

undercurrent

The Private, Exclusive Guide for Serious Divers

October 2007

Vol. 22, No. 10

Bruce Bowker's Carib Inn, Bonaire

IN THIS ISSUE:

| | |
|---|----|
| Carib Inn, Bonaire..... | 1 |
| Car Rental Insurance..... | 3 |
| Thumbs Down: AquaCat . 4 | |
| Indonesian Liveboard Update..... | 5 |
| Dive Boat Fiascos..... | 6 |
| Readers' Travel Reports .. | 7 |
| Diver's Death Due to Few Skills, Faulty Valve | 7 |
| Disabled Diver Sues DAN and Coast Guard..... | 8 |
| Divers as Hazards..... | 9 |
| New Advice for Divers in Rip Currents..... | 10 |
| Is Diving Eco-Friendly?.. | 11 |
| Breathing Exercises for Longer Dive Time..... | 12 |
| Underwater Photo Tips from the Pros | 14 |
| Dive Pioneers Tell All ... | 15 |
| Flotsam and Jetsam | 16 |

www.undercurrent.org

Editorial Office:

Ben Davison
Publisher and Editor
Undercurrent
3020 Bridgeway, Suite 102
Sausalito, CA 94965
BenDavison@undercurrent.org

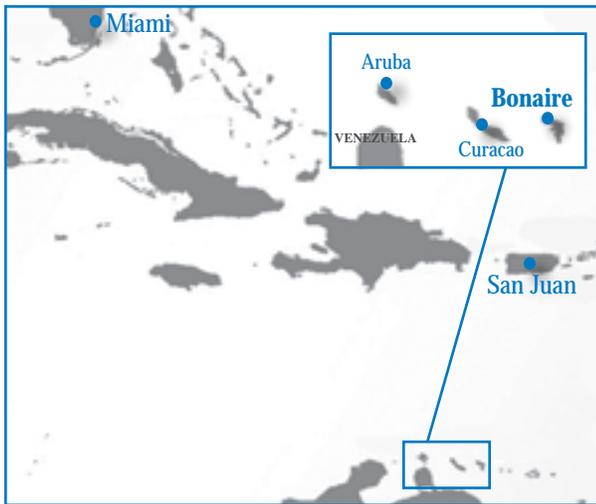
hard to book, but heaven for hardcore divers

Dear Reader:

Bonaire's semi-arid climate makes for great visibility, and its reefs are shallow and full of life. The Reef Environmental Educational Foundation (REEF) lists eight of North America's top 10 sites for species richness in Bonaire. Another bonus: Bonaire lies far south of the Caribbean's hurricane belt, so it was spared any effects of recent hurricanes Dean and Felix. The last hurricane it felt was Lenny in 1999. Waves hitting the western side for 12 hours destroyed the charming restaurant and dive shop that stood over the water at Sand Dollar Condominium Resort, my usual haunt. The government became restrictive about structures built over water so Sand Dollar wasn't permitted to rebuild on the old site. My new choice would be the Carib Inn.

With years of diving under my belt, I felt worthy of becoming a guest. That's because this small, no-frills resort caters strictly to hardcore divers. Bowker, Bonaire's first full-time dive instructor back in 1973, worked for Captain Don, then founded the Carib Inn in 1980 and is legendary among serious divers. His staff gives excellent service but also leaves divers to do as they please. That's why the Carib Inn, just south of downtown Kralendijk, has an average occupancy rate of 90 percent and the highest return guest percentage in Bonaire. It's so hard to get a reservation that even return guests must book a year ahead of time.

As a first-time visitor last June, I got a brief diving orientation after checking in. Unescorted by a divemaster, I did the official checkout dive on the Inn's house reef. The white, sandy bottom spread out gently, scattered with nautical debris, including a mix of rusted anchors from different decades. Reef squid hovered in groups, while a small octopus was out and about. I also saw three spotted morays, a goldentail and a sharptail moray. When I placed my hand in front of Pederson cleaner shrimp, they soon hopped on to do a manicure. During my night dives, a large green moray, 24 inches around at the neck, basked in



shallow water, and on afternoon dives an eagle ray put on lengthy shows.

In my mind, "resort" conjures up images of pools, bars, restaurants and long lists of guest activities. Not the Carib Inn. It has a freshwater pool, but no restaurant or bar. However, the Divi Flamingo Beach Resort and Casino have such amenities. There are only 10 units, each containing a refrigerator and microwave, and eight have kitchens. Rooms are basic but air-conditioned, clean and comfortable. I stayed in Unit 3, near the pool, with tile floors and a full kitchen. Two twin beds could be pushed together, and the day bed quickly became an equipment bench. The bathroom was small and needed more ventilation but had a nice-sized shower. I gladly paid the additional \$10 daily charge to run the

air-conditioning when not in the room because it couldn't cool the room quickly after being switched off. Free wi-fi Internet access around the pool also worked well in my room. During my week, the guests were American hardcore divers, with the exception of a young Dutch couple. I met a couple enjoying their 27th visit to the resort.

All divers are required to pay a \$25 annual fee to dive in the Bonaire National Marine Park and receive a tag to place on their BCs. At Angel City in the south, a ranger politely asked to see my tags. Part of a double reef system, Angel City had a easy beach entry, although like all the southern entries, there are many chunks of sharp ironshore in the sand interspersed with slick rocks that can cut and trip divers when waves come in. The two reefs merged just south of the mooring buoy anchored in the sand and were filled with large boulder star coral and multiple schools of school-masters, creole wrasses, blue tangs and bold trumpet fish. Several juvenile spotted drums posed for pictures. While I was told to expect large schools of horse-eyed jacks, I never saw any here or at any other site.

I dived Alice in Wonderland, south of Angel City, three times. On the south end is a canal bringing seawater to the solar salt farm that made a good entry point to go in geared up and avoid the slick rock. It was a long swim to the inner reef but worth it to see colorful boulder star coral, brain coral and tube sponges. Rainbow anemones contained Pederson, squat and spotted cleaner shrimp, often in the same anemone. Five flamingo tongues clung to one gorgonian. Large schools of Creole wrasses and blue tangs were common, as well as hinds and graysbys. I have never seen so many lettuce leaf slugs; one was the size of a small lime.

The Carib Inn made diving easy. I was assigned a number to hold space on the dive boats that also corresponded with a numbered tank. There was a signup board for after-hours tanks, and extra tanks for shore divers were always available day and night. After each dive, I returned my tank to be refilled. Because I went shore diving, I didn't interact much with the staff; they left me alone unless I asked for something and then were friendly and helpful. Multi-day fill packages were also offered but there was no need to purchase one in advance. At the end of my stay, staff looked at my total fills and gave me the package that equaled the best possible deal.

Bruce Bowker's Carib Inn

| | |
|-------------------------------|-------|
| Diving (<i>experienced</i>) | ★★★★★ |
| Diving (<i>beginners</i>) | ★★★★★ |
| Snorkeling | ★★★ |
| Accommodations | ★★★ |
| Restaurant Food | ★★★★★ |
| Service and Attitude | ★★★★★ |
| Money's Worth | ★★★★★ |

★ = poor ★★★★★ = excellent
Caribbean Scale

The dive shop is a full-service facility stocked with high-end equipment for sale and rent. My dive buddy had a regulator problem, and Bowker worked on it twice without charge. He was unable to solve the problem but when my friend asked for a rental, Bowker explained that the regulator wouldn't pose safety concerns during the week, and he was right. Nitrox was expensive -- fills were \$15 each or \$179 for six days of unlimited fills (by comparison, the Aggressor boats charge \$100 for the week). But Bowker says he doesn't think Nitrox is worth the cost when doing two to three dives daily with huge surface intervals.

Two dive boats went out promptly at 8:30 a.m. and 1:30 p.m. daily for one-tank dives. Boat diving was handled the same way as tank rental -- interested divers could place their number on the sign-up board by the tank fill room. Like the Inn itself, the boats were clean, basic, fiberglass boats powered by large outboards, with large ladders making for easy exits from the water. Boat dives were \$15 each, with the best package deal calculated at trip's end. However, only one boat was in use each day and it was never full. With 60 dive sites on Bonaire's western side alone, shore diving never got boring.

There were no currents and most dive sights were shallow with no real reason to go below 60 feet. Visibility ranged from 75 to 100 feet. I was thrilled to find Bonaire's reefs beautiful with zero bleaching. The water temperature ranged from 78 to 81 degrees, while day temperatures were slightly higher.

