Diving since 1974, I've made more than 2,200 dives in more than 100 destinations worldwide. I'm always looking for special destinations that have 'icing on the cake' dives like Phoenix Island, Kiribati, Rowley Shoals, Djibouti and New Calendonia. I'm still dreaming of visiting Bikini Atoll and Yemen."



Divers Compass: For my five days of diving, Olympus charged \$645, not including the \$32 each day for two tanks . . . Hurricane Florence severely affected towns on North Carolina's coast, but as of press time, Olympus is repairing its docks, running its shop on limited electricity, and started taking trips out again at the end of September . . . Sand Dollar Motel standard rooms start at \$70, efficiency rooms with full kitchens start at \$85, and all rooms have free WiFi, but Hurricane Florence has closed it through mid-November . . . Websites: Olympus Dive Center - www.olympusdiving.com; Sand Dollar

Motel - www.thesanddollarmotel.net

Siladen Resort and Spa, Indonesia

a tranquil place where "chill" dives are the main thrill

Dear Fellow Diver:

I was fortunate to have taken my Sulawesi dive trip in early June, before the earthquake and tsunami that has killed at least 1,500 people. And now Mount Soputan, on the northern arm is erupting lava and spouting ash three miles into the air. While I was there, volcanic peaks were simply scenic charm along the horizon as my spouse and I, the only passengers on the dive boat, cruised around the northeastern tip of Sulawesi Island. However, I still had not enjoyed the ideal vacation yet: I had been wiped out by a bout of lower tract "discomfort" at Lembeh Resort the week before. Fortunately, I had only missed one dive, thanks to three days' worth of azithromycin (recommended in Indonesia for traveler's diarrhea, versus ciprofloxacin used in other countries), but I was now in the mindset for relaxing dives that weren't exerting. So, I was ready for a change of scenery and a slower pace at Siladen Resort, a sister hotel to Lembeh Resort.

My Lembeh and Siladen Resorts package included a land transfer from the former to the latter, but when I heard about the boat transfer involving two dives in the three-hour cruise, I opted for that upgrade. Why drive when you can dive along the way to your destination? I found it to be an amazing deal. We moored off Bangka Island, equidistant between Lembeh and Siladen. Divemaster



The Dive Boats

What's the Craziest Thing You've Seen While Diving?

Undercurrent subscriber William Domb (Riviera Beach, FL) came across this story on a website about crazy things people have seen in boats.

"I was on a dive vacation in the Florida Keys back in the mid-80s. We had no cell phones or digital cameras. There were pay phones and film cameras back then. We went into the water, and no sooner did I get to the bottom at around 30 feet, when a heel strap on my fin broke and the fin fell off. I picked it up and signaled to my dive buddy that I was going up to the dive boat to get a replacement."

"I surfaced maybe 20 yards from the transom on the stern and saw the dive boat captain standing with his shorts off, naked from the waist down, holding a camera over his junk. He took a picture, then put the camera back into a diver's gear bag, rooted around in another bag, pulled a camera out of it, aimed it at

his junk and took a picture. He was not the paragon of health or physical fitness, and I started laughing so hard that my regulator shot out of my mouth and the Captain looked up and said, 'Aww shit!' and stomped his feet like a little kid caught in the cookie jar. He put his shorts back on and signaled me to approach the boat. I grabbed the transom and handed my fin up."

"He said, 'I've been doing this for years and never been caught. Give the tourists something to talk about when they get home.' Since my camera was ashore, I just laughed, put my fin back on and finished the dive."

We wonder . . . what sort of crazy thing have you seen while on a dive trip? If you've witnessed something equally outrageous, tell us about it by emailing BenDDavison@undercurrent.org

Ramly outlined the dive at Sampiri 3 on a whiteboard, the main attraction being a volcanic hot spring. Within minutes of backrolling in and settling to the bottom, he found a blue-ring octopus hunting along the sand. Its rings pulsed bright blue whenever Ramly waved his tickle stick. I took multiple photos before moving on to other creatures -- a tiny hairy shrimp (alas, the devious creature was hard to catch in focus), pygmy seahorse, harlequin and orangutan crabs. After feeling the heat of the hot spring at 70 feet, I passed a football-sized giant frogfish while ascending to the surface.

As our boat nudged onto a shady beach on the tiny island of Pulau Siladen, I got the sense my time here would be as uneventful as I wanted it to be. A group of villagers sat in the sand; dogs wandered back and forth. Boat crew hopped in the water, hoisted our luggage on their shoulders, and loaded everything onto a large pushcart. A young lady from the resort met us, explaining that at low tide, their dive boats must moor next to the village's deeper jetty instead of the resort's shallower beach. A resort golf cart normally shuttled to and from this low-tide mooring, but it was out of commission. The 15-minute walk turned out to be an easy stroll on a paved sidewalk that took us past children pedaling on bicycles, and a tiny bodega with snack food and powdered coffee hanging in its screened windows.

I opened the main gate and went down the covered walkway that wrapped around a sprawling salt-water pool, connecting the front desk, restaurant and cozy bar with pool table. I was warmly greeted at the main office, then shown my home-away-from-home. The 520-square-foot garden view villa, occupying half a duplex, was paneled in wood, with high peaked ceilings, and looked out over some parched, scruffy-looking plantings. A footpath led to the porch, holding a small couch, table and drying rack. A king poster bed draped in mosquito netting stood in the middle of the air-conditioned room. A nook contained a five-gallon jug of drinking water with hot and cold water spigots, instant coffees and tea bags. Electricity was 220-volt, with outlets close to a desk I used for my camera station. Our greeter



The Salt Water Pool at Siladen

brought me a multi-outlet power strip and towels from the camera room. In the shower in the open-air bathroom, water from a rain-fall head flowed down onto thick black tiles, with blue sky and tropical foliage perched overhead. Body wash, conditioner and shampoo in capped ceramic vases sat on an altar-like stand. Showering was like performing a primitive cleansing ritual. The only flaw: the odd mosquito flying in from above to disturb my meditations while sitting on the throne.



After eating breakfast that was served at 7 a.m., I headed to the dive center for our 8 a.m. briefing before walking to the boats. Two morning boat dives were followed by lunch at 1 p.m. Siladen's dives were spa-like, usually drift dives requiring little energy. My standard routine: dropping into 60-foot-plus visibility, drifting along a sloping or steep wall, staying at depth for awhile, then gradually poking my way back up. Bottom times usually exceeded an hour. We often meandered around 60 feet for a long time, so I requested nitrox after the first day. Water hovered around 82 degrees; my 5-mil and hooded tunic worked great.

Bunaken Marine Park is home to nearly 400 coral species; they looked healthy because so many coral polyps were fully open and feeding during the day. Plenty of sea whips gave me many opportunities to spot and photograph the tiny whip coral goby. Hard, rough star coral were covered with so many tiny white polyps, they resembled super-powdery sugar donuts squashed together in a big lump.

The dive staff, mainly from Siladen and North Sulawesi, gave complete safety and dive briefings and came to the rescue when my regulator's second stage started breathing wet. Galen Schmitt, one of the dive center managers, quickly swapped one of their regulators for mine. The next day my regulator was back on my rig, staying nice and dry.

