

undercurrent

The Private, Exclusive Guide for Serious Divers

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Buddy Dive Resort, Bonaire

freedom for solo diving photographers

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Dear Fellow Diver:

As a photo-diver, I have too often been paired up with a buddy who is with me at the start of the dive, then disappears the first time I stop to take a careful shot. Being solo certified, I wondered whether at Buddy Dive Resort, I'd be able to do my own thing, which is important for a serious shooter. With only a week to travel at December's end, Bonaire was my choice, especially due to its reliably good winter weather. And thanks to Captain Don Stewart and others, its waters are a protected marine park, with diving that's easy to reach and enough marine life so that photographer/naturalists like Ned DeLoach come back year after year.

Outside Flamingo airport, a friendly Buddy representative herded us onto an air-conditioned bus packed with a huge tour group of divers who managed to drink and joke their way from Atlanta. (Thankfully, they were put on their own dive boats.) At check-in, I received my dive-and-drive package perks, including keys to a pickup truck with tank racks, and the clear warning: Leave the windows rolled down and remove everything of value when parking for shore dives.

Buddy has one- to three-bedroom units in three-story buildings. A king-sized bed filled most of the air-conditioned bedroom in my unit. The bathroom was clean but small, with a shower. A leak from the AC pooled in the doorway, remaining there during my entire stay. The living area had touches of Caribbean elegance, with a dark wood dining table, a wide-screen satellite TV and a full wall of closet space. The kitchenette contained a coffee maker, fridge,



Buddy's Dive Resort



microwave oven and cabinets containing plenty of utensils. French doors overlooked a private patio, one of Buddy's three pools, an attractive thatched outdoor bar and grill, and the ocean beyond. A modest strip of sand spanned the coral ledge that separated the grounds from the ocean-front. Comfortable lounge chairs were shaded by low palms. During my stay, the sky was clear, and air temps hovered in the low 80s during the day and 70s at night.

On my first morning, 80 new arrivals gathered at the outdoor bar at 9 a.m. for our dive orientation. Stocky John Wall, photo shop manager, let everyone know about camera rentals and his "photo doctor" services. Smiling Venezuelan transplants Marco Caldato, a supervisor/technical dive instructor, and Augusto Montbrun Segini, operations manager, led a tour of Buddy's impressive PADI 5-Star Gold Palm facilities. Reviewing the rules for diving in Bonaire National Marine Park in a relaxed way (no dive Nazis here), they nevertheless left no doubt as to how serious the island is about protecting its ecological treasures. Even shells purchased as souvenirs are confiscated at customs, according to park officials (see all rules at www.bmp.org).

By 11 a.m., I walked down wide stairs from the wharf into eight feet of 81-degree water. I was diving alone -- and no one stopped me. Visibility near the dock was only about 30 feet; fine suspended particles filled the water. Pale blue-green yellowtail parrotfish wore expressions that reminded me of Groucho Marx with their dark "eyebrows" and drawn-out snouts. Harder corals predominated. Farther out, visibility increased to 100 feet. Secretary blennies' tiny heads poked out like little whack-a-moles on almost every coral head. Macro photo ops included peppermint gobies, yellowline arrow crabs, flamingo tongues and dozens of rosy-lipped blennies. A silver tarpon glided by and there were colorful tangs, pug-nosed blackbar soldierfish, floppy gray-blue soapfish, sharpnose puffers, and uncharacteristically bold graysbys seemed to predominate each local coral neighborhood. An hour and a half later, with the third of a tank that solo divers are trained to hold in reserve on every dive, I emerged for lunch with my non-diving spouse.

While my first dive left me feeling liberated, the rest of my daytime shore dives on Bonaire had a sameness that became a bit boring. Bari Reef seemed barren compared to my trip four years ago. Piles of rubble testified to the pounding the reef must have received in recent storms. Buddy's House Reef appeared healthier, with sandy shallows at 15 feet close to shore, followed by a transitional coral- and sponge-covered slope from 20 to 35 feet deep that then dropped off onto a wall down to the sand at 100 feet, but no giant coral heads, haunting underwater canyons, maze-like spur-and-grooves or swim-throughs. Drab browns prevailed. The reefs teemed with small fish and a few schools of tangs, schoolmasters, Creole wrasse and chromis. Klein Bonaire was not much different; however, that's where I saw the first frogfish and seahorse of my trip, plus a large spotted drum and a magnificent midnight parrotfish gliding smoothly along like a boxcar on steel rails. But somehow, I was missing the "wow factor."