The Hilma Hooker wreck was a favorite dive site. North of Angel City, the 235-foot freighter sits on her starboard side in 95 feet at the beginning of the double reef, and the top of the wreck is at 50 feet. It's covered with encrusting sponges, tube and stove pipe sponges, wire coral and orange cup corals. The hull was a favorite nesting place for sergeant majors and I found lots of shrimps. Garden eels and one large stingray lounged in front of the wreck while surrounding it were schools of black durgons, yellowtail snapper and an ocean triggerfish. As Bonaire's most

A Good Reason for Car Rental Insurance

After diving in Bonaire, *Undercurrent* subscriber Beverly Leo wanted to pass on this warning: Beware of car-rental companies trying to take advantage if you've passed on their collision-damage waiver (CDW). "It seems some have a ripoff scheme by claiming renters are damaging their vehicles. Without complete photographic evidence, the dispute goes on and on, and the renter has to either leave the credit card charge open or close the account, signing off on the additional charges."

Divers renting cars in Bonaire are ideal targets. Because the red-eye lands while still dark, the car rental person goes with a flashlight to mark dents and scratches on the paperwork. When you return the car in the daytime, voila, there's supposedly a new dent. That's what happened to the man standing in front of Leo at Budget Car Rental. "He had taken photos of the sides of the rental truck, but he photographed them in the early morning and didn't photograph the front or rear. He said the Budget employee had written down the areas of the car which he had photographed, but the dent they claimed he caused was on the unphotographed region of the vehicle. That caused us to photograph the entirety of our vehicle and when we returned our car, it was without incident."

It doesn't end with the car rental agency -- then you have to dispute the claim with your credit card company. Many credit card issuers weasel out of CDW claims, citing fine print regarding exceptions. For example, some credit cards that offer CDWs only cover basic car rentals and don't include upgrades such as SUVs or trucks, which many Bonaire divers use. Also, it doesn't extend to car rentals in many countries including Australia, New Zealand and Jamaica.

"Personally, I always purchase the CDW from the car rental company, even though it's expensive and usually unnecessary," writes Wendy Perrin, consumer news editor for *Condé Nast Traveler*. "I know that if I do have an accident, I'm in for a time-consuming headache to ensure my credit card company pays the claim. I've had to stop my trip for half a day to get a credit card rep on the phone, get a police report, take the car to the garage and wait for a damage estimate. I prefer to pay extra for the peace of mind knowing I can walk away free and clear if I damage the car."

If you're reluctant to pay extra, check with your card company to see if they offer a CDW and if so, exactly what it covers. Ask if it provides for the "loss of use" the rental car company will charge if you damage the car. If you're not fully covered, most rental companies charge \$8 to \$11 per day for CDW. Yes it's pricey but if you're diving overseas and/or renting a four-wheel drive to cart your gear around, it's worth it.

Thumbs Down: AquaCat

After *Undercurrent* subscriber Henry C. Campbell (Tacoma, WA) attended the Dive Equipment Manufacturers Association conference in 2006, dive operator AquaCat Cruises sent him a flyer, offering a special discount on a Bahamas cruise with its Blackbeard's Cruises division. The regular retail rate was \$1,995 per person but because Campbell was a dive professional, he was offered a spot for \$1,095. Then he found out about the \$300 gratuity he was supposed to pay in advance.

An AquaCat agent contacted him after he had booked, stating prepaid tips for crew were mandatory. Campbell said no thanks and canceled. "They never said up front how much the tip was," he says. "Then they e-mail later saying I have to pay the tip ahead of time. Why don't they just say the trip is \$1,385?"

AquaCat Cruises does not mandate pre-paid tips on regular-priced cruises, but does so for the discounted cruises

offered to dive professionals, charging them 15 percent of the non-discounted trip price. "We have learned that people tend to base their crew gratuity on the price they pay rather than on the value of the trip," says spokesperson Beth Olivera. "For this reason, we require all non-revenue or reduced-priced passengers to prepay the tip based on 15 percent of the trip value. In the liveboard industry, crews rely heavily on gratuity for income and if tips are based on this lower amount, employees are the ones who suffer." Olivera says this fact was listed on the flyer Campbell received.

AquaCat's required tip came to 30 percent of the price, and that rubbed Campbell the wrong way, just as it did us. Maybe it's just a matter of semantics. Why not just charge \$1,385 and say gratuities are included? Or charge \$1,195 and add a 15 percent service charge? Either way would be a lot more customer-friendly than demanding a tip – what one should give after they get good service – in advance.



popular dive site, it's crowded with boats each morning so I arrived in the late morning or early afternoon to have it to myself for a shore dive.

As beautiful as the southern reefs were, the northern reefs were more so. The most difficult part was access. From Kralendijk north is a cliff coast broken up by the occasional small rock beach, making getting in and out with dive gear a challenge. Oil Slick Leap was a popular site, as much for the well-placed ladder as the healthy reef. The ladder descends 10 feet down a sharp ironshore cliff, with large clusters of orange cup corals underneath rocks at the bottom. The reef top starts almost immediately from shore at 30 feet, sloping steeply to give the appearance of a small wall. The reefs were dense with soft coral, large black sea rods, sea plumes, even some staghorn coral that was common on Bonaire before Lenny struck. A hawksbill turtle allowed me to swim with him for as long as I wished.

Eating in Bonaire was as enjoyable as the diving -- I didn't have a bad meal. Can't-miss restaurants are Richard's Waterfront Dining and Carpaccio. Richard's is a block south of the Carib Inn. The large, covered terrace made a great dining atmosphere and the bar a great place for a drink beforehand. Steaks and pasta were on the menu but with such fresh fish, expertly prepared in light sauces, it was hard to order anything else. Capriccio specializes in Northern Italian cuisine with less cream and more olive oil. The extensive wine cellar is considered one of the Caribbean's finest. Entrees ranged from brick-oven pizza and simple pastas to osso bucco and filet mignon. A lobster pasta in a light olive oil and cheese sauce, followed by tiramisu, transported me to Italy.

To get to dive sites, my group rented three Mazda BT50s from A-B car rental at Flamingo Airport. Reservations were made in the U.S. by phone and everything went smoothly. The trucks were a little beat up but ran fine with good air-conditioning. A-B trucks' wooden tank holders bolted onto the truck beds could hold nine tanks and kept them from rolling around and damaging gear. We returned our trucks dirty but undamaged and our deposit was returned. However, in the return line before me was a man being charged for a truck dent marked as pre-existing on his rental form.

Returning to The Carib Inn after an afternoon of shore diving, I found a notice with directions to a turtle nest hatching on the island's south side. Such is the way Carib Inn does business. Bowker's staff measure their tenure not in months but years of employment, and he made time to talk to anyone wanting to chat about diving, the

island or anything else. That makes booking a room difficult during the peak winter dive season. Reservations are already open for 2009, and regulars are quick to snatch up their favorite rooms.

While Bonaire is not the place to see pelagics or large schools of game fish, it's hard to find anywhere that has its combination of healthy reefs, easy dives, clear water, large schools of reef fish, shrimps and every type of eel found in the Caribbean. I got this on every dive. There are many places to stay but for serious divers desiring a peaceful place where they're left alone and free to dive as they please, the Carib Inn is unbeatable.

--D.W.



Diver's Compass: Carib Inn rates start at \$99 per night for poolside units without kitchens to \$159 for a three-bedroom house, and these rates are not per person but per unit . . . The Inn's Web site has a "Last Minute Openings" page . . . A \$125 non-refundable deposit holds any unit for a one-week stay and, unlike every dive resort I've visited, the remainder of charges weren't due until check-out; the five flight-delayed members of my group weren't charged for the missed day . . . The basic charge was \$12 per day for one tank, weights and belts; \$5 for each additional air fill per day . . . My A-B rental

truck was \$374 for the week, with a \$100 deposit. . . A Continental red-eye flight in January costs approximately \$800 from either Houston or Newark; Delta Airlines plans to start nonstops from Atlanta on February 9 . . . Departure tax is US\$32 . . . U.S. dollars and major credit cards are widely accepted . . . The hyperbaric chamber is next door to the hospital . . . Web site: www.caribinn.com.

Indonesian Liveboard Update

what boats are coming, going, disappointing and enchanting

There's been upheaval within the Indonesian liveboard community during the past 18 months. As many divers know, some of the world's most biodiverse underwater sites are now being dived in the Raja Ampat islands, just west of Papua (formerly called Irian Jaya), so Western Indonesia continues to attract attention with the recent arrival of quality liveboards.

The Aggressor fleet pulled their venerable *Truk Aggressor* from that popular Micronesia atoll and relocated it to Sulawesi in 2005. The *North Sulawesi Aggressor* draws mixed reviews, mostly due to the preponderance of muck diving with little else offered to divers not content to stare into a macro lens for a week (see the travel review in our February 2007 issue). "You need to stick close to a guide, but they were very good at finding things," says *Undercurrent* subscriber Ralph Baker (Las Vegas, NV), who went on the *Aggressor* last August. "Also, you must wait your turn and give everyone a chance to see the fish. That works for very small groups, not so well otherwise."