Siladen's friendly feeling was led by managers Ana Fonseca and Miguel Ribeiro, a married couple of Portuguese divers who met while working at another resort. Ana greeted me with a big smile at nearly every meal, and she switched easily between multiple languages when saying hello to everyone. Eco-friendly as well, Siladen asked guests to pack out their own waste plastic and spent batteries, and it set aside a patch of its beach for a turtle hatchery. Too bad they couldn't do anything about the smudgy smoke from fires just outside the resort that could pose a hazard to guests with lung issues in the one or two villas at that extreme end.

I saw so much coral on so many easy wall drift dives that after a while, I longed for a classic Sulawesi muck dive or two. (Siladen offered them at nearby Manado, I was just too lazy to request any.) The only time we dove below 100 feet was to see an uncommon yellow pygmy seahorse on an afternoon dive at Sachiko II off Bunaken Island. As we descended to 104 feet in 55-foot visibility, I was leery of making this my third dive of the day. I kept such a close eye on my computer, I felt distracted from the dive. But that little yellow seahorse got my full attention. The other divers were not photo-hounds, so I spent some quality time with it, using my trusty Nikon 105 coupled with ReefNet's 10x diopter. We took the remaining 35 minutes ascending slowly past nudibranch, many reef fish, large sponges, hard and soft corals. My computer showed me "in the green" the whole time.

Alvian, my 20-something Sulawesi guide for nearly the entire week, deployed a surface marker buoy after such drift dives; we'd surface as a group and be quickly spotted by the boat, often a quarter-mile away. Hot face towels, tea, coffee, hot cocoa and often sweet cakes were offered after each dive, then Alvian recounted our major sightings. My log entries filled with orangutan crabs, porcelain crabs, nudibranch in

rainbow colors, flatworms, Ambon, leaf and devil scorpionfish, a hairy octopus, little dancing harlequin sweetlips, batfish, and white tip sharks. I readily accepted Alvian's offers to carry my heavy camera rig from the dive center to the boat and back. Divers put on or took off gear in the water. Dive staff always set up and cleaned our gear, and with care.

Only a couple of other divers joined me on most dives -- a French physician and a business executive from Monaco now based in Singapore. Both spoke English, and we got along great. The 3 p.m. afternoon dive left time afterward to shower, prep my camera and enjoy a sundowner while reviewing the day's photos, all before dinner at 7 p.m. Siladen offered periodic dusk (mandarin) and night dives (the tank-like sponge crab lumbering past my night-dive lights was hilarious.)

All the dive boats were fully-roofed monohulls, 50 feet long and 10 feet wide, plenty roomy for the resort's standard max of 12 divers. Twin 100-HP Yamaha outboards propelled us to moorings, mostly 30- to 45 minutes away, off Bunaken Island (Siladen's boats moor instead of anchor). The roof was sturdy enough to climb up and catch some rays topside. A rinse tank for cameras was big enough for my rig and some smaller point-and-shoots, but too small for a boatload of heavy-duty gear.

Dive staff welcomed me every morning in the open-air meeting area with ample seating, fish books and charts, boat assignments on whiteboards and dive site maps. A high-pressure air nozzle and two camera rinse tanks stood near the air-conditioned camera room, with plenty of stations and towels. The gear storage building next door was airy, with separate spaces for each villa, standing 15 yards from the shoreline where dive boats moored. Walking up the beach, I rinsed my feet in a shallow pool, showered and rinsed my suit in tanks outside the locker area. Staff handled the rest, including cleaning and drying my gear at week's end.

The sea between the islands in Bunaken Marine Park plunges to 6,000 feet, so it paid to look away from the walls and down into the blue. Among the fly-bys: huge green humphead parrotfish and endangered Napoleon wrasse, the largest of its kind. After years of Caribbean diving, I'd never seen particularly large hawksbill or green sea turtles. This changed here, most memorably at Lekuan Pygmy, on the far side of Bunaken. One monster spotted a sponge on the wall that must have looked particularly appetizing, glided in for a landing, then ripped into that sponge like a dog given a thick steak.

At Fukui, down at 70 feet, I felt something akin to the holy when we came across a group of truly giant clams and empty shells, about two-and-a-half-feet across. Was this

Pirates of Papua New Guinea

Here's another reminder that some of the best diving happens in Third World countries with not-so-great economic and political conditions. In his reader report about a March trip aboard the *MV FeBrina*, David E. Reubush (Toano, VA) alludes to "a unique set of circumstances" that caused them to dive off the southern coast of New Britain in Papua New Guinea rather than the Alotau region because, "it had become too dangerous." Locals in the Milne Bay area had raided the police station, stolen guns and were robbing people on land and at sea.

Reubush wrote *Undercurrent*, "Among other things, they would approach locals in their canoes with speedboats, stop them, rob them of everything including their clothes, and force them to swim to shore . . . According to the newspaper account, we read there had been a

number of drownings as a result, plus other deaths. This has evidently been going on for some time, including them raiding at least one of the resorts in the area. The big problem is that the leader of the bad guys is the brother-in-law of the police chief - so nothing was being done."

According to PNG TV, 16 men with high-powered guns stormed Tawali Resort, tops among divers in the Milne Bay area, on August 23 and got away with an undisclosed amount of cash. They ordered guests and staff to go to the lobby, then demanded to see the resort manager, who had no choice but to hand over the keys to the safe. Besides the cash, the men took off with some guests' valuables. They left in a getaway dinghy, and the entire robbery happened in just under an hour.

an ancient family, with the offspring living next to the sacred "bones" of its ancestors? By stark contrast, at the end of the dive, we came across some man-made structures set as an artificial reef, their lack of marine growth and unnatural-looking lines reminding me how important it is to protect the marine life that's already there.

Breakfast and dinner were set under the restaurant's open rotunda. As the sun climbed, I tucked into breakfasts of chilled juices and smoothies, cold cereal and yogurt with fruit and muesli, and hot dishes like eggs Benedict, sausage, bacon, French toast, pancakes and made-to-order eggs. Lunch was often served on white-linen-covered tables on the beach, with dishes ordered from a menu or on buffet tables. Chef Mateo, an Italian with an animated personality and charming accent, served up the fine-dining-worthy cuisine. Starter dishes from the lunch and dinner feasts included prawn salad with mint dressing and fusilli pasta with minced beef and tomato sauce. Main courses included tofu with herbs steamed in a banana leaf, tempeh-encrusted fish and chicken Cordon Bleu. I tried to save room for desserts like apple crumble, lemon tarte and coffee mud cake.

Siladen Resort, Indonesia

Diving (Experienced).....	*****
Diving (Beginners).....	*****
Snorkeling	*****
Accommodations.....	*****
Food.....	*****
Services and attitude	*****
Money's worth.....	*****

*= poor *****= excellent

Worldwide scale

The most challenging part of my trip was hunting for and doing justice to what became my target photo op: a hairy shrimp smaller than the tip of a matchstick. After multiple failed attempts to get a clear photo, Alvian came to my rescue, finding one more on my last day of diving. Out of six images, one was clear enough to see its legs and eyes in the same shot -- a home run.