My Salt Pier night dive (guided) was one of those personal pinnacle dives that made up for any lack of thrills in the rest of the fish bowl. From the get go, a sandy beach gave way to steeply sloping, unstable and uneven blocks of coral rubble underwater, making balance tricky in the dark. Waves threatened to throw me on my rear even as the seaward-bound surge tried to pull my feet from under me. Donning fins in deeper water, Daniello Nicolaas, my young pony-tailed Bonairean guide, headed for the massive pilings that prop up the loading equipment and conveyors. Here at 40 feet, the dive took on an Alice in Wonderland quality, threatening equilibrium and orientation at every turn. The clusters of pilings angle into the water, and each one holds a grove of colorful sponge and coral-encrusted trunks, crawling with life. If you approach under a piling's acutely angled side, any lack of buoyancy control can send you upwards into the unyielding encrustation. Divers' light beams swept about like long light sabers, adding to the funhouse sensation. To compound the disorientation, a second

group entered the water not long after us, its members often crossing my path, making it difficult to lock onto the sight of Daniello's raggedy, cut-off swimming jeans and follow him out of the mass of black-clad, light-waving divers. Back on shore, I stripped off my gear in that calm, warm afterglow I sometimes get following a proverbial "better than sex" dive.

For me, my four night dives, whether from boat or shore, surpassed the 17 I made during the day and tipped the overall diving experience from good to great. Finding so many sleeping parrotfish in their shades of night coloration was a kick. So was seeing the nocturnal, giant basket starfish folding and unfolding its bird's-nest arms, soft polyps emerging from their hard coral bodies, and the beautiful blue lettuce sea slugs. Keeping in mind that solo dives are properly made in environments you are comfortable with, the two night dives I soloed made in shallow water on Buddy's Reef fit perfectly: no current, less than 25 feet depth and close to a guideline back to the swim ladder. The path to the reef took me by a pair of beautiful nocturnal creatures, like a pale, hydra-like, undulating tube anemone with delicate, translucent pointed arms about five inches long, and another tube anemone blossoming like a small, bright purple carnation. Light-sensitive, the little carnation withdrew into its tube, which itself scrunched up into a perfectly camouflaged sandy lump. On my second solo night dive, the visual feast took another turn as soapfish revealed unexpected Dr. Jekyll and Mr. Hyde personalities. By day, they lazed around, bodies floppy, but by night,

Death to Flamingo Tongues?

While diving in St. Kitts, Carol Ziller (Littleton CO) noticed that Dive St. Kitts divemasters were pulling flamingo tongues from sea fans, and either broke them up or buried them in the sand. They claimed there was a proliferation due to the last hurricane, and that the little animals are killing the gorgonia. Ziller told us she saw as many as 20 on a single sea fan and wondered if this was a kosher practice.

We asked Paul Humann, author of the superlative Fish, Critter and Coral ID book series, who told us, "I've heard of this. Under normal circumstances, flamingo tongues do not seriously injure sea fans and other gorgonians upon which they feed. The living tissue they feed on is quickly replaced by the colony, and no permanent damage is done. The number of flamingo tongues on any colony is normally held in check by unknown mechanisms. In fact, in many parts of the Bahamas and Caribbean, flamingo tongues are endangered because of over-collection by unknowing divers who don't realize the beautiful pattern is not part of the shell but is instead the mantle, which will disappear when the animal dies after being removed from the water.

"In the St. Kitts case, perhaps the stress caused by the hurricane has temporarily disabled the unknown mechanism that, under normal circumstances, prevents flamingo tongue population explosions. This is part of natural processes, and will correct itself over time and return to normal. It does not appear to be a man-made problem. Should man interfere with nature and try to do something about it? This is a philosophical question that we could argue about endlessly. It would be my suggestion that the diving community check with local marine biologists, government or educational agencies, and follow their advice. Otherwise, it may be another ill-conceived attempt by the ultimate predator - man - to alter nature."

So we contacted Dive St. Kitts to see what was behind its policy. Michael Arsenault, dive operations manager at Dive St. Kitts, told us, "This is the first I have heard of this practice. It is not a policy of Dive St. Kitts or a recommendation from our governing bodies. If these actions are taking place, management does not endorse such actions. I will be following up with our professionals and advise them of non-interference.