Peter Hughes will launch a massive new vessel to begin service there and in a wider operating sphere starting this April. The *Paradise Dancer* is still under construction but ultimately will measure 180 feet in length to be one of the largest liveboards in the world. It will feature cabins that are 60 percent larger than competitors, and a luxury suite called "Master and

Commander" will set a new standard of luxury. *Paradise Dancer* will accommodate 18 passengers for 11-night itineraries. (www.peterhughesdiving.com)

Peter Hughes' Paradise Dancer will be one of the world's largest liveboards

Worth noting is the departure of the *Adventure Komodo* diesel catamaran made popular by divemaster Larry Smith. Tragically, Smith passed away last March and things went swiftly downhill for the vessel after that. As we reported in the June 2007 issue, customers were initially advised that it would be "business as usual" only to find out the vessel had been sold with no replacement. Its Australian owner Steve Jacobs played "rope-a-dope" for months with individuals and group leaders trying in vain to recover their deposits and pre-paid trips. Only after litigation was threatened did the refunds finally materialize.

Another operation did an abrupt turnabout when ownership changed. The popular Kararu Dive Voyages had an excellent reputation thanks to owner Tony Rhodes who helped

Dive Boat Fiascos

After movies like *Open Water* and *The Perfect Storm*, you'd think all dive boats would tighten up their safety measures, but there are still a few that make stupid mistakes – with divers paying the price.

In August, two British divers were abandoned off Antigua for five hours after dive crew from Sandals Grande Antigua Resort failed to notice they were missing. The two drifted for miles from Cades Reef after the group left the site for lunch without them. The 11 other divers and three crew continued to dive elsewhere in the afternoon without noticing they were gone. Their disappearance was discovered only when their wives asked for them when the boat arrived back at the dock, and they were rescued just at the verge of drowning. Sandals fired four staff but later reportedly reinstated two of them and refused to comment.

The *M/V Kingfisher*, a Thai liveaboard based in Phuket, was carrying 55 divers and four crew in early September when it sank a mile from Phi Phi Island, killing one diver and injuring two. Near the end of the dive trip, Captain Suriyan Soison, 34, saw a storm approaching and called the divers back to the boat but it was too late. On the way back to Ton Sai Bay, the *Kingfisher* was hit by big waves, and started taking on water while making a turn near an island. The boat started sinking quickly, forcing everyone into the water. Nearby boats rescued all passengers except for Israeli diver Nissim Lugasi, 26, who got trapped under the boat and drowned. Adam Berbichevsky, 23, also from Israel, had his legs nearly severed by the boat's propeller. Soison has been charged with reckless manslaughter and faces 10 years in prison. Summer is Thailand's low season because conditions in the Andaman Sea are often hazardous, but despite warnings to shut down operations during off-season, many Phuket-based dive boats still offer trips.

refine Komodo Islands service. He then expanded to other regions including Raja Ampat, the Banda Islands and the infamous Gunung Api, home to thousands of free-swimming sea snakes. Rhodes made a bold decision to acquire a Norwegian commercial ship called *Voyager*, with plans to extensively renovate it and replace his wooden Pinisi-style motorsailer with the twin-diesel steel ship. But he got into disagreements with his two partners, finally opting to sell out to them in April 2006, and now concentrates on developing tourist properties and resorts in Bali. The ship was never properly refit, had a long list of mechanical and operational failures, and finally was retired in June.

Kararu re-introduced the *Voyager* as a chartered motorsailer, but *Undercurrent* reader Steven Levin (Arlington, VA), who sailed on it last August, says things have not improved. "The

bathroom area was smelly and moldy, and hot water was unavailable most of the time. Cabin lighting is poor. Because the compressors are at the front, exhaust drifts over the entire boat. The food was marginal, and "hot" breakfasts were cooked hours before being served."

Two new liveaboards provide some good news. The *Seven Seas* started operation in 2006 and is nearly the size of the upcoming *Paradise Dancer*, housing up to 20 divers. Reports from divers have been excellent and renowned IMAX filmmaker Howard Hall selected it as his base for a lengthy upcoming film project expedition in the fall of 2008. One of the owners is a nephew of Australian dive pioneers Valerie and Ron Taylor so its pedigree is well established. Veteran captain Stewart Esposito, formerly of the Aggressor fleet, is aboard from fall to spring and brings with him a wealth of experience and an engaging personality. E-mail *Seven Seas* partner Jos Pet at sevenseasexpeditions@gmail.com. (www.sevenseas.net)

The newest startup comes from an experienced couple that used to run the diving operation at Kararu. Alberto Rieja and Olga Spoelstra spent three years honing their expertise with Tony Rhodes. They teamed up with Spanish nautical engineer Txus Reiriz to build the 120-foot *Seahorse*, a comfortable ship in the Pinisi motorsailer style, that recently began service. *Seahorse* has six standard cabins with twin beds, two deluxe cabins with queen beds and an extra twin berth, and a grand master cabin with a king bed and single that can serve as a couch. The deluxe and master cabins have their own television/DVD systems. All cabins have private heads and showers en suite.

One reader report suggests caution. Michael Bode (Braunschweig, Germany) went on the *Seahorse* last April for a dive trip led by renowned guide Graham Abbott and while he enjoyed the trip, he was not impressed with the crew. "They were fighting among themselves, and there was a lot of fluctuation – people left all the time and replacements couldn't be found. The chef left with us in Sorong. At Triton Bay, the skipper realized he didn't have enough fuel to reach all the dive sites Abbott had scheduled so we were forced to skip all the first-class sites in the area." Hopefully, these problems were resolved after the maiden voyages. For more details, e-mail olgaalberto@hotmail.com. (www.indocruises.com)

The *Ocean Rover*, Fantasea Divers' boat currently cruising Thailand and Myanmar, is coming to North Sulawesi next summer. Fantasea Divers' Jeroen Deknatel got an offer he couldn't refuse from some Indonesia-based dive operators that plans to move it to Manado. Starting June 28, the *Ocean Rover* will cruise to Lembah Strait, the Sangihe Archipelago and Raja Ampat. Deknatel says he will stay with the boat "until the new owners are comfortable in their new role." (www.ocean-rover.com)

– Ben Davison

Belize, Palau, South Carolina and More

dive operator charges 50% cancellation for bad weather

Undercurrent subscribers have been sending reports of their spring and summer trips, from Fiji to Florida. Some had excellent dive service and accommodations, others not so great. Here's an assortment of diver feedback from the Caribbean, Pacific, even the Cooper River in South Carolina. Stay tuned for the hardbound version of all reader reports in the 2008 *Travelin' Divers' Chapbook*, coming at year's end.

Sun Dancer II in Belize. Previous *Chapbook* reviews have mentioned this boat's problems with choice of dive sites, unfilled tanks and restricted dive times, but Greg and Pat White (Cobden, IL) say those issues were nonexistent during their March trip. As light breathers, the Whites were always the last ones back but crew never indicated a problem. "Our tanks were always refilled before we got our wetsuits off, and warm towels and back rubs were waiting for us after every dive." They were impressed with the focus on safety. "We began the first night with an abandon ship drill and thorough explanation of safety features and procedures." Pat, a nurse, and other medical professionals onboard were shown the location of medical supplies and asked if they would assist in a medical emergency. Food and service were excellent. The only drawback was a tight schedule to fit in five dives per day. "Because dinner is a sit-down affair, everyone must be there on time, leaving hardly any time for a shower after the last afternoon dive. But this was the only way it could work to finish the night dive at a reasonable hour." (www.peterhughes.com)

Seahorse Dive Shop in Placencia. Seahorse Dive Shop takes divers to Gladden Spit, the Belizean atoll known for its whale sharks, but according to Todd Shannon (Mississauga, ON), Seahorse should not be known for good customer service.

"Sea Horse upped the fee to enter Gladden Spit from \$10 to \$15. They charge 50 percent for canceled dive days due to bad weather and since you pay in advance, you're stuck." Luckily he only encountered heavy wind on his trip last May but the long boat rides were uncomfortable, doubly so because of staff's unfriendly attitudes. Pick another dive operator for the trip to the Spit.

Fantasy Island in Roatan. This resort has been considered a good all-inclusive deal, but divers who visited this year say the Fantasy was a big disappointment. "Three of the four compressors were down while we were there in May," say John and Marilyn Walker (Castro Valley, CA). "Coco View resort had to fill Fantasy Island tanks but they sometimes filled short, probably to service their own guests." Nitrox was in shorter supply and frequently short in oxygen levels. "Since their sniffer was unreliable, we couldn't be sure what the real measurement was, especially since so much else was in poor condition." David Pax (Portland, OR), also there during the compressor shutdown, says his dive boat broke down after exchanging tanks at Coco View and had to be towed back to the dock. "The dive operation is only good for beginners," says James Filmore (Post Falls, ID). "They had 15 to 18 divers per boat, with one divemaster. The boat goes back to the marina after each dive so it doesn't go far and diving gets very repetitive." "From the rush to get a locker and wait in line for weights with 100 other divers to rusty ladders with rungs missing, it was a disappointment," says Liz Morini (Plymouth, MA).