On other dive vacations, there always seemed to be a timetable to meet, and I've rushed to board dive boats on time and make every minute count. During my week at Siladen, watching a blood-red sky at sunset, marked by the massive dark outline of a ,800-foot volcano rising directly out of the sea, the gentle diving and gracious feel enveloped me. Staff put on no special show for me -- I paid my own way and did not disclose I was writing for Undercurrent -- but this time, especially after gastrointestinal issues, being able to chill was the thrill. Siladen was the most relaxing and refreshing dive experience I've had. I hope Mother Nature gives it and the rest of the Sulawesi island community a much-needed break from excitement for a while."

-- S.P.

Our Undercover Diver's Bio: "While learning to scuba 35 years ago, my beaver-tail neoprene wetsuit got me through my YMCA silver-level certification, even if I did freeze my bippy off during 100-foot descents onto Great Lakes freighters. I've gradually earned all the main certifications, including Master Scuba Diver, and I have an SDI/TDI/ERDI solo diving certification that comes in handy when I am sometimes left on my own while taking photos on dives. In between frequent dive trips, from the Caribbean to the Asia Pacific, I am a public safety diver and try to dive once a week year-round when our local lakes are not frozen over, and when they are, I'm ice diving."



Divers Compass: My 15-dive stay came to \$2,033 for me, and \$1,313 for my non-diver spouse . . . Round-trip airfare from the Midwest with a one-night stop in Singapore was \$2,471 per person, and boat transfer for two from Lembeh Resort to Siladen was \$325, plus \$90 for the two dives . . . Entrance tags to Bunaken National Park were \$10.25; Nitrox was \$8 per tank . . . Complimentary beverages, with the exception of an extra \$2-\$3 for gourmet coffees, \$7.50 for a glass of wine, \$5 for Big Bintang beers, and \$9.50 and up for mixed drinks . . . In addition to the service fees on our bill, I tipped \$200 for the dive staff and \$200 for the resort staff; my regulator rental/repair was \$15 . . . Siladen has a strict no-gloves

policy, but my doctor wrote an official letter requesting I be allowed to wear them (I get cold easily, so they were for exposure protection), and the resort didn't question it . . . Indonesian rupiah, U.S. dollars and credit cards are accepted . . . I highly recommend overnighing in Singapore -- we stayed at the boutique Amoy Hotel (\$180/night, which included one airport transfer and breakfast) and saw highlights such as the Gardens by the Bay and Sentosa Island . . . Bluewater Dive Travel put my package together with expertise . . . Websites: Siladen Resort & Spa - www.Siladen.com; Bluewater Dive Travel - (www.bluewaterdivetravel.com)

Part I: The Ups and Downs of Ocean Currents

strategies for surviving them

One can dive his entire life and never find much in the way of currents. But every so often, a combo of tides, wind and other factors can create currents that can throw you a surprise.

For example, Nick Macelletti (Sarasota, FL) was calmly finning along at Delila Reef in Cozumel when an unexpected current sent him unwillingly to the surface. Reunited with his group on board, he learned they all had been separated like pins hit by a bowling ball, although no one else was brought to the surface as he was.

The more you dive in sites affected by big ocean tides, the more chances you'll have of experiencing a topsy-turvy dive, as our readers attest to below. Sometimes, it's only a mild shake-up that adds a little zing to a mild Caribbean dive, as Macelletti had. But sometimes, you'll have to keep your cool and remember what's needed to get out of an up- or down-flowing current safely.

Thrown into the Washing Machine

When an ocean current meets an immovable object such as an island or a submerged reef wall, it has to divert around it, and, rather like air passing over the wing of an airplane, it has to speed up to do so. The problem for divers is that the current can go left or right, sometimes over the top of the obstruction, or sometimes downward to form an eddy at depth. It's these upward and downward currents that cause a problem for divers, especially if you encounter one near the end of a dive. Nobody can swim against a current that flows at more than one knot for more than a short time, and some of these currents are faster.

One initial sign of a downcurrent is when you put up a surface marker buoy that ascends in a satisfying manner, only to find it changing direction and coming back downward still fully inflated. At that time, you'll find yourself enveloped by your

own exhaled bubbles, and you might even find yourself hurtling along helter-skelter and rotating uncomfortably out of control. These dive sites are often called 'washing machines.'

Harvey S. Cohen (Middletown, NJ) wrote us about a dive in the Bahamas near Highbourne Cay Marina, known as "The Washing Machine," where the tide rushes through a gap between two islands, creating a vortex along one of the wall edges. "The diver is pulled horizontally by a fast current while rotated up and down through one or two complete circles. It's fun!"

"You are literally tumbling along through the area -- upside down, sideways, inverted," Michael Ring (Santa Barbara, CA) writes of the same dive site. "And you are really moving. Fast! The exhilaration level is quite high, as you find yourself being carried along at seemingly incredible speed, sometimes what appears to be directly at the rocks, with no hope of avoiding impact. Then the current will swirl you clear of catastrophe, only to do it all again in the next few seconds."

Notable Dive Sites with Downcurrents

A great reason to enjoy diving in currents is because marine life loves them. Visit Blue Corner in Palau during a slack interval between tides, and you'll wonder why it is rated so highly. But go again when the current is running at several knots and it's a different story, as you'll see plenty of sharks and other large pelagic life surfing effortlessly in the flow.

Mick Domagala (Chicago, IL) confirms this, but he had a scary experience when he was quickly taken by a current down to 130 feet. "We must have made our way out on the ledge far enough to hit the brunt of the current, or it just kicked in stronger at that point. Whatever it was, we didn't need to be in the middle of it." He enjoyed the

dive, but he wishes he'd been alerted to this possible deadly phenomenon during the dive briefing. It's good to remember that any wall has the possibility to send water -- and divers -- downward with a strong force.

John Yavorsky (Warren, IN) experienced an unusual current at the southern edge of Turneffe Island in Belize. "A cold surface current was falling down the edge of the underwater wall. Our bubbles flowed down, and we had to use BCs to buoy us up against the current until, at 30 feet, we had to expel that air to get negative and crawl along the sand channel back to the boat. By digging a knife into the sand, I could anchor and then sprint 10 feet against the current and anchor again. Fortunately, everyone figured this out and got back to the boat. We called it the 'Niagara Falls Dive'."

You can shelter from an unwelcome current by hiding behind rock or reef formations, just as you might take shelter from the wind. Alan Riggs (Denver, CO) and his friends would do this when diving Deception Pass in Washington's Puget Sound. As experience got them used to the abrupt velocity shears and passing turbulence boils, they

were able to dive closer to the corner of Whidbey Island, where the current was strongest, ducking into depressions in the island wall to watch things rush by in the current. "After that, resort diving could be pretty dull."

Asia-Pacific's Shifting, Seasonal Currents

People are often surprised when they first dive in places in the Maldives or the Indonesian archipelago, not by the strength of the current but by the vagaries of its direction. Situated as they are in the middle of the Indian Ocean, the Maldives' currents tend to be seasonal, but where an archipelago such as the Indonesian islands separate the tides of major oceans from smaller seas, they stay the same throughout the year.

For example, at Cape Kri, the classic dive in Raja Ampat, there is usually a strong current that takes you in a comfortable drift along the reef wall 60 feet deep, only to suddenly whisk you down to 130 feet just as you are thinking about ascending to safety-stop depth. Of course, it soon brings you up again, but not before it has made you soil your wetsuit the first time you do that dive.