Then we heard from another staffer, Jeremy Reeves, who said, "I was told by the natives that the flamingo tongue is an alien species . . . but I feel I do not have the expertise to answer this, as I have not been on St. Kitts long enough to truly know for sure. Because you are the expert magazine, I ask that you please do more investigation on this matter and let me know what you find out. With your guidance, perhaps I can help educate the natives on what really is going on under the water."

We e-mailed Reeves with specific information about flamingo tongues and suggested he check Humann's Critter ID books. After all, flamingo tongues have been in St Kitts' waters far longer than humans have lived there. He wrote back, "Thanks so much for your help. Neither the resort, myself, nor the dive shop believe in removing things from the ocean, and we have put a stop to it."

Buddy Dive Resort, Bonaire

Diving (<i>experienced</i>)	★★★★
Diving (<i>beginner</i>)	★★★★
Snorkeling	★★★★
Accommodations	★★★
Food	★★★★
Service and Attitude	★★★★★
Money's Worth	★★★★★

★ = poor ★★★★★ = excellent

Caribbean Scale

their energy was electric and frenetic. Each time I shone my dive light into a crevice, two to three marauding soapfish instantly appeared. They slithered into virtually every crevice I lit, more annoying than flies at a picnic.

Buddy's dive operation was top notch and supports 24-hour diving. Technical dive instructors offer many courses. Nitrox is complementary, and they offer custom-blended gases, including trimix, for a fee. The gear-drying area is large, with ample hangers and hooks; it's locked at night but a hidden key is available to all of Buddy's divers. There were three main gear rinse areas, two dedicated regulator tanks and two camera rinse tanks. The camera tanks were always crystal clear but by late afternoon,

the gear tanks were as briny as the sea. The dive shop is well stocked with reasonably priced gear and rentals. One complaint: The newly added boat dive off of Washington Slagbaai was poorly advertised. I only discovered the dive shop's paper placard for it on my last day there; it wasn't in the chalkboard area where people sign up for dives.

My six boat dives were all aboard Harbour Lady, a 36-foot Newton making easy runs to Klein Bonaire sites. Its broad swim platform and single boarding ladder were adequate for the divers they carried; headcount rarely exceeded half the boat's stated 24 seats. As a photographer with heavy gear, I preferred using its dedicated photo table to the on-board rinse bucket where everyone else's cameras sloshed about. Diving out front of the resort was even easier; after you suit up, you only need to get yourself down a ladder to take advantage of the house reef. Negligible current meant easy finning from Buddy to explore Bari Reef to the south, and Scientifico and Captain Don's Reefs to the north, each on a single tank. Underwater navigational aides include a well-marked trail. Buddy also has a "drive-thru" area where divers driving to other shore-dive sites on the island can drive through a two-lane pickup area to grab tanks on their way out. On the way in, driving divers only have to drop off their tanks and throw gear into the 24-hour-a-day rinse tanks right there in the drive-through bays.

A drive through Washington Slagbaai National Park is memorable. At an average speed of maybe two miles an hour, it took me close to five hours to tour. You can climb dunes, watch spouting blowholes and visit historic settlements. I lingered at Playa Chikitu, a beautiful little cove with a treacherous, washing-machine-like surf. Roads were so rutted that one side of the track was sometimes two feet below the other, and had so many steeply pitched turns, climbs, and descents that it felt like a wild theme park attraction. My description is no exaggeration; authorities will turn you back if you don't have a four-wheel-drive vehicle with a spare tire.

The drive to the southern part of the island is more laid-back. At Lac Bay, the island's windsurfing mecca, I had a pleasant lunch munching on a fish sandwich while sipping Amstels at Jibe City's Hangout Beach Bar. Going barefoot on their sand "floor" felt liberating but admittedly not as carefree as the naturists at neighboring Sorobon Beach Resort (which has now temporarily gone non-nudist). On the way back to town, a row of cramped stone slave huts, too small to stand up inside and barely long enough to lie down in, sits in front of the salt ponds, a grim reminder of the past. A rich double-dip waffle cone at Lover's Ice Cream, just a stone's throw from Buddy's, capped off the trip back.