Resort facilities seem to be deteriorating. "The air-conditioning unit for the room upstairs dripped onto my A/C unit, providing a form of water torture that maintenance couldn't

Diver's Death Blamed on Few Skills and Faulty Valve

Inexperience coupled with a faulty valve led to a diver's death during a Canadian diving trip two years ago, say coroners in British Columbia. Ronald John McKindsey had 20 dives under his belt and an Open Water certification when he went with a local diving club in May 2005 for his first ocean dive.

According to the coroner's report, he completed one dive in the morning at Denman Island, in British Columbia's Strait of Georgia. Despite not feeling well at lunch, he went back for an afternoon trip. Shortly after getting in the water, McKindsey surfaced in obvious distress, then sank before others could reach him. He was found a few days later in 65 feet of water.

The coroner's report states that McKindsey's second stage regulator was turned to its highest setting. "This level would have required severe physical breathing effort," said the report. That led to McKindsey suffering severe coronary atherosclerosis, resulting in sudden cardiac arrest.

The coroners also put blame on the certifiers. "The entire process from being a non-diver to an advanced open water diver (as McKindsey was) can be accomplished in under a week," coroner Kerry J. Clarke stated. "It was suggested in the inquest that the term 'advanced' is misleading and leads to a perception by new holders of the certification that their skills are greater than reality. This can lead to new divers putting themselves in positions beyond their ability, leading to potential serious consequences."

fix,” says Pax. “My bathtub drained poorly and some public toilets didn’t flush very effectively.” “Saggy mattresses, and the tub and toilet were painted white, making them look dirty,” says Mornini. “If I wanted a remote control for the TV, I had to leave a \$20 deposit at reception. Ditto with beach towels.” The heated pool had an ineffective filter, resulting in cloudy water and a bottom coated with sand and dirt. The buffet is abundant but flies crawled on the food, say the Walkers. “Our room had a notice that tap water isn’t potable, but filtered water is supplied by a single refrigerated pitcher filled by the housekeeper from a jug. Not all rooms had the notice in it so many people probably drank and brushed their teeth using tap water.”

Starfish Enterprise in South Florida. Many divers say diving in Florida’s Palm Beach waters is superior to the Keys. Petra Israel (Annapolis, MD) writes, “When I hit the water here, just a half-mile offshore from Lantana, I was amazed to be descending to a ‘real’ Florida dive site.” Visibility was better at 50 to 75 feet and the reef was “prolific” with multiple photo ops. “While I didn’t spot the turtles and dolphins generally in the area, I wasn’t disappointed by the array and variety of marine life.” Israel gave thumbs up to Starfish Enterprise’s Captain Craig and his 34-foot Crusader with plenty of gear space. She was allowed to drift dive her own profile and coast leisurely

over healthy coral and sponges. The best part: “You can’t beat the price. My only expenses were airfare on Southwest for \$87 roundtrip and \$57 for two tanks.” (www.idivestarfish.com)

Fossil Hunting in South Carolina. Fossil hunters should dive the Cooper River, says Edward Noga. “It’s like going to a museum where you’re allowed to take the exhibits home.” Shark’s teeth, from the megalodon to great whites and makos, and prehistoric animal fossils are the main lure, and divers are guaranteed to find something. On a May trip with Cooper River Diving, Nago gathered fossilized teeth and other goodies like pre-Columbian arrow points and Colonial-age whiskey bottles. The diving is shallow, 18 to 25 feet, with occasional holes of 45 feet but it’s not for beginners. “It’s black water, clean but dark, and the current is ripping at times. If you’re afraid of the dark and alligators, pass on it.” Noga praises the “powerful” boat and captain John Cercopely. “He knows the river well and is good company.” (www.cooperriverdiving.com)

Being Gracious Divers. Besides offering good diving, the *Fiji Aggressor* also gives guests a chance to mingle with the locals. Edie and John Sumney (Carbondale, IL) enjoyed a kava ceremony and dancing at a village on Magogi Island in 2006. They kept up correspondence with the schoolchildren they met, so on their return trip last June, they came bearing gifts. “We

Disabled Diver Sues DAN and Coast Guard for Negligence

In May 2005, Timothy Hogan was making his second dive at 122 feet off Tampa Bay when his vision went blurry. He ignored the symptoms when he looked at his dive computer and saw he had seven minutes to surface safely. Hogan had speared a seven-pound mangrove snapper that he wanted to reel in. So he stayed where he was, despite the flashes of light he saw when he blinked.

Big mistake. Hogan’s symptoms worsened back on the boat, as tingling in his toes rose into his legs. The boat captain called Divers Alert Network’s emergency hotline and a Coast Guard rescue helicopter was dispatched. But Hogan didn’t reach the hospital until five hours later and despite 11 treatments in a hyperbaric chamber, he is now paralyzed from the waist down. Doctors say too much pressure on his lungs caused a gas embolism in his arteries, damaging his spinal cord beyond repair.

Last March, Hogan filed a civil lawsuit against DAN and the Coast Guard, stating they mismanaged his rescue by leaving him waiting while he lost all feeling in his legs. His lawsuit stated that while the Coast Guard is not required to rescue divers, “when it does so voluntarily, it assumes the duty to perform such rescues with reasonable skill.” Hogan also says he would have avoided injury if the helicopter had not gotten lost on the way to his boat, and the time lapse caused his paralysis. DAN decided to settle, and its official statement is: “Divers Alert Network made no admission of negligence, liability or fault in this case. Mr. Hogan agreed to respond to

inquiries that DAN responded promptly and appropriately to his emergency request for medical assistance.”

Other injured divers have tried to sue the Coast Guard without luck, and Federal law does not require the agency to rescue scuba divers. In 2004, another disabled Florida diver sued the Coast Guard, contending he could have avoided injury if it had provided him with emergency care on its rescue boat. The Coast Guard argued that under federal law it has broad discretion to decide if and how it provides emergency help to divers. Florida’s Federal district court ruled for the Coast Guard and despite the diver’s appeals, the Supreme Court refused to hear the case.

But a month before trial, the Coast Guard agreed to mediation and settled with Hogan for a confidential sum. “Divers do indeed have recourse against the government if it fails to use reasonable care in a rescue,” Hogan’s attorney Matthew Mudano told *Undercurrent*. “Although there are certain restrictions on suits against the United States, it is held to a standard of reasonable conduct just like a private entity.”

But he cautioned that divers need to be prepared for a long, expensive battle. “Most cases against the government are expensive and time consuming. Unless the injury is severe, it may not be economically feasible to pursue the case. In Mr. Hogan’s case, he is completely disabled, and will face a lifetime of debt and medical bills.”

brought a new Toshiba laptop computer complete with a special package of *National Geographic* back issues up to the year 2000. The children gathered around John as he showed them how to use it, and the chief graciously accepted the gift on behalf of the school and village. "We like how *Aggressor* brings guests there to help support villagers' efforts to improve economically and share their culture." (www.aggressor.com)

A Better Way to Reach Palau. Michael Hofman (San Francisco, CA) found a cheaper route to Palau. "We flew through Manila on Continental Micronesia, which is a good alternative to the Guam-Honolulu trip," he said. "Fish N' Fins arranged our fare on the Manila-Koror legs for a good price,

making the trip about \$500 less than it would be through Guam." Fish N' Fins' Web site says it can get divers a special Continental Micronesia round-trip fare from Manila to Palau, a three-hour flight, for \$475, compared to the regular rate of \$760. A November round-trip airfare on Philippines Airlines from Los Angeles (a 17-hour outbound flight including a stop in Guam, nonstop returning on a 12-hour flight) was recently priced at \$916, for a total of \$1,391. From San Francisco, the same trip cost \$996, totaling \$1,471. The cheapest online rate we found for a Los Angeles-Honolulu-Guam-Palau flight, averaging 19 hours each way, was \$2,047.

When Divers Become Hazards

buddies, trip leaders, even divemasters as potential risks

We all know about driving defensively, but one must dive defensively as well. You see, other divers in the water can sometimes be hazards. To learn what kind of dangers they can pose, we asked our subscribers via e-mail to describe any experiences they had when divers may have personally caused them risk.

Perhaps most surprising were the number of cases involving trip leaders, divemasters and instructors who didn't do their jobs properly. They show we can't always trust our leaders.

Dominic Sansone (Charlotte, NC) says his life was put in danger by a dive shop owner giving him training. "He decided that for my openwater drysuit dives, I didn't need to wear the 'rock boots' that go over the footies in the poorly-fitted dry suit I rented." At 60 feet, Sansone's fin straps slipped off the back of his ankles. The air in his suit immediately went to his feet and he began an uncontrolled ascent. Due to poor visibility, the instructor had no idea where he had gone and searched the bottom for a few minutes before surfacing to find Sansone floating and luckily unharmed. "I later found out my drysuit had an emergency dump valve to vent air immediately. I wish I had known that beforehand." The dive shop is no longer in business.