When It Comes to Diving, Don't Trust the BBC

The BBC ran a podcast in late July about how a scuba diver ended up in a wheelchair, paralyzed from the waist down. However, the episode has raised questions in the dive world about whether the news broadcaster got the facts straight.

In August 2009, Richard Osborn and three other diving instructors made a dive on their day off from working at a dive center near Ayia Napa in Cyprus. They say they went to 133 feet deep, where two of them ran out of air. During the air-sharing ascent, the other two also ran out of air at 100 feet. Two got bent during the following emergency free ascent, and Osborn, then 21, was the worst affected.

There are some discrepancies in the story as told. First, it describes how they anchored their boat, yet says they later swam to shore. It says the dives were well planned, which they patently were not. How did all four diving instructors run out of air? The water around Cyprus is very clear and with hardly any tidal range, so there are no currents to speak of.

Some social media users suggest they must have suffered nitrogen narcosis, because none of them monitored their air supplies. The podcast transcript states that they exchanged written messages after the first

two ran out of air. Unlikely, although Osborn says in the podcast, "As we're all dive professionals, we've got extensive training in how to communicate under water and things like that. There are also little slates and pencils that we all carry with our dive gear, so if we can't communicate with hand signals, we can write down what's going on and get the message across to everyone who's diving."

The two bent divers were transported by road across the island to a hyperbaric facility (a journey of more than three hours), where they were treated for decompression illness. The BBC reporter inaccurately says Osborn's spine was crushed, when in fact DCI would only have caused nerve damage to his spinal cord.

Was this poor reporting by the BBC? Or, with sympathy to the casualty, could we be cynical to suggest that, for all four divers to have run out of air, they changed the facts to state that they dived less deep than they actually had so as not to affect their insurance coverage? PADI recreational divers are certified to a maximum depth of 133 feet, and most insurance policies limit maximum depths to that of a diver's certification or less. For all four divers to run out of air suggests they did a much deeper dive.

Sardines and Mike's Point are similarly difficult dives in Raja Ampat. Finding himself in such a washing machine while diving there, Fred Turoff (Philadelphia, PA) reckons it was one of the toughest dives he has ever done -- he was yanked down to 88 feet and aborted the dive after only 13 minutes underwater. Of course, if you can manage such conditions, these currents attract the high-voltage marine life the area is famous for.

"Before I knew it, I was back in the whirlpool, but this time, I had almost no air left, and I soon felt the telltale tightness that signifies the tank was near empty."

Mel McCombie (New Haven, CT) loved diving around Siladen/Bunaken in North Sulawesi. "Whenever we noticed our bubbles spinning into the water like soda bubbles and hanging there, it was time to hug the wall. We could feel a downward tug and sometimes saw our bubbles not only sit suspended in mid-water but also spin downward. On one dive off Bunaken, the down current was so powerful, we were forced to 'gecko dive' -- cling to the wall and pull ourselves across it by hand -- or face a quick trip to the bottom of the ocean! Usually a down current could be handled by just staying close to the wall, where its contours would break up the current, but sometimes the only way to not be carried off was to cling to the wall."

David Hill (Gloucester, MA) had a similar experience in the Philippines. He ended up clinging to a wall with his buddy after their dive group encountered a current that swept both upwards and downward. It was bizarre to see his buddy's exhaled bubbles go straight down. Then he was swept one way, while the dive guide was swept the other. One of his group was sucked down to 80 feet and rushed back up to 20 feet several times in succession.

Sucked into an Underwater Whirlpool

Bruce Yates (Bellevue, WA) has a harrowing story about Indonesia's erratic current effects when he was diving near Komodo and Rinca Islands, where the waters are known to have ripping currents and sizable "washing machine" whirlpools. He says, "Some years ago, on a liveaboard trip there, we dove a site called Current City, a small, unassuming seamount where the surface current didn't seem bad at all. We dropped in on the lee side and

were told in the briefing, 'If the current is too strong, just go a little deeper and it should be less.' "

"As soon as we descended, the current was actually blasting along, and it was all we could do to hold onto dead sections of the reef to avoid getting blown into the blue. My buddy had little trouble because he didn't have a camera, but my big rig acted as a sail, and I struggled just to hold on, let alone attempt photos. At about 30 feet, with several other divers nearby, I signaled him to stay put and that I was going a little deeper, assuming that the briefing was right, and the current would be less down there. By the time I got down to about 60 feet, however, the current was every bit as strong, so I decided to abort the dive. I let go to do my ascent and safety stop in the blue, knowing the crew was assiduously tracking our bubbles. I had over 1000 psi of air and expected an uneventful drift and safety stop."

"While on my safety stop, I suddenly noticed the water was more turbulent, my bubbles were swirling around and going down instead of up -- and so was I. After drifting 50 yards from the seamount, I had been pulled into a big whirlpool. My dive computer's depth gauge went berserk, jumping around from 20 feet to 60 feet a second later, then 40, 30, 50, and so on. Whirlpools can create false depth readings because the increased pressure of swirling water is interpreted by the computer as a greater depth. The only thing I knew was that I was definitely going deeper, no matter how hard I kicked toward the surface, which was my natural impulse. More concerning, I was rapidly depleting my remaining air between the exertion of kicking and rapid breathing."

"I began swimming as hard as I could horizontally to get out of the whirlpool, just as you swim parallel to a beach to get out of a riptide. Sure enough, within a minute or two, I was back in calm water, albeit still at roughly 40 feet. I began another ascent and, at 20 feet, began a short safety stop because my air was low."

"Before I knew it, I was back in the whirlpool, but this time I had almost no air left, and I soon felt the telltale tightness that signifies the tank was near empty. Knowing I had only two to three tight breaths left, I made a decision: I could either breathe that air, which I knew would not get me to the surface, or inflate my BCD and see if that would."

Had Yates done the former, he wouldn't be here to share his tale. But with that last breath, he simultaneously inflated his BCD with what air was left and started swimming horizontally. "Essentially, I was doing an emergency swimming

ascent, but letting the BCD handle the ascent part. With no time for another safety stop, I let the BCD's buoyancy take me toward the surface, while I quickly switch let air out as I exited the whirlpool to avoid rocketing to the surface."

Don't Panic; Just Be Prepared

So what do you do if you get caught in a downcurrent? As Yates said, your first inclination is to fin strongly upward or fully inflate your BC, but that's often ineffective. The second inclination is to grab the reef wall and do a bit of rock climbing.

You don't have to do either. A downcurrent is like an underwater waterfall; it's very localized. The astute diver swims horizontally and preferably away from the underwater topography that's causing the phenomenon, to get out of the flow.

And during the briefing, pay attention to the name of the dive sites -- if any have "Express" as part of their names, prepare yourself for a bumpy ride. Kuredo Express in the Maldives is a notable one that comes to mind. Constricted by the islands

and submerged reefs and diverted up and down by the topography of the seabed in the channels, the ocean flow speeds up there to give divers a wild ride. Divers expecting leisurely conditions can suffer a scary experience if they don't know what to do.