Buddy is within walking distance of a number of restaurants (typically \$25 to \$30 per person) with on-the-water views. At Rum Runner's, located at Captain Don's Habitat, I had a succulent grilled wahoo, attractively plated with au gratin potatoes and delicious vegetables. I tried the sautéed wahoo (overdone) and sampled my spouse's tiger shrimp with pineapple salsa (good) at the Sunset Bar & Grille, located by Sand Dollar

Condominiums. At both places, the wait for the main course was long but made tolerable by decent food. The 90-minute wait (even after complaining several times) for under-done burgers at Lion's Den Restaurant, on Buddy's grounds, was ridiculous but Buddy's own meals were as good as or better than any. Its "Dive & Dine" dinner was just \$8. The mahi-mahi with garlic butter sauce was delicious. I also enjoyed the weekly complementary happy-hour rum punch, followed by a reasonably priced all-you-can-eat barbeque. Breakfast was always good, with eggs prepared by a chef and a choice of cereals, cold fruits, delicious breads and hot entrees.

The high point of the trip came after I got home. A trusted expert stated that more than 10 of my images were of things he hadn't gathered before, and probable "NIBs" (not in the book). Even among the seemingly commonplace marine life, I left the island with something rare. My latest appraisal of Bonaire is a variation on how Captain Don put it years ago: Bonaire truly is indeed the home of -- solo -- diving freedom.

--S.P.



Diver's Compass: The six boat-dive "Drive 'n' Dive" package with breakfast was \$1,200 for me and \$930 for my non-diving spouse . . . We took an early-morning flight on Delta through Atlanta, arriving in Bonaire with plenty of daylight left to settle in; thanks to a great credit-card offer from Delta and AMEX, I had enough frequent flyer miles to cover my flight . . . We economized by buying lunch foods and a couple of dinners in nearby convenience stores, one within 300 yards, the other half a mile away, and local markets nearby in Kralendijk, preparing meals in our apartment's well-stocked kitchen . . . Wireless internet access cost \$8 for two hours or \$90 per week . . . The night dive at Salt Pier was \$35, and a night boat dive added \$10.50 to my package . . . Be prepared to pay refundable deposits for things like beach towels, extra room keys, a safe deposit box key; you'll also pay about \$135 for full auto insurance, a departure tax of \$35 per person and the National Marine Park's annual dive tag fees of \$25 (a donation of \$1 per night to voluntary social programs is optional) . . . Buddy's says its pickup trucks are allowed into Slagbaai Park but I'd double-check to make sure . . . Website: www.buddydive.com.

Fethiye and Kas, Turkey

in search of amphorae on the Mediterranean Coast

Dear Fellow Diver:

Exotic Turkey -- the muezzin call to prayer five times a day echoed throughout the Mediterranean coastal town of Fethiye, adding a magical touch when viewing the 2,500-year-old ruins of tombs. I am a woman traveling alone, as I often do, but I avoid irrational avoidance by educating myself about a destination beforehand. Just because the Kurdish Freedom Fighters blew up a bus of tourists in a nearby city four years ago doesn't mean it will happen to me. I was to divide my two weeks between diving in Fethiye and Kas, where American divers are rare. I came to dive ancient wreck sites to see the Amphorae, unique and ancient vases, and they are there, in abundance.

I showed up at the Dolphin Diving 45-foot dive boat-cum-office, where Colonel Yilmaz Guven, one of Turkey's first divers, was waiting to introduce me to the "Turkish Diving Delights", or so his website assured me. It was a package deal of US\$360 for three days diving and hotel for five nights. Excellent deal? Nope. With only one boat, majority rules. Seventeen of 20 were first-time divers. Somehow, I was roped into spending seven hours in the water at the same dive site for two consecutive days teaching novices, Brits and Turkish university students. John, the colonel's



son, smashed a sea urchin to draw in fish. My reward, other than the pleasure of educating newbie divers, was a beer at day's end. Any diving is better than sitting on deck sulking.

Dolphin Diving's day is 9 a.m. to 6 p.m. with only two dives planned; midday is for new divers. Colonel Yilmaz captains the boat, and both he and John are instructors. The craft was well-kept, with kitchen and clean head. Their yappy dog, Lucy, announced the comings and goings at docking. A lunch of spaghetti or pasta with chicken was prepared on board. Tanks were 80 cu ft aluminum. Old

rental equipment not well maintained. Fellow divers assisted with entries and exits, especially negotiating the two-foot step-over to get to the dive platform in full gear. I once asked John if he could adjust my alternate air source for a free flow issue. He refused, saying he would be too busy filling tanks.