Michael Hofman (San Francisco, CA) didn't feel appreciated on his dive trip in Cuba when the boat crew gave him and his dive buddy, a novice, too-challenging dives. "The divemaster wanted to take us through a chimney at 90 feet. My buddy kept following the divemaster down and down. When we got below 100 feet, I started trying to catch up to them." Finally at 165 feet, Francisco got ahold of his buddy and pointed to his depth gauge. They then rose slowly and did the safety stops. "The divemaster didn't say anything. We really had the feeling they were trying to get rid of two Americans."

Robert Clarke (St. Albert, Alberta) also had a Cuban horror story while on board the *Halcyon* off the island's west coast.

"On one dive, I was at six feet, videotaping the sharks doing lazy circles around us. All of a sudden, they became excited." One shark struck him in the back of the head, then another struck the right video light of his camera and carried off the reflector. A large shark clamped its jaws over his video camera and tried to pull it away but when Clarke held onto it and hit the shark's nose with his other hand, the shark let go and swam away. More sharks were coming so he dropped to 20 feet. "When I looked up, I saw pieces of fish floating in the water near where I had been moments before. When I returned to the boat, I discovered the trip leader had thrown fish in the water just behind my head, hoping this would give better closeups of the sharks. It sure did - the videocamera was still rolling when the shark bit it so I have some very scary footage of the inside of a shark's mouth."

Diane Gedymin (Brooklyn, NY) was diving at a popular Grand Cayman resort that had a policy of all divers descending and ascending simultaneously. "We all descended and I immediately saw a photo shot and patiently waited for a small critter to reemerge from the coral. We must have been down for 10 minutes when the divemaster, also the manager of the dive operation, yanked my regulator out of my mouth with no warning. I was doing nothing wrong and did not anticipate such an early ascent so of course I wasn't looking at the group from the back of my head." Gedymin swallowed some water but calmly used her octopus before she could retrieve her primary second stage from the out-of-control divemaster. "Apparently, he had acted similarly to other divers so when I surfaced, there was close to a riot on board. And for no reason because there was no emergency."

Carl Schulz (St. Louis, MO) was in the Western Caribbean with a dive buddy who had new camera gear, and their divemaster was trying to find photo ops for him. "On one dive, we had some ripping current. Suddenly, I realized that I was

alone. My buddy and the divemaster had stopped behind a coral head to take some pictures and by the time I realized they had stopped, I had traveled some distance.” Schulz tried to get back to them but the current was hard to fight and he started breathing heavily. He finally grabbed rocks on the bottom, made it over to them, then hung onto a rock and concentrated on getting his breathing and heart rate back to normal. “The most surprising thing was that neither of them had looked up the entire time it took me to get back to where they were, about 50 yards and almost 15 minutes. I was already at 500 dpi but

when I gave them the up signal, they both looked at me like I was crazy.” The safety stop was also a challenge because of the current, but Schulz’s buddy and the divemaster aborted it and went straight up to the boat, once again leaving him in the water alone. “That’s when I decided that on my next dive I would make sure there was at least one other person diving who wasn’t a photographer.”

Of course, this last case is an example of a diver rightfully expecting that his group leader will be there for him when he needs it, but that’s often not the case. Schultz is right to

New Advice for Divers Caught in Rip Currents

The standard advice to shore divers about escaping a rip current, sometimes wrongly called an undertow, has been doled out for decades: Swim parallel to the shore. Yet rips remain a real danger. In the U.S. alone they contribute to 100 drownings a year, and there’s no end to the anxiety a diver faces if caught in one.

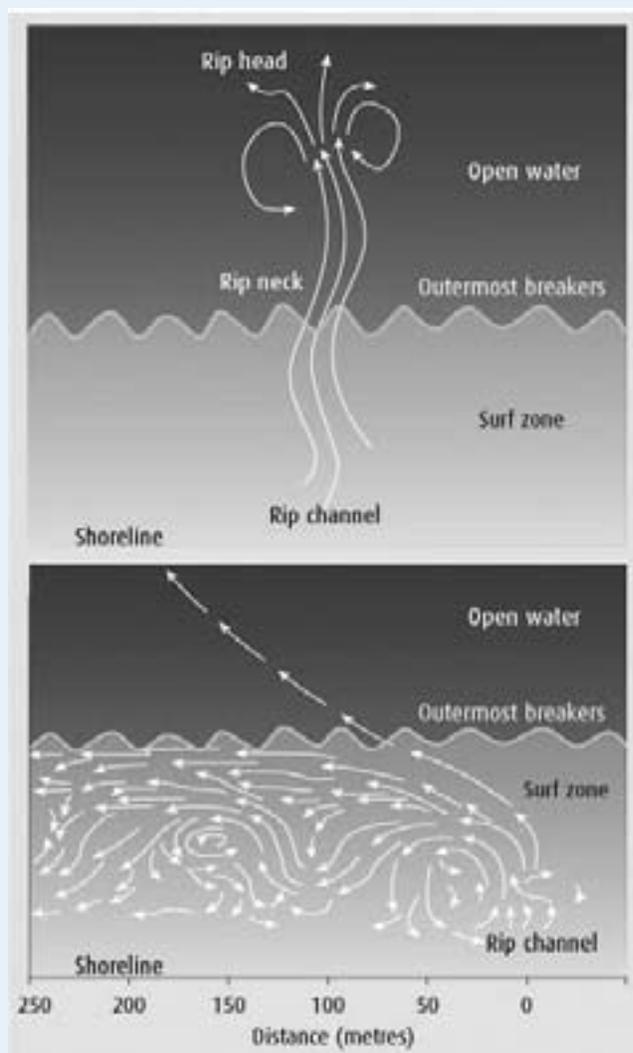
Oceanographers have little first-hand experience with rip currents, so a research team led by Tim Stanton and Jamie MacMahan spent a month on the beach studying rips. They even swam directly into the rip, then relaxed and waited to see where they would end up. Conventional wisdom was that a rip was like a straight-sided river gushing out to sea for hundreds of feet, eventually petering out in a floret of small eddies called the rip head. But the researchers found that rip currents can drag objects nearly a half of a mile from shore at speeds of up to 500 feet per minute – fast enough to overpower the strongest of swimmers. They are especially common on sandy beaches, where waves approach at right angles, and sheltered beaches because the headlands diffract arriving waves in just the right way.

The team released GPS-equipped drifters into the waves. They bobbed close to shore for a few minutes, then, one by one, slipped into the rip current. Thirty seconds later, they were 300 feet from shore. Shortly before the surf zone gave way to open water, the drifters turned sharply to the left and then doubled back on themselves. Caught in a rip that looks less like a river than a whirlpool, a swimmer who heads parallel to shore won’t necessarily get out of the current. Rips can pulse from sluggish to fierce in the blink of an eye.

The best way to escape a rip may be to rely on the eddies to sweep you back into shallow water. To demonstrate, MacMahan floated into the rip. After heading out nearly to the breakers, he swept southward, parallel to the beach. Not long afterwards, he was back in the shallows. He had been in the rip for four minutes. Had MacMahan battled the current, he might have stayed in place for a minute or two before the rip exhausted him. Then he would have been in real danger, as breaking waves made it hard to catch his breath without choking. Instead, the current carried him safely back home.

It won’t always work, but remember it the next time you feel the pull of the ocean. It might just save your life.

A version of this article appeared in the magazine New Scientist.



Rip currents were once seen as simple torrents of water surging through the surf zone into open water (top image). That model is now being challenged by real measurements (bottom image).

recognize that photographers and divemasters working for them are the worst buddies. But if a diver gets buddied up in that situation, he's got to take responsibility to hang close by since the photographer's subject is obviously far more important than other divers in the water.

We also received word of several incidents where a diver tried to help another diver in distress, resulting in a serious increase in risk. One case came from Watt Hinson (Bay City, TX) during a dive at Cozumel's Las Palmas reef. At 55 feet, he saw another diver's tank slipping out of her BC bands. She removed her BC and in doing so dropped a small, cheap camera that floated down current. The diver then dumped her regulator and swam for the camera but because her BC was weight integrated, she immediately became positively buoyant. "I was

able to grab her fin and pass her my primary second stage. Because she was so buoyant, I was unable to hold her on the bottom so we both made an uncontrolled ascent. Fortunately, we didn't sustain injury."

Finally, Paul Gmelch (Amelia Island, FL), though not at risk himself, told us of a dive buddy who was the proverbial accident waiting to happen. "On a recent dive trip, he stopped taking his blood pressure medication, and dove with a dead battery on his wireless transmitter, hence no pressure gauge. On the next dive, he hit his tank on the boat deck while entering and became an inattentive diver with a new camera in his hand. Lastly, while getting out of the water, he gave his fins and camera to the boathand, then fell back in. Enough?" So divers, if there's one lesson to be learned here, it's to dive defensively.