However, don't be put off visiting these places. The mindful diver has nothing to fear. I'm in my 70s and not that powerfully built, but I've dived virtually all of these abovementioned sites and enjoyed myself while doing so. It's high-voltage diving.

Panicking won't do anything; being prepared for some literal ups and downs when they happen will keep you from injury. And it will certainly be a notable dive you'll remember in detail, tell your buddies, and hopefully share with us.

-- John Bantin

Next month: Readers share their experiences in strong horizontal currents; and what to do when you surface a long way from your boat.

Was There a Cover-Up in This Diver's Death? *many questions about search-and-rescue efforts for Rob Stewart*

Do you know the legal difference between a "rescue dive" and a "recovery dive?" That is a major matter of importance in the lawsuit over the death of Rob Stewart.

Following up on the story we wrote in our August issue, the investigation into the death of Stewart, the filmmaker behind the award-winning 2007 documentary *Sharkwater*, is getting murkier. The Monroe County Medical Examiner has threatened criminal action against the divers who recovered Stewart's body off Islamorada after he died on a rebreather dive with Horizon Dive Adventures in January 2017. Thomas Beaver, the medical examiner, says private divers should not have undertaken the recovery effort -- especially because they were hired by Horizon Dive Adventures' attorney in anticipation of a lawsuit.

Did He Drift, Or Did He Sink?

Four months after Stewart's body was recovered, the filmmaker's family filed a lawsuit against Horizon, contending that the crew failed to monitor and help Stewart after he surfaced and

waited to board the boat. He sank shortly after surfacing. Early reports suggested Stewart had simply drifted away, which led to a three-day air and sea search, but in fact Stewart had dropped immediately below the surface.

Why did he not stay afloat with his BC-wing inflated? If Stewart was unable to inflate his wing, it might contradict testimony from those on the boat who said he was able to signal he was OK. Peter Sotis, his dive buddy and rebreather mentor, had already boarded and become unconscious on the boat deck, where people tried to revive him.

In his witness statement to the Monroe County Sheriff, David Wilkerson, the boat captain, said Stewart had "become incoherent," but nobody attempted to get into the water to help him before he dropped and drowned. Wilkerson says Stewart had disappeared in the space of a few minutes. So why did those on the boat allege he had drifted off?

David Concannon, a trial attorney representing rEvo, the manufacturer of the rebreather unit Stewart was using, told *Undercurrent*, "Sotis was being attended to by his wife, a doctor. Brock

Why Even Air-Breathing Divers Should Analyze Their Tanks

All nitrox divers are taught to analyze the contents of their tanks before using them, but now air-breathing divers should be doing it, too. With nitrox fills the norm on dive boats, on tap there and in dive shops, a new hazard lurks -- when tanks of air are filled alongside tanks of nitrox, and some divers may pick the incorrect one. Tanks are not always clearly or correctly labelled.

Air which is actually nitrox 21 (meaning it is composed of approximately 21 percent oxygen and 78 percent nitrogen), is recommended for a maximum safe depth of 185ft. Nitrox 32, one of the most common mixes for recreational diving, is limited to 111ft. It has higher partial-pressure amounts of oxygen, which can subject a diver to the risks of oxygen toxicity. If a diver mistakenly takes a tank of nitrox, thinking it is air, he may go too deep and suffers a life-threatening spasm (depending on an individual's susceptibility) with the likelihood of drowning. Which means we should all analyze the contents of every tank before we go diving.

Any dive operation that provides nitrox should have a portable analyzer available. You can simply adjust it to 20.9 percent, then hold it over a tank's valve that you've opened sufficiently to supply a gentle flow of gas, and wait until the display stabilizes. If it's air in the tank, the display will still read 20.9 percent oxygen.

Do you always know what you're breathing when you dive? Have you or someone on the boat ever picked the wrong tank and if so, what happened? We'd like to know. Write to BenDDavison@undercurrent.org, tell us your story, and include your town and state.

Cahill, Stewart's filmmaking partner, jumped into the water to do a surface search after the boat came back [to where Stewart was last seen] and Stewart had already disappeared." Cahill is another subject of the ongoing investigation because he was also on the Horizon boat when rescue divers went out four days after the fatal dive to recover Stewart's body.

An Illegal Rescue Dive

The rescue divers were originally identified as members of the Key Largo Volunteer Fire Department, which later denied it had a dive unit. Then a *Miami Herald* article reported that an attorney

representing Horizon Dive Adventures' insurance company had retained Craig S. Jenni, a Boca Raton attorney involved in many diving accident lawsuits, to join the dive to recover Stewart's body -- and take photos as possible evidence.

Court documents show that, besides Jenni, the recovery divers included Horizon Dive Adventures owner Dan Dawson and one of his employees.

The only diver affiliated with Key Largo's fire department was Rob Bleser, another dive shop owner who had led dozens of other underwater rescues and recoveries. Bleser radioed the Sheriff's office, saying he was going out to search using the call sign for his "fire boat," even though he was on Horizon's boat, and the fire department doesn't have a fire boat. Since then, the fire department has distanced itself from Bleser, although it was he, using a remotely operated underwater robot, who located Stewart's body at a depth of 200 feet.

Beaver emailed Bleser, "There was no communication with my office, and no approval was requested or given. I consider your actions and the actions of those involved in the recovery a flagrant violation . . . and a complete disregard for the authority of the Medical Examiner." Florida law states that a person who takes actions like Bleser without a district medical examiner's approval can be charged with a first-degree misdemeanor.

Bleser's email reply to Beaver conveniently omits any mention of the recovery divers' names or identities, misrepresents the circumstances of the search for Stewart, and misconstrues who had the authority to supervise the recovery operation. He never informed Beaver, the sheriff or the Coast Guard before going out on the recovery mission.

Defense Tactics

Defense attorneys are using the turmoil over how Stewart's rescue and recovery was handled to boost their clients' credibility. In its court filings, the legal team representing rEvo states that Horizon Dive Adventures created a criminal conspiracy by tampering with evidence in order to misdirect authorities' suspicions away from it, and to frame rEvo and Sotis for causing Stewart's death.

Concannon told *Undercurrent*, "Bleser and Horizon specifically did not have permission [to recover the body], and Bleser was informed of this two days before the recovery. Horizon and Jenni made the recovery anyway on February 3. In the

interim, they acted as though they were only performing a search, not a recovery. While the Coast Guard and Stewart's family were out searching an area the size of Connecticut because they thought Stewart was alive and drifting on the surface, the people who actually saw him sink were at the site, ready to do a search and recovery, after being forbidden to do so."

And now the defense says Beaver also made a major error in his handling of the Stewart investigation. He decided the cause of death was hypoxia, but Concannon says that's a misinformed ruling. "The dive computer data was downloaded by the Coast Guard with the assistance of both rEvo and Shearwater (the computer's manufacturer), and in the presence of the Stewart family attorneys, on July 31, 2017. The medical examiner was invited to attend, but he did not. A copy of the

data was made available to him, but he did not review it before issuing his report in August 2017. As of May 2018, he still had not reviewed the data. Consequently, his finding that Rob Stewart suffered hypoxia was not made after considering this evidence. The dive computer data shows Stewart could not have been hypoxic. We filed the data printouts in court."