On my birthday, Colonel Yilmaz took five divers on two of his special dives. The first was through a crack at 60 feet, progressing through two tunnels with ambient light during most of the seven-minute transit. Small golden and red sponges inhabited the tunnels. Exiting at 115 feet, the colonel directed us to Shrimp Cave, which a myriad of shrimp called home. Gradually ascending, we were met by schools of sea bream, popular lunch and dinner fare at the harbor restaurants. Small sea bass, several barracuda and fair-sized jacks were also spotted. On the next dive, we dropped anchor near the rocky shore at Amphora Bay, an amphora site dating back to 500 B.C., where endless ships have crashed upon the rocks. (Ours broke loose in the surge and nearly did the same). True to its name, there are many vases that have become firmly embedded over time, many intact and upright (removing them is forbidden). Hidden in crevices are three-inch azure vase sponges. Five- to 36-inch brown and bumpy Kerferstein's sea cucumber were the most prevalent of any species, kept company by colorful peacock and spiral fan worms. Shades of brown dominate. It's a good dive only if you are into archeology.

Whereas John at Dolphin Diving looked at my C-cards, Barakuda Diving Center in Kas, 60 miles further east along the coast, requested my C-card, logbook, passport (required by the Turkish Coast Guard) and a medical exam from a physician. European divers come with them in hand. I was permitted to complete the medical form myself. I brought my own gear, but their Mares rental equipment was well maintained. Dive briefings with hand drawings were thorough, and they pointed out the safety equipment and oxygen set-up on board. The closest hyperbaric chamber was a two-hour drive.

Dive guide Maume led me slowly on 70- to-85 minute deco dives, most to 100 feet. Four Brits diving for one day hoped to get a dive at Flying Fish, the home of a WWII Italian bomber resting at 190 to 230 feet. No dice, until the dive crew ascertained their diving expertise. I saw much more sea life here. Two dragonfish exuberantly mating was a highlight, as were some esoteric nudibranchs. Mediterranean morays fascinated me with their blue mouths, as did Turkey white-mouths. There were dozens of sea slugs at the Cave III site, with the 40-degree interior of the cave enough to fog goggles, diminish a flashlight, and see your breath after ascending inside. On all other dives, water at depth ranged from 71 to 83 degrees. Visibility was typically 100 feet. The September days were sunny, dry, and hovered in the mid 90s.

Off the volcanic islands of Two Brothers, five dozen squid hovered over a boat wreck. Elegant, intact three-foot amphorae and ceramic



Dolphin Divers' Boat in Fethiye

pots and pans, among many pieces of others, graced the area, along with small red scorpionfish and brilliant ornate wrasse. Stonehenge held unusual volcanic rock formations along with ancient man-made stone stairs. Red black-faced triplefin blennies and Zeus fabers (John Dory) were common.

Barakuda's efficient 82-foot traditional schooner has a capacity of 78 divers, but only 15 were onboard, with two instructors and two divemasters. The most frequently used tank was the 12 liter, although three additional sizes were available. Entry and exits from the large dive platform were easy. Barakuda Diving offered two dives at 10 a.m. and 3 p.m. (European divers come for the nightlife, which meant no early start

to their day.) I spent the two-hour dive interval at the charming Asmaalti Café, steps from the marina but hidden in an herbal garden from which it collects its fresh ingredients. It's traditionally Turkish, with comfortable cushions and low tables. Try the fragrant Turkish narghile (water pipe) after dinner.

In both Fethiye and Kas, my single room in the two small hotels included in the dive packages was \$30 per night. Rooms were air-conditioned and scrupulously clean, with firm beds and small showers. Both were near the harbor but quiet reigned after the last muezzin call of the night around 10 p.m. Fethiye was the more interesting town, with the deep blue harbors having the Taurus Mountains as backdrops. This ancient city of 50,000 dates from 500 B.C. I foraged for Turkish restaurants nearby and found flavorful breads such as puffed rounded lavash or the traditional flatbread, pide, baked in wood ovens. Kebabs were spicy, yoghurt rich and creamy. Away from the harbor, expect to pay \$5 for a midday meal; at the harbor, it's at least twice that and not nearly as traditional or tasty. Kas gradually rises from the sea and is built in separate sections - - hotels, restaurants, then businesses -- all within easy but hilly walking distance. Along the harbor, one can easily spend \$30 for a simple meal and beverage. I explored many ancient sites and rode on the back of several motorcycles with elderly Turks eager to show me the most ancient and remote sites. Turks and Kurds are hospitable and eager to share their knowledge, stories, and food. In the tourist areas, one can get by with English or German but in the back streets, some Turkish is needed.