Calculate Your Carbon Fin-Print

Can you go diving and still be eco-friendly?

How eco-friendly is diving? Sure, we love the sea and its creatures, and we want to support healthy coral reefs, but we humans are big contributors to global warming and that's killing the reefs. Considering what goes into a dive trip, are we the best stewards of the environment?

We take advantage of cheap flights to dive in exotic locations, but air travel is the biggest contributor to carbon emissions. The gear we use is manufactured in Third World countries with poor environmental records, then shipped half way around the world. Airplanes annually produce about 3.5 percent of the world's human-generated carbon dioxide, the greenhouse gas most responsible for climate change. Jet travel, combined with emissions from cars and factories, are major contributors to global warming and rising seas. And the dive boats we ride in burn gallons galore of fuel.

That's leading some concerned citizens – and divers – to determine their "carbon footprint," using Internet calculators to determine their share of travel- and home-based carbon-dioxide emissions, then paying to "offset" the damage they help create by sending money to organizations that reduce greenhouse gases. Still to be determined is whether carbon offsets will truly help the environment or merely salve the consciences of people who don't want to give up big cars, jet travel and air-conditioning at the touch of a button.

But some dive businesses, recognizing that healthy oceans are integral to profits, are taking steps to reduce their carbon emissions, or paying to offset their carbon footprints.

Explorer Ventures, which has five liveboards, claims it's the first "carbon neutral" fleet. CEO Clay McCardell said his staff analyzed how much carbon dioxide they emitted through

boat diesel burned, utility bills, even employee commutes. Then they calculated what it would cost to offset those emissions, and paid that amount to NativeEnergy, a carbon-offset marketer that funds renewable energy projects. McCardell says he's gotten flack from some in the dive industry about carbon credit purchases. "We couldn't find anything that directly affects the marine environment but we are looking for projects that have a more direct environment. The bottom line: It can't hurt and it can very possibly help." Among other liveboard fleets, Aggressor plans to upgrade to more energy-efficient engines while Peter Hughes is testing biofuel.

Explorer Ventures claims it's the first "carbon neutral" fleet

Eco-dive tour operator Beautiful Oceans is thinking of charging divers an extra fee for the carbon offset of their flights and dives, and sending that money to Sustainable Travel International to fund emission-reducing projects. Ocean First Divers, a dive shop in Boulder, Colorado, added a carbon calculator to its Web site so customers can see the dollar figure on carbon credits from their dive travels. Ocean First asks them to buy credits for their emissions to fund renewable energy programs. Owner Graham Casden says he's still deciding whether credits from his sponsored dive trips should be paid by customers, Ocean First, or in a 50/50 split.

Dive Key West upgraded its boat engines to be more fuel efficient. "Our fuel savings is \$35 per engine, and the engines don't smoke," says owner Bob Holston. "We're also

trying to get biodiesel but the typical order must be in hundreds of gallons.”

It also trickles down to dive clubs. The Holborn Dive Club in London asks members to travel together to dive sites, participate in at least one marine survey annually, and forge long-term relationships in overseas diving destinations by funding or participating in environmental initiatives for that country.

Holston is on the board of the Marine Sanctuary Program, which is working with dive organizations and the U.S. government to create a sustainable-practices program for educating dive shops and divers. The program will debut at DEMA’s annual trade show in November. “The U.S. is not as far along as Europe in sustainable practices,” Holston says. “But unless we take care of the environment, our industry will disappear.”

Should You Fund Trees, Energy or Iron Dust?

Many organizations offer online “carbon calculators” – you can calculate your emissions from flying, driving and daily routines, and cleanse your environmental sins by paying for your emissions with a mouse click.

Sustainable Travel International, a carbon-offsetting middleman, is working with dive operators and shops to install carbon calculators on their Web sites and create diver-education pro-

grams. “We’re seeing the industry starting to embrace action, but we’ve only talked to a fraction of the dive businesses so far,” says STI president Brian Mullis. They’re either building the cost of carbon offsets into their pricing or allowing divers to voluntarily participate. “We encourage them to inform customers that it’s clearly in divers’ and the industry’s best interests to take a pro-active stance to global change.”

One STI client is Dive Frontiers in Grand Cayman, which created a carbon-offset calculator specifically for dive travel. “Besides air and land travel, it also calculates energy consumption on a per-dive basis,” says Steve Broadbelt, Dive Frontiers’ co-founder. It created the calculator by monitoring boat fuel and comparing it to how many dives were made and tanks were filled, then looking at its electricity and water consumption. For example, the calculator figures that a couple of divers on a round-trip flight from New York to Grand Cayman are responsible for the emission of 5.76 tons of carbon dioxide, while 14 dives during a one-week-trip generate an additional 0.26 tons. To compensate for all the carbon generated during their diving vacation, the conscientious couple could donate \$91.80 to carbon-offset projects.

“What surprised me was how inexpensive credits are, based on the cost of an average trip,” says Broadbelt. “Ten dives

Breathing Exercises For Longer Dive Time

Last April, we reported a study about divers doing certain breathing exercises for 30 minutes daily that increased their dive time by 66 percent and decreased their underwater breathing frequency by 23 percent. Many readers, tired of burning through tanks too fast, asked us to describe those exercises, but unfortunately they can’t be replicated at home. “We tested them on a specially built machine, but it’s not available for purchase,” lead researcher Claes E.G. Lundgren told *Undercurrent*. “And if you try to breathe as intensively for 30 minutes while sitting at home, you’ll just get very dizzy.”

But there are simple ways to expand your breathing capacity. First, you must change the entire way you breathe, says Michael Grant White, founder of the Optimal Breathing School in Charlotte, North Carolina, and a diver. “Most people inhale only using their chest muscles, which wastes a lot of the oxygen. You need to breathe with your whole body.”

Breathing with your belly and strengthening your diaphragm are key, he told *Undercurrent*. “You must train your diaphragm to push more air out on the exhale, otherwise you won’t inhale the needed volume of air into your lungs. Your belly must expand on exhalation and relax during inhalation so the diaphragm can move downward with less force and less energy expenditure.” This will help you breath slower too and pump blood more efficiently.

One of White’s exercises to build up the diaphragm is the “Squeeze and Breathe.” Sit up straight near the edge of a hard chair with feet flat on the floor. Relax your jaw and stomach. Place your thumbs over your kidneys and wrap your fingers around your sides toward your belly button as if you were getting a grip on your love handles. Squeeze fingers and thumbs together gently but firmly. Then inhale through your nose in a deep three-second breath, using the force to widen your fingers and thumbs against their attempt to stay tensely closed. Then relax your grip and, keeping your belly stomach relaxed, slow down your exhale so it lasts seven seconds. Gradually work up to 20 counts of a three-count inhalation and a seven-count exhalation.

You can also turn to Dennis Lewis’s *Tao of Natural Breathing*, a book with diaphragm-building exercises. But forget breathing machines, with names like PowerLung and SportsBreathe. Experts say they’re no good for building up the diaphragm. And pumping iron won’t do the trick. “Bodybuilding actually restricts lung capacity because it builds up the external muscles around the diaphragm, giving it less room to expand,” says White.

A few minutes a day building up deep-diaphragm breathing can increase underwater time by minutes. White says divers have it better than land-based athletes. “Because most of a diver’s exertion is done in a gravity-free environment, he can have greater lung capacity than a Mr. Universe.”

only cost \$3.” His dive calculator is available for all dive businesses to use by paying STI an annual \$200 fee. Although Dive Frontiers doesn’t charge offset fees to divers upfront, it may reevaluate. “We’re not getting any negative feedback, but it is more of a mindset issue to get divers to change their minds.”

Buying offsets may assuage guilt, but does it work? The answer is “maybe.” According to Ricardo Bayon, director of green research firm Ecosystem Marketplace, “There are no widely accepted standards for what qualifies as an offset. Almost anyone can sell you anything and claim it will make you carbon neutral.”

Take tree plantations, which accounts for most voluntary offset money. Trees will reabsorb carbon only gradually, in decades. Even successful trees die, rot and yield their carbon. So the result is not negating the emission but timeshifting it. Rather than staying in the atmosphere through this century, that ton of offset carbon will just inhabit the next.

Then there’s just-plain-crazy projects. American company Planktos Inc. wants to dump 45 tons of iron dust near the Galapagos Islands. It says iron will stimulate growth of phytoplankton, which would absorb large amounts of carbon dioxide. Planktos will then sell carbon credits from the iron dump to companies. The U.S. Environmental Protection Agency, the Galapagos National Park and worldwide environmentalists say it would lead to toxic algae blooms and choke off the ocean’s oxygen supply. Greenpeace plans to send an interceptor ship to block Planktos’s vessel.