Beaver is no longer the medical examiner, and Monroe County has begun a search to fill his post.

Meanwhile, Stewart's spirit still lives -- on film, that is. He's the narrator of *Sharkwater Extinction*, an exposé on the shark-finning industry and a sequel to *Sharkwater*, which had its premiere last month at the prestigious Toronto Film Festival.

-- John Bantin

Who Are You Calling Rude?

our readers sound off on the most offensive divers

While diving with veteran underwater cameraman Stan Waterman at Alcyone in Cocos Island, we decided to extend our dive time beyond one hour. At our safety stop, we looked up at the panga, anchored in less than comfortable conditions above us. Small explosions of vomit alongside the hull occasionally punctuated the small vessel's movements on a choppy sea. When Waterman eventually climbed the ladder and was confronted by the sorry sight of the green-faced divers patiently waiting for us, he turned to me and observed, with a twinkle in his eye, "When you get to my age, it's best to be the last one in the boat!" However, that still means you have to swim through the barf.

In my August story, about a reader report on Ocean Frontiers in Grand Cayman criticizing "rude" divers who made others wait for them, I asked our readers who was rude: those who stayed down, eking out their air to the last breath, or those back in the boat, having finished their dive and anxious to be somewhere else? It was no surprise most readers said it was the latter, and I was overwhelmed by responses to that effect.

Howard Kaiser, co-owner of Compass Point Dive Resort on Grand Cayman and a regular diver with Ocean Frontiers down the road from him, perfectly expresses the point of view of going for

the longest dive times possible. "I've done hundreds of dives with Ocean Frontiers and appreciate that they do not limit dive times, primarily because they cater to experienced divers who are there to dive -- not catch the shuttle to go shopping. How someone can complain about being able to stay down longer is beyond my ken.

"That these poor neglected divers must 'suffer' on a dive boat in beautiful tropical seas while waiting for us? I say, 'Suck it up.'"

"I will say, however, that OF's dive briefings now gently remind the divers (along with the standard 'return with 700 psi' admonishment) not to inconvenience their fellow divers. You'll still have folks who are sea-sick, cold, hungry, etc., waiting while others finish their dives. It comes with the territory, especially where divers are allowed to go unguided and photographers are numerous."

"Folks, you ain't in Siberia. You're on vacation in Grand Cayman spending a ton of money, and so are your fellow divers. It is not up to OF

to compensate for your misery by spreading it out among customers having a good time. If your schedule is so tight that a boatload of divers becomes captive to your social calendar, then stay on land or pay more for a private dive."

Kaiser says there are relatively few perpetrators from either extreme on the standard dive boat. "You'll find the occasional whiner, just like we'll grumble about the diver with the huge camera rig who stays down 90 minutes right below the boat.

"One issue I will point out: These dive guides and captains have a 40-minute turnaround for lunch on a good day. When we do four dives at

[Compass Point], we're on the same time constraints to get back to the boat for the afternoon departures, so we can empathize. That 90-minute diver turns the staff's 40-minute lunch break into 20 minutes or less. So those divers doing the 90-minute dives can also be complicit in delaying the afternoon boats. Sort of a dive boat version of airline scheduling dynamics."

But during a dive day, are you more focused on the fish or more focused on what's for lunch? Bringing snacks for surface intervals is what many divers do to tide themselves over between dives, and then they save their relaxing over meals once their dive gear is cleaned and hung up to dry.

Divers and Dolphins: How Much Should They Mix?

When Max Weinman (Atlanta, GA) posted a report about diving with Top Dive, the dive shop at the Kia Ora hotel in Rangiroa, French Polynesia, some *Undercurrent* subscribers were outraged.

You see, Tiputa Pass, one of the two channels feeding the lagoon at Rangiroa, has such a rush of water with the inward flooding tide that the force produces a standing wave. A resident pod of dolphin regularly frolics in this standing wave, and because the Tiputa Pass has become a favorite dive site, they have also learned to frolic with divers in the channel.

Weinman wrote, "Of course, when divers witness wild dolphin, all bets are off, and to hell with the depth limits, as the dolphin would eagerly engage us at around 100 feet. Some of the dolphins became adorned with numerous divers clinging to their flippers, like hysterical human Christmas ornaments, until the dolphin became bored, at which time they would shake divers off and cunningly plunge deeper and continue to zoom all about us. To experience this once is the experience of a lifetime, but on almost every dive was purely amazing!"

Weinman added, "Sadly, despite briefings strongly discouraging that type of behavior, many divers demonstrated a type of deepwater dolphin narcosis, where the only thing of importance was to come into physical contact with the dolphin, irrespective of depth, dive tables and the laws of reason. Confronting them was not met with any type of logical or meaningful response, other than a distorted sense of entitlement."

There have been many cases of wild dolphins having close encounters with divers. Probably the most famous of them was Jojo, who resided in the waters off Providenciales in the Turks and Caicos. Jojo became

so important to the tourist industry that Dean Bernal, a dive instructor who later turned into the executive director of the Marine Wildlife Foundation, became his official warden, and even had a parking space at the airport inscribed "Reserved for Jojo's Warden."

Naline, a female pan-tropical spotted dolphin, befriended a Bedouin boy in Nuweiba, an Egyptian village on the Red Sea, which reaped revenues from divers prepared to pay to dive with her. Naline liked to have her flanks rubbed with a brick left underwater for that purpose, but when pictures of her being stroked by divers with their bare hands were published, many were outraged. One diver in the published photographs, reading that people thought she might have damaged the dolphin's skin with her nails, retorted, "Well, they ain't never touched a dolphin!"

A bottlenose dolphin is a very large and muscular mammal, and its flanks are tough as concrete, unlike those of a cartilaginous shark. In the open ocean, they can choose to be near divers or not, easily out-swimming any human and most fishes.

Of his Rangiroa experience, Weinman wrote, "[The dolphins] had kept divers at bay, as a calf had recently been born in the pod, but with time, they grew more social as the baby matured. And lo and behold, the mother and calf skirted around us close enough to obtain some photos."

Undercurrent's stand has always been, you don't ride on any marine animals -- dolphins, turtles, mantas -- and keep a "look but don't touch" stance. Our thoughts: Hitching a ride is demeaning to the animal and doesn't present the human in a good light. What's your opinion? Write to us at BenDDavison@undercurrent.org.

Shorter Dive Times at Cocos Island?

An unfortunate encounter happened last December, when a diver had her legs bitten by a tiger shark off Manuelita Island, off the larger Cocos Island, and lost her life (see the January 2018 issue for details). Since then, the operator of *MV Sea Hunter* and *MV Argo* have put new rules in place to avoid that happening again. (A similar shark encounter in April caused a fright to a lone diver, but no real damage was done.)

Scalloped hammerhead sharks, for which Cocos Island is famous, are very skittish, and sport divers' exhaled bubbles will send them into retreat. Galapagos sharks are equally timid. Not so tiger sharks. They move ponderously but appear fearless -- and they tend to sneak up on lone prey.