The intrigue of diving in Turkey is uncommon and unique, beginning with careful looks into rock crevices; a tiny colorful nudibranch appears that will tax your memory to identify. Around the next rock, a parrotfish swims or a goatfish is stirring up sand, and a loggerhead turtle may appear. The fish and critters are there -- be patient -- and they add a spark of color, as does the scattering of small coral. Rugged rock formations give a fairyland appearance, with deep crevices, tunnels, caves and caverns. And of course, there's the amphorae. Turkey is a magical place, above and below water.

--C.P.

Kas and Fethiye, Turkey

Diving (<i>experienced -- if you like archeology</i>)	★★★★
Diving (<i>beginner</i>)	★★★
Snorkeling	★
Accommodations	★★★★
Food	★★★★
Topside Attractions	★★★★★
Money's Worth	★★★★★

★ = poor ★★★★★ = excellent
World Scale



Diver's Compass: I flew Turkish Airlines from JFK to Dalaman, Turkey, via Istanbul for \$1,000 round-trip, then a 90-minute Turkish Air flight to Dalaman; I traveled from Dalaman to Fethiye, then to Kas by bus, \$10 per trip . . . The end of my trip was three days eastward along the coast by car to Adana, making many stops along the way to visit ancient tombs, castles, caves, mosques, and to scout for dive locations for my next trip; I traveled by private car with two Turkish Muslim men, and as it was Ramadan, we made about five stops per day for prayers . . . Take cash because Fethiye and Kas

are not credit-card friendly; cashing a traveler's check in Kas carried a fee of \$12 per check . . . Six days of diving and nine days' hotel with breakfast cost me \$724; two-tank dives were \$70 . . . Tipping was not expected but graciously accepted . . . Dolphin Diving: www.dolphindiving.com.tr; Barakdua Diving Center: www.Barakuda-kas.de

Death in the Galapagos

a fatal first dive that wasn't fit for not-so-advanced divers

The first real dive of a scuba trip for 14 divers aboard the Galapagos Aggressor II ended in the death of E.G., a 23-year-old kindergarten teacher from Galveston, Texas. But for a twist of fate, my wife and I could have unfortunately been with E.G. today. Here is my account of this fateful trip.

On February 11, my wife, Kimberly, and I met E.G., Denise Friou, divemasters Jamie and Patricio, and the other 10 divers at the San Cristóbal Island airport. Being the two unaccompanied women on the trip, E.G. and Denise immediately gravitated toward one another. We were bused to the *Galapagos Aggressor II*, boarded and given a short briefing and room assignments. At the dock, we made a 20-minute, 20-foot checkout dive. As many of us did, E.G. struggled to find the proper weight for neutral buoyancy.

The next morning, Jamie briefed us on the dive site, at the easternmost point of North Seymour Island, and the dive plan, using a map drawn on a whiteboard. Visibility was 60 feet and currents were running in different directions. He told us to stay above 90 feet and to surface within an hour. He also told us how to surface safely around the pangas and how to get back into them. I was surprised at the brevity of the briefing, especially as it was our first actual dive of the trip.

After gearing up, E.G., Denise, Kimberly, three other divers and I climbed into one of the two pangas, along with the driver and Patricio, our divemaster. Before we got into the pangas, however, there was no equipment or "air on" check by the divemasters, which had been my experience on two other Aggressor trips. I presumed at the site we would get more of a briefing and safety checks but after traveling only 100 yards to the dive spot, Patricio told us all to backroll into the water on his command, otherwise the panga would be unstable.

A Tough Current

Once underwater, Kimberly and I gave each other the OK sign. Patricio and others were 20 feet below us and moving away. I am slow to equalize on early dives, so we fell behind most of the group. We descended faster than usual to stay with the group, though Patricio was always lower and further out from the island than Kimberly and I. Following Patricio, my dive computer indicated we were at 98 feet at five minutes. At six minutes, we were at 104 feet. I thought about Jamie's briefing: Stay above 90 feet.