A good alternative is green energy projects like wind turbines and solar panels. “Funding these is better than forests because it stops pollution rather than contributing to it later, and you’re contributing to a wider move away from fossil fuels,” says Bayon.

Boats Dive into the Green

On liveboards, fuel consumption varies based on engine type, boat speed, even weather conditions. Climate Care estimates a small dive boat taking 10 divers out for a day’s diving uses 18 gallons of fuel, equaling \$1.85 per diver. A larger liveboard uses seven gallons per hour steaming at seven knots, and two gallons per hour while idling at the site. That calculates to 24 gallons, or \$3 per diver per day. New high-speed catamaran-style dive boats may double this amount. The energy used to fill an individual tank is marginal. Carbon Care estimates \$3 for every 100 fills. Nitrox and trimixes fills are \$7 for every 100 fills.

Earl Meador, operations manager for the Aggressor fleet, wants to install the most fuel-efficient engines recommended by the EPA. The big issue is fuel availability at various ports. “Some eco-engines won’t operate with high-sulfur fuels, but some countries, like those in Central America, have a high sulfur content in theirs.”

The Peter Hughes operation says its *Sky Dancer* in the Galapagos received kudos from Smart Voyager, a sustainable

tourism certifier in South America, for eco-friendly handling of liquid and solid waste, and gas emissions. Larry Speaker, Hughes’ vice president, says its *Star Dancer* in Papua New Guinea now runs on palm oil instead of diesel fuel. But reflecting the contradictions of eco-friendly practices, palm oil is now called an eco-nightmare fire by environmentalists because demand for it is causing the clearing of huge tracts of Southeast Asian rainforest and the overuse of chemical fertilizer.

Boat fleets want to be green but say large vessels have a harder time. “There’s no affordable alternative to burning fuel, and divers expect air-conditioning, compressed air and the power to charge their electronics, so we’re limited based on what we can do,” says McCardell.

So what does “think globally, act locally” mean for divers? You’re not going to give up diving or stop traveling to do so. Therefore, it’s a question of minimizing environmental impact and offsetting the damage. Check some carbon calculators before your next dive trip, evaluate credit marketers to find an honorable one, and consider contributing money to offset your fumes. Another bonus: Your contributions may be tax-deductible.

-- Vanessa Richardson

Statement of ownership, management, and circulation, as required by U.S. Postal Service 39 U.S.C.3685:1. Title of publication: Undercurrent. 2. Publication number: 1095-1555. 3. Date of Filing: October 1, 2007. 4. Frequency of Issue: Monthly, with the Nov/Dec. issue being the book-sized annual dive guide. 5. Number of issues published annually: 11. 6. Annual subscription price: \$99.00. 7. Complete mailing address of known office of publication: Undercurrent, 3020 Bridgeway, Suite 102, Sausalito, CA 94965. 8. Complete mailing address of the headquarters of general business offices of the publisher: Undercurrent, 3020 Bridgeway, Suite 102, Sausalito, CA 94965. 9. Full names and complete mailing address publisher and editor: Ben Davison, Publisher and Editor, 3020 Bridgeway, Suite 102, Sausalito, CA 94965. 10. Owner: Undercurrent, a non-profit corporation, 3020 Bridgeway, Suite 102, Sausalito, CA 94965. 11. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities: None. 12. Tax Status: Nonprofit. 13. Publication title: Undercurrent. 14. Issue date for circulation data below: January 2006. 15. Extent and nature of circulation: A. Total number of copies (net press run): Average number of copies each issue during preceding 12 months: 11,000. Actual number of copies of single issue published nearest to filing date: 11,000. B. Paid and/or requested circulation: 10,500. Mail subscription outside county (paid and requested): Average number of copies each issue during preceding 12 months: 10,500. Actual number of copies of single issue published nearest to filing date: 10,500. 2. Mail subscription inside county (paid and requested): Average number of copies each issue during preceding 12 months: none. Actual number of copies of single issue published nearest to filing date: none. 3. Sales through dealers and carriers, street vendors and counter sales: none. Average number of copies each issue during preceding 12 months: none. Actual number of copies of single issue published nearest to filing date: none. 4. Other classes mailed through the USPS: Average number of copies each issue during preceding 12 months: none. Actual number of copies of single issue published nearest to filing date: none. C. Total paid and/or requested circulation: Average number of copies each issue during preceding 12 months: 10,500. Actual number of copies of single issue published nearest to filing date: 10,500. D. Free distribution by mail (samples, complimentary, and other free copies): 1. Outside-county: Average number of copies each issue during preceding 12 months: 44. Actual number of copies of single issue published nearest to filing date: 44. 2. In-county: Average number of copies each issue during preceding 12 months: none. Actual number of copies of single issue published nearest to filing date: none. 3. Other classes: not applicable. E. Free distribution outside the mail: none. F. Total free distribution: Average number of copies each issue during preceding 12 months: 44. Actual number of copies of single issue published nearest to filing date: 44. G. Total distribution: Average number of copies each issue during preceding 12 months: 10,500. Actual number of copies of single issue published nearest to filing date: 10,500. H. Copies not distributed: Average number of copies each issue during preceding 12 months: 456. Actual number of copies of single issue published nearest to filing date: 456. I. Total: Average number of copies each issue during preceding 12 months: 11,000. Actual number of copies of single issue published nearest to filing date: 11,000. J. Percent paid and/or requested circulation: Average number of copies each issue during preceding 12 months: 99%. Actual number of copies of single issue published nearest to filing date: 99%. 16. Publication of Statement of Ownership: October 2007. I certify that the statements made by me above are correct and complete. Ben Davison, Publisher.

Underwater Photo Tips From the Pros: Part I

Cathy Church, David Doubilet and Martin Edge give advice

Should you use one strobe or two? What's the best way to turn a fish into your photo subject? Famous underwater photographers Cathy Church, David Doubilet and Martin Edge give their advice and share their favorite places to dive. Next issue, we'll feature Burt Jones, Maurine Shimlock, Brian Skerry and Norbert Wu.

Cathy Church

Church conducts photography classes at Grand Cayman's Sunset Beach Hotel and is considered one of the best teachers on the subject. Church has authored five books on photo techniques and her latest, *My Underwater Photo Journey*, is for sale on our Web site.

Recommended gear: Some may prefer a point-and-shoot system, others may want manual control in a compact digital, while others may want a single-lens reflex (SLR) camera. So defining the ideal camera must start with the shooter's needs. For a manual compact digital, I prefer the Olympus SP350, and for SLR the Nikon D200 and D2x in Subal housings. For the point and shoot, there are several Olympus systems and even the SeaLife with a wide-angle lens.

How to better use your camera: Get a versatile strobe arm, such as the UltraLight, if you want to vary your lighting. This type of arm is for the diver who is comfortable in the water and wants to improve his style. For any camera, if there is a wide-angle lens available, add it to your system.

A technique to perfect: Blurry photos are from too much movement or too slow a shutter speed. Master your balance and buoyancy because that is the most important part of getting great photos underwater. You can't compose, adjust strobe angles and analyze your results if you are kicking, falling over and scaring your subject away.

Most common no-no: Shooting from too far away. You should take a photo, get closer and take another, and then get closer yet until either you can't fit the subject into your picture area or the subject leaves. If the fish stays still, move in and shoot just the eye, but keep getting closer.

Recommended photo book: Rather than reading, come visit me in Grand Cayman, and I or my instructors will take you through the process from beginning to end. But *My Underwater Photo Journey* not only shows many of my favorite photos, but a link on my Web site also offers readers a free photo lesson for each image in the book.

Favorite dive sites: The Caymans continually surprise me. During a photo class with a snorkeling student, the water was rough where I usually go. We went inside the barrier reef on the south side, where it is just grass with a small wreck. There was a beautiful flying gurnard on the sand, a fabulous photo op. The shallow water around the wreck provided a new setting I

didn't know even existed in my own backyard. For liveboards, I recommend the *Bilikiki* in the Solomon Islands.

Web site: www.cathychurch.com

David Doubilet

One of the world's most renowned underwater photographers, Doubilet has shot mostly for *National Geographic* since 1971 and is now a Contributing Photographer-in-Residence there. He has authored seven books on the sea and is a member of the International Diving Hall of Fame.

Recommended gear: I shoot Nikon and always have. I now shoot the Nikon D2X and D200 models in SeaCam housings and Nexus Housings. But it's a matter of preference and budget.

How to use your camera: Shoot topside to get a feel for the latitude of the camera and lens system before taking it underwater. Know the controls like you know your car.

A technique to perfect: Experiment and try everything. Digital is good because if you fail, you can delete and move on. Shoot, shoot, shoot. Shoot what you like because you will invest the most energy in that subject and get the best results.