That's why Undersea Hunter Group, which operates those two liveboards, put this announcement on its website: "We have implemented several new procedures to enhance the safety of all our passengers, including: having all our divers enter and exit the water together; increased training for the dive guides; and equipping our dive guides with specially constructed aluminum sticks that can deter close encounters if necessary. We strongly believe that by following the above procedures, any kind of serious incident with sharks can be avoided. This is a reminder to all visitors

to Cocos Island how important it is to follow the safety guidelines of dive guides at all times."

So now on every Cocos trip, the 20 divers on board are divided into two groups. But getting a group of divers to exit the water together brings its own problems. Because conditions are not always easy, and divers' experience and abilities can vary widely, bringing up a group of 10 divers at the same time means dive times are determined by the least able in the group. More experienced divers will not be pleased to have to surface after only 35 minutes, which might be the maximum amount of time a novice diver can get from a tank of air.

While these rules seem suitable while on paper, *Undercurrent* subscriber Catriona Steel complained of them in her recent reader's report: "In our 10-person group, we had a few people who were pretty inexperienced or hadn't dived for years, and others who were very experienced and frustrated by the dive times. We had divers out of air after only 30 or 35 minutes." It's a long way to go, at not inconsiderable expense, for such short dive times.

Another change: Undersea Hunter boats' night dives, which typically featured diving with the white-tip sharks at Manuelita Island, are no longer offered.

In general agreement, Thom Lopatin (Lake Hopatcong, NJ) wrote, "If [people] happen to miss their lunch as a result, then so be it. Perhaps their not missing many meals plays a role in their truncated bottom time problems, anyway? That these poor, neglected divers must 'suffer' on a dive boat in beautiful tropical seas while waiting for us? I say, 'suck it up,' be responsible and work on improving your limitations. As for 'blistering sun' and rough topside seas, that's what appropriate sunscreen and motion sickness medications are for."

Diving with Reef Divers at Little Cayman, Lenny Zwik (Austin TX) thought all was perfect, except the limits on dive times: 50 minutes for the first of a two-tank dive trip, and 60 minutes for the second. "This is ridiculous, as any competent diver who can manage his or her air supply can dive a profile of 80 to 100 feet for well over an hour, given that the majority of diving in Little Cayman is wall diving that ends in 25 to 40 feet of water.

There are a few extreme examples of dive-time-limit requests. Paul Salembier (Ottawa, Ontario), diving with Lahaina Divers on Maui four years

ago, was shocked when he and his wife were asked to surface at only 35 minutes, because the other (inexperienced) divers had used up all their air. "I simply shook my head and pointed to the area of the reef where we would be finishing our dive," he wrote. "The divemaster seemed to recognize the ridiculousness of his request, since he nodded and then surfaced with the rest of the group."

One suggestion from Raymond Haddad (Candiac, Quebec): "The divemasters should ask those who are excellent on air consumption to get ready early and get into the water as soon as the boat arrives at the site."

Of course, there may be a very good reason for limiting dive times. Strong or divergent currents can make finding surfacing divers over a wide range of timespans difficult. Michael Hofman (San Francisco, CA) reminds us that in French Polynesia they adhere to the French approach, which includes strictly regulated dive times and depths, and having all the divers stay together in a group. "At the southern end of Fakarava, where seeing the masses of sharks was astounding, we only stayed down for 50 minutes."

To someone who is diving the passes of the Tua Motus, those rules are obvious. They offer high-voltage diving with masses of sharks drawn there by immensely strong currents flowing into the lagoons. If divers became separated by time or distance, finding them when they surfaced might be a problem. So before making a judgment, find out why there might be a moratorium on longer dive times. It might not be just because the dive center is catering to inexperienced divers.

When all is said and done, I don't recommend you stay down until you have sucked your tank dry. There is no obligation, either, to return with only 750 psi. Some return with more. You're not paying for the air so much for as the total experience.

At the same time, it can be quite harrowing for the responsible dive guides when a minority of divers stays down a significant amount of time more than the bulk of their customers. There's always the worry something untoward might

happen. Alex Bryant of the Emperor Fleet in the Maldives, known for very strong currents, says dive times are limited to 60 minutes, and it's rare that people are capable of abusing that.

Find out in advance if there are time limits, which you may not like, or even an absence of time limits that might be equally annoying for some. As Michael Braunstein (Las Vegas, NV) wrote, "Everyone should be aware of rules ahead of time."

I'll finish with this point made by Jim Schoenick (San Diego, CA). "Because operators who do not set limits often mention this in their marketing, or it's highlighted in reviews, I believe it's incumbent on the diver to know what type of boat they've selected."

It's all about managing expectations -- the dive-master managing those for everyone on the boat, and you for managing yours for an overall great dive trip.

-- John Bantin

Suunto Finally Settles Its Lawsuit

the results may benefit owners of its dive computers

How many divers look at a computer display without really understanding what it means? Do they usually understand the difference when a computer switches from remaining no-deco-stop time to minimum ascent time? Similarly, that diver blindly following guidance from a computer might not realize the information displayed is full of errors. Even if nothing happens to the person on his dive, the manufacturer is automatically at fault for putting that diver at risk -- and even more at fault for failing to publicly disclose the errors.

That's the premise of a class action lawsuit filed by Ralph Huntzinger, from San Diego, CA, in May 2015 against Aqua Lung America. He claimed that some Suunto dive computers it distributed in North America could malfunction, and the inaccurate information they gave could be life-threatening (we first wrote about it in our August 2015 issue). Apparently, the computer defect was so prevalent that the ordinary two-year warranty for Suunto computers was extended to five years for problems related to self-diving, incorrect depth readings, tank pressure and temperature -- but Aqua Lung didn't publicly state that it had extended the warranty.

Huntzinger had bought a Suunto Cobra 3 from the Leisure Pro website in May 2013, but, as he said

in his lawsuit, had he known it was unsafe or unfit, he would not have purchased it or used it.

Aqua Lung struck back in July 2015, filing a motion to dismiss Huntzinger's case. Their reasoning: Huntzinger never said his Cobra 3 malfunctioned, nor was it ever serviced or replaced by Aqua Lung. Because he alleged no direct injury, his complaint should have been dismissed on this basis alone.

Was this a frivolous lawsuit? After all, he'd purchased the Cobra computer but never suffered any harm using it. Suunto (its products are no longer distributed by AquaLung America) later tried to dismiss the suit, contending that Huntzinger had not sustained an injury, and his belief that he could not rely on his Cobra computer was nothing more than a hypothetical injury that might have only happened if his device ever malfunctioned.

The U.S. District Court didn't buy that argument. In December 2015, a judge in San Diego denied Aqua Lung's bid to dismiss, finding that, despite Huntzinger never experiencing problems with his own dive computer, he had standing to bring the case because he never would have bought a \$700 computer if he'd known about the defects. The judge

said Huntzinger had sufficiently alleged that Aqua Lung was aware of the defects but did not disclose them “while continuing to market and distribute the dive computers.” He upheld the plaintiff’s right to pursue the case.

Earlier this year, we asked Huntzinger’s attorney, Tim Blood, partner of San Diego law firm Blood Hurst & O’Reardon, what they wanted to achieve. “The lawsuit seeks a number of different forms of relief,” he wrote. “It seeks refunds on behalf of all purchasers, and an injunction requiring the defendants to warn all users of the problems with the dive computers to ensure no one relies on them.”