Kimberly and I struggled against the current. I was near hyperventilating and had to consciously slow myself down. At the nine-minute mark, Patricio signaled us to grab hold of the sloping bottom and move up against the current, hand over hand. Kimberly and I continued struggling against the current but we finally got control by hanging onto the rocks and moderating our breathing (around the 10- to 15-minute mark). I looked around to see where everyone else was. Kimberly and I were well under 2000 psi of air, a lot of air to have used so quickly. I saw what looked to be Patricio communicating to Denise to stay put and hang onto the rocks with the rest of us while he would go look for someone, and it appeared he did. I looked for E.G., but didn't see her. This was around the 13- to 17-minute mark.

We moved up to watch sharks circling in 50 feet of water. At the 24-minute mark, I signaled to Jamie that I was at 700 psi, and he signaled for me to go up. I took Kimberly's hand to ascend, concerned about being separated in the current. Later, she said I was holding her tightly, as if I was afraid she would drift away. I was.

We did a three-minute safety stop, then surfaced at the 30-minute mark. I didn't see E.G. though I expected her to be on the surface, because there was no way for Patricio and her to fight the current to get back with the group. I thought I heard a diver's whistle, and told the other panga driver, who took off in that direction. I assumed it was E.G. but I suppose it was Patricio, because the next time I saw that panga, he was in it – and he looked worried.

As divers surfaced, I kept looking for E.G. She was young, slightly built and didn't look strong enough to fight the current. With her training (I'm told she had taken a divemaster course and a rescue course), I figured she would simply go with the current and slowly ascend to the pangas, standard protocol when separated from your dive buddy. She had a diver's flag designed to activate on the surface. We searched the surface for that flag for hours, both from the *Aggressor* and the pangas. At some point, I believe Patricio and Jamie dove from a panga to search for E.G. During that time, there was also an aerial search, along with many other boats and the Ecuadorian Coast Guard. I believe Jamie mentioned he was bent from his dive looking for E.G. He was clearly shaken.

At some point, he mentioned that it was nearly time for our planned afternoon land excursion. He seemed to be looking for direction about what to do. But how could we go about our vacation not knowing where a missing diver is, not knowing if she is bobbing in the water waiting to be picked up? We told him no.

“It Didn't Feel Right to Continue”

After four-plus hours of searching, we returned to the original dive location. Denise and Patricio went back into the water where E.G. was last seen, taking an extra Nitrox tank, then rode the current to wherever it took them. Denise saw E.G. lying on the bottom at 168 feet, in somewhat of a fetal position, eyes closed, looking restful and calm, without a mask and the regulator out of her mouth. Denise said that after getting E.G. to the surface, the tank registered 2,000 psi of air; she showed signs of drowning, although she didn't seem to have water in her lungs. Denise was uncertain if E.G. had both her fins on when she was found, but knew at least one came off during the ascent. Ecuadorian officials came on board, questioned us and eventually took E.G. away.

Kimberly later said that around the five-minute mark was the last time she saw E.G., who had been just behind her, toward deeper water. Neither of us remembers seeing her or Denise grabbing onto the bottom. It is Kimberly's recollection that Denise was in front of her, while E.G. was behind her. I don't know if anything more could have been done to save E.G. Based on the time Kimberly last saw her and the amount of unused air in her tank, it's my belief that she died in the six- to nine-minute timeframe.

Jamie informed us that Peter Orschel, owner of the *Galapagos Aggressor* I and II, would make accommodations and provide future credit for anyone who didn't want to continue the trip. I talked to Peter via the ship's cell phone. He was very accommodating but sounded shaken and seemed to have been crying. Only three of us -- Denise, Kimberly, and me -- left the ship and headed home. It didn't feel right to continue. We didn't feel like partying and having a good time. We didn't feel safe with the divemasters. We didn't feel they prepared us for what we were going to do and would encounter. This just may be our own inexperience, however.

TUSA Regulator Recall

Tabata USA is recalling about 250 TUSA RS-670 regulators. The first-stage's balance chamber plug can loosen from the regulator, causing a high-pressure leak, creating unstable pressure and posing a drowning hazard. *Undercurrent* called TUSA's customer service line but the representative couldn't tell us how the faulty plug was discovered. However, on TUSA's website, it says the company was “recently informed” about the loosening of the plug, suggesting TUSA dealers and/or customers discovered the problem.

The recall for the regulators involves the following serial numbers: UR600022 through UR600029, UR600031 through UR600103, UR6000637 through UR6000676, UR600708 through UR600716, UR600737 through UR600776. The serial number and TUSA logo are printed on the regulators, which were made in Japan and sold in the U.S. between May and September 2009.