Most common no-no: Finding yourself locked into one angle and shooting the same frame over and over. Move around and look at the situation from a different perspective.

Recommended photo book: I actually recommend others' books. Howard Hall and Brian Skerry have a good book called *Successful Underwater Photography*. There's also Michael Aw's *Essential Guide to Digital Underwater Photography*. My latest work, on Raja Ampat, appears in the September issue of *National Geographic*.

Favorite dive sites: If you like muck creatures, go to Lembeh Strait and work with Ecodivers at Kungkungan Bay Resort. If you like remote reefs bursting with life and challenging currents, visit Max Ammer in Raja Ampat at Papua Diving. If you like weird, wonderful and temperate, get to Tasmania.

Web site: www.daviddoubilet.com

Martin Edge

A prodigy of Jim Church, Edge has taught underwater photography for 20 years. The recent third edition of his classic *The Underwater Photographer Digital and Traditional Techniques* is available on our Web site. Edge is based in Bournemouth, England.

Recommended gear: Ask yourself to what extent you want to do photography. Some may buy the most basic camera because they're beginners only to find they can't add flash or supplementary lenses. Don't buy a low-end camera if you know you want to pursue this obsessive hobby. If you start by buying cheap and then upgrade, you'll waste money.

How to use your camera: If you want to take more than

happy snaps, you need a close-up facility, something that will act like a macro lens or supplementary lens for closeups, and wide-angle lenses for magazine-worthy blue water shots. Regarding flash guns, start with only one to learn its effects and what it will do so when you add a second flash gun, you'll know the difference it makes to the mood in a photo.

Techniques to perfect: I just returned from Truk and trying to avoid backscatter in the murky waters was one of my biggest challenges ever. The trick when shooting in silt or sediment with SLR housing is to get flash guns as far back behind the housing as you can. For wide-angle shots, position the flash gun behind one of the shade constructions on the camera's top and side to minimize backscatter. Many amateurs with digital cameras don't correct their mistakes while they're underwater. I always make a habit of building 10 minutes into every photo dive to check the LCD screen for mistakes that should be corrected before resurfacing. Once you're back on board, the

opportunity is gone.

Most common no-no: Shooting down or at eye level at your subjects. It is the most comfortable position for divers but it separates amateur shots from pro shots. A spear fisherman told me you should always approach a fish from below. If you come down on a fish too close, you'll spook it but if you get down below it and swim upward, it'll be more comfortable with you. Try to come up to its level, then shoot from slightly below.

Recommended photo book: My book has a big chapter on the mindset to have underwater. Amateurs pop shots while diving, but photographers are always looking for photo opportunities like landscape photographers always look for good light.

Favorite dive sites: My favorite liveaboard in recent years was the *Odyssey* in Truk Lagoon. For resorts, Captain Don's in Bonaire and Kungkungan Bay Resort in Sulawesi.

Web site: www.edgeunderwaterphotography.com

Diving Pioneers and Innovators Tell All In New Book

Industry veteran and *Undercurrent* contributor Bret Gilliam's newest book is *Diving Pioneers & Innovators*, in-depth interviews with 20 people who helped make diving what it is today. These luminaries talk in length and depth about their careers, opening up in a way they rarely have before in print. Notables include now-deceased *Jaws* author Peter Benchley; Oceanic founder Bob Hollis; History Channel's featured wreck diver John Chatterton; shark-diving pioneers Ron and Valerie Taylor; and Emmy Award-winning filmmaker Stan Waterman, who wrote the book's foreword.

Gilliam conducted insightful conversations over the span of a decade, asking questions never asked before. The results: Great anecdotes and thorough details of diving's history. It's like relaxing on the back of a dive boat while listening to a fellow diver tell tales, except they come from an MVP who influenced the overall culture of diving

"It took me six minutes to get down to the bottom," says Chatterton about his famous 1991 dive off the New Jersey coast. "I saw an angled hatch, very prominent, very much a unique feature. I'm at 230 feet and my mind is racing, and I think I know what this is. I look inside the hatch and I see torpedoes." He gives more details about being the first diver to set eyes on the *U-Who*, an unidentified German U-boat from WWII that lay undiscovered for nearly 50 years.

Australian couple Ron and Valerie Taylor describe their friendly pet tiger shark at Coralita Pass and their scariest shark dives. Benchley talks about clashing with Steven Spielberg over *Jaws*, and his first experience with a great white. Hollis reveals how "dumpster diving" helped him beat rival ScubaPro in a deal, and what it was like to be the first diver to enter the wreck of the *Andrea Doria*. Waterman explains how a Japanese mask inspired his 50-plus-year

career, and what Nick Nolte and Jacqueline Bissett were like as dive students during filming of *The Deep*.

Besides being a time capsule of diving's oral history, *Diving Pioneers & Innovators* is filled with full-color photographs of each interviewee throughout their careers. At 496 pages, the hardcover 8 x11-inch book weighs in at eight pounds.

To order, go to www.undercurrent.org and click on the homepage icon. The price is \$60, plus \$10 shipping and handling. California residents, add \$5.10 sales tax. You can also order by calling *Undercurrent* at (800) 326-1896.



Flotsam and Jetsam

Smitty Leaves Sea Eye. Algrove “Smitty” Smith, the popular divemaster at Sea Eye Diving in the Turks and Caicos, has left after nine years to start his own dive operation, called Grand Turk Diving, and is now constructing his new shop. To find out when it will be open, e-mail Smitty at DukeofDiving@hotmail.com

Gator Eats Snorkeler’s Arm. While snorkeling in South Carolina’s Lake Moultrie last month, Bill Hedden, 59, had his arm ripped off at the shoulder by an 11-foot, 550-pound alligator. He stumbled to shore and luckily was found by some picnicking nurses who iced his wound and kept him conscious. Wildlife officials shot the alligator, found Hedden’s arm in its belly and rushed it to the hospital in a cooler, but doctors were unable to re-attach it.

Medical Help Needed in Roatan. Between dives at Sueno del Mar last May, *Undercurrent* reader and dentist Bill Edell (Lake Oswego, OR) volunteered his services at La Clinica Esperanza, a new hospital run by nurse and missionary Peggy Strange that gives low-cost and free healthcare to Roatan residents. “The clinic is better stocked with

instruments and equipment than other places I have volunteered,” says Edell. “I worked alongside many dedicated people visiting Roatan to do volunteer health care, the patients were appreciative, the staff friendly and helpful. I recommend dentists, hygienists, doctors and nurses who enjoy great diving and want a rewarding experience to consider volunteering. Take your dive gear, favorite instruments and perhaps some supplies to donate, and you will have a truly rewarding vacation.”

Bog Snorkeling. Talk about poor visibility. The Waen Rhydd peat bog near Llanwrtyd Wells in Wales is home to the annual World Bog Snorkeling Championships every August. This year, 100 contestants from as far away as Russia and Australia snorkeled two lengths of a 60-yard trench cut through the bog in the quickest time possible. In a ‘bog off’ for first place, the winner was Haydn Pitchford from Leeds with a time of 1:42. The bog also hosts the World Mountain Bike Bog Snorkeling Championship in July; snorkelers must cycle two lengths on bikes with lead- and water-filled tires. The latest winner, Roger Heslop from East Kent, breezed through the bog with a speedy time of 41 seconds.

Undercurrent is the consumer newsletter for sport divers that reviews scuba destinations and equipment. We accept no advertising. Subscriptions in the U.S. and Canada are \$99 a year (addresses in Mexico, add \$20; all other foreign addresses, add \$35).

Undercurrent (ISSN 1095-1555, USPS 001-198) is published monthly by Undercurrent, 3020 Bridgeway, Suite 102, Sausalito, CA 94965, with the November/December issue being the annual book-sized *Travelin’ Diver’s Chapbook* Periodicals rates paid at Sausalito, CA, and additional mailing offices. POSTMASTER: Send address changes to 3020 Bridgeway, Suite 102 Sausalito, CA 94965

Letters to the Editor/ Submissions

Undercurrent
3020 Bridgeway, Suite 102
Sausalito, CA 94965
Fax 415-289-0137
undercurrenteditor@undercurrent.org

Subscriptions/Address Changes

To subscribe, renew, change address, or order back issues, call 800-326-1896 or 415-289-0501, Mon.–Fri., 9–5 Pacific Time
E-mail: pete@undercurrent.org or write:

Undercurrent
3020 Bridgeway, Suite 102
Sausalito, CA 94965

Editorial Office
Ben Davison, Publisher and Editor

E-mail:
BenDavison@undercurrent.org

www.undercurrent.org

Printed on recycled paper 

undercurrent

September 2007 Vol. 22, No. 9

undercurrent

The Private, Exclusive Guide for Serious Divers
3020 Bridgeway, Suite 102
Sausalito, CA 94965

Periodicals
Postage PAID
Sausalito, CA
and Additional
Mailing Offices