Suunto finally agreed in August to a settlement that affects many of its customers. If you purchased a Suunto dive computer between 2006 and 2018, the proposed settlement provides for a free inspection, repair or replacement program to determine if your dive computer has a faulty depth pressure sensor. If it does, you can opt for a repair or a free replacement. The settlement also reimburses certain costs to qualifying customers. For a full list of models included in the settlement, and choices of action for Suunto computer owners, go to www.suuntodivecomputersettlement.com

Blood, Huntzinger’s attorney, said he and his clients are very happy with the settlement. “We are the most proud of the educational and outreach aspect of the settlement. With this, class members (and divers with other brands of equipment) will be educated about the limits of dive computers, how to spot problems before they become life threatening, and, for Suunto dive computer owners, what to do when a problem is suspected.”

We contacted Suunto, but the company is staying tight-lipped and didn’t respond to us.

If you own a Suunto computer, take it back to a Suunto dealer for a checkup every year or two -- because the depth pressure sensor should be checked every time a qualified technician changes the battery (normally bi-annually), properly maintained units should automatically get that free inspection.

Scubapro Steps Up

In response to our campaign to eliminate single-use plastic in packaging dive products, Scubapro contacted *Undercurrent* to explain what the company is doing about it.

Joe Stella, who runs the Scubapro brand for its owner, Johnson Outdoors, told us that starting next year, the dive gear manufacturer plans for all its snorkels and small dive accessories to be supplied in cartons, cotton shopping bags or recycled polypropylene. Fins will be shipped in either cardboard boxes or reusable bags. BCs will be supplied in boxes. And masks will no longer be packed in plastic bags inside their reusable plastic boxes.

To its credit, Scubapro started putting many of its smaller accessories in eco-minded cardboard boxes in 2017. Boots and gloves are supplied in reusable fabric bags, and regulators in cartons that can be reused or recycled.

Stella pointed out that in 2012, Scubapro was the first to introduce X-Foam, a limestone-based neoprene, for its wetsuits, together with solvent-free glue and dope-dyed yarn. Black carbon from recycled tires is imported into the neoprene to improve quality and aging.

Those moves look promising. Let’s now hear from other manufacturers.

Details of the current U.S. warranty for Suunto dive computers are at www.suunto.com/en-us/Support/Warranty-information/Sports-Watches-Dive-Computers-and-Precision-instruments

Regardless of the dive computer model you own, there are a few actions you should take to ensure it runs smoothly and error-free. Because a computer’s depth sensors are often blocked by a build-up of salt crystals, we recommend rinsing it in fresh water and gently scrubbing it with a toothbrush after each use.

-- John Bantin

Flotsam & Jetsam

Update on Post-Tsunami Sulawesi. Dive resorts in Manado, Bunaken and Lembeh are 650 miles away from Palu, scene of the devastating earthquake and tsunami last month, so they’re unaffected. However, Mount Soputan, in North Sulawesi, erupted on October 3, sending a plume

of ash 12,000 feet into the air; flights into Manado are not affected as of press time. If you wish to donate money to the relief aid, Americares, which is sending humanitarian aid to Sulawesi, is a good option (www.americares.org/worldwide).

Want Some of Our Old Issues? Many of you will recall that *Undercurrent* used to be sent out as a hard copy. Reader Lori Southard has got copies of issues dating back many years and is offering

them up for sale. If you are interested in this historic collection, contact her at ljsouthard@gmail.com

Hugyfot Pitches the Plastic. No more single-use packaging for this camera maker. The parts currently made from plastic will be replaced by 3D printed parts by 2020. The material will be made out of formic acid, which is entirely biodegradable. With this move, Hugyfot joins Mission 2020, a dive community project aimed at eliminating single-use plastic in product packaging by 2020 (www.mission2020.org)

There's Plastic and Then There's Plastic. Reader Bill Van Antwerp (Los Angeles, CA) writes, "In your recent tips, you suggest that glass is better than plastic for magnification. Simply not true. Water has an index of refraction of 1.33, while crown glass has an index of 1.52 and polycarbonate has an index of 1.58. This means a polycarbonate magnifier will magnify a bit more than a glass one while in water."

Sargassum Weed Reaches Mexico. Massive rafts of weed that have floated in and piled up on the beaches of Caribbean islands (see our July issue about this) have reached the Yucatán Peninsula. However, Isla Mujeres, famous for whale shark encounters, has been spared, due to the way currents flow, says Jim Silver, owner of Aqua Adventures Eco Diving. Farther south in Cozumel, dive guide Paulo Maçarico says sargassum has had little effect on the diving, because most gets blown over to Playa del Carmen.

A Florida Dive Gone Wrong. After two divers went missing last month during a dive on the RJ Thompson, near Tarpon Springs, FL, local law enforcement and the Coast Guard searched more than 1,700 nautical miles of the Gulf of Mexico before finding them. Michael Pavlich spent seven hours in the water, five miles southeast of the wreck. Terry Hayes was spotted nearly a day later, 12 miles farther away. Hayes kept his BC on to give

him flotation, and he drank rainwater he collected with his mask. He was finally spotted by means of his surface marker buoy.

Update on Hawaii's Fish Trade. We wrote last month about Rene Umberger, director of For the Fishes, and how the Hawaii Supreme Court agreed with her claim that the impact of the aquarium trade on the state's reefs was not being properly documented. She writes us about good and bad news since the ruling. "Because Hawaii's government is sidestepping the spirit and intent of the court opinion, we're reaching out to [aquarium] suppliers and having great success. eBay has agreed to prevent the aquarium trade from selling Hawaii's marine life on its website."

Diving and Dehydration. About the article we did on this topic in last month's issue, Neal Pollock, research chair in hyperbaric and diving medicine at Laval University in Quebec, would like to add that although reasonable hydration is important for dives, excess hydration carries its own risks -- it can increase a diver's susceptibility to immersion pulmonary edema (IPE), when fluid leaks from the bloodstream into air sacs in the lungs and can lead to heart failure or other cardiac problems. IPE, which causes rapid shortness of breath, coughing and sometimes blood-tinged sputum, resembles drowning, but the fluid comes from within the body rather than from inhaling water.

Send Us Your Reader Reports. We're preparing for the 2018 edition of the *Travelin' Diver's Chapbook*, and we need your reports to make it chock-full. Send us reviews of dive operators, liveaboards and resorts you've visited this year by filling out our online form at <https://goo.gl/bacmCT>. Also follow the link "File a Report" on the left side of our homepage (www.undercurrent.org) or after logging in, follow the "Reader Report" link in the top navigation bar. Thanks for telling us about the good and bad dive travel experiences out there.

undercurrent

Undercurrent is the online consumer newsletter for sport divers that reviews scuba destinations and equipment. We accept no advertisements and have been published monthly since 1975.

Letters to the Editor/Submissions

EditorBenD@undercurrent.org

Editorial Staff

Ben Davison, Publisher and Editor
John Bantin, Senior Editor
Dave Eagleray, Webmaster

Contact Us Call: 415-289-0501

Go to: www.undercurrent.org/UCnow/contact.shtml

or write: Undercurrent
3020 Bridgeway, #102
Sausalito, CA 94965

www.undercurrent.org