Customers should immediately stop using the regulators and return the product to TUSA or an authorized dealer for a free inspection and replacement. For information, call TUSA at (800) 482-2282 between 8:30 a.m. and 5 p.m. Pacific, Monday through Friday, or e-mail info@tusa.com.

How A Diver Stumped Airport Security

Undercurrent contributor John Bantin wrote about his recent experience with U.S. airport security in his blog on our website, and how he was one of the lucky few to be selected for a hand search of his checked baggage. Havoc ensued - - here's a sample:

“Out came the wetsuit. Out came two towels. Regulators with hoses were examined with knowledgeable expressions but none that fooled me. My BC was withdrawn and inexplicably held up to the light. They examined my extending emergency flag. My fins were found to contain very ominous-looking masks. They examined my hexagonal wrenches, my spanners and my diving knife until they finally found something really suspicious.”

What was it? Find out, along with the other TSA pitfalls Bantin experienced, by reading his blog post “Fortress America: Heightened Security for Flights to the USA.” His posts, and those of our other diving expert contributors, can be found by going to our website www.undercurrent.org and clicking on “Blogs.”

unsure if we had sufficient experience for the Galapagos. However, we have been to many different places, using all kinds of equipment, in very cold water and with zero visibility. [But] we were challenged by the strong current, too. My wife, an instructor, even aborted one dive because it was too much for her. The big fishes are where the currents are strong, so we expected tough dives from the very beginning. Moreover, Patricio did a good job to find the best ways to get through.

“I would not recommend the trip to anyone with significantly fewer than 200 dives, and some of those [should be] in stronger currents. The problem is no one tells this to the divers for business reasons. We had professionals among the guests with 4,000-plus dives, and they confirmed that the usual minimum requirement in ads is “50-plus” for difficult dives anywhere. This is definitely not sufficient.

“And PADI et al. make it worse when they certify people as divemasters or even instructors with 60 or 120 dives, most of them in lakes or swimming pools. My wife’s instructor certification was worth nothing at Darwin’s Arch, where the current was so strong it twisted our reef hooks. The only thing that counts is experience, and this cannot be provided by the dive guides. However, only a few instructors I’ve seen tell their students bluntly about their capabilities and prevent them from overestimation. For the same reason - - the truth is bad for business.”

So what could have prevented this tragedy? Keep in mind I am not a very experienced diver (150 dives over 10 years; 100 of them in the last six), but the following are my suggestions:

1. The dive briefing and the dive plan could have been much more detailed.
2. The divemaster should do what he can to keep the group from getting as spread out as we did.
3. We should not have gone beyond the 90-foot limit given in the topside briefing; we may have avoided the heavy current, as the other group of divers apparently did.
4. The Aggressor fleet - - in fact, any liveaboard based there - - should make it abundantly clear that Galapagos dives are for advanced divers only.

Peter met us at the airport on Baltra Island. He seemed to do everything he could for E.G.’s family. Although we were bearing the extra expenses to get back home, Peter’s staff helped arrange our getting back to the mainland. Denise was devastated. She was questioning herself for not doing more and questioning her decision to follow Patricio’s instruction to stay with the group while he searched for E.G..

“The Truth is Bad for Business”

I wrote this account two days after E.G.’s death, in Guayaquil, Ecuador, while on standby for a flight home. We just could not continue on our vacation and enjoy ourselves after what had happened, knowing how E.G.’s family must feel and thinking about a young girl, the age of our children, who had tragically lost her life.

After I wrote this and posted it online, a diver who had been on the *Galapagos Aggressor II* the week before our trip emailed me this note:

“I’d like to share my thoughts based on my week on the *Aggressor*, and I don’t intend to judge anyone. I am a PADI Rescue diver and had 170 dives before entering the boat. My wife has 200+ dives. We both were

5. A diver should be physically fit and free from any medication influence that may affect diving in such challenging waters.
6. Buddies must stay together, in physical and visual proximity, in order to keep good communication.
7. The liveboard should find an easier spot for the first full dive, allowing divers to get more comfortable with the environment, their buddy and their equipment.
8. The boat should provide satellite-locating devices on all dives.
9. Divers should carry an easily activated noise maker that's clearly heard underwater.

John Bisnar lives in Irvine, CA, and is senior partner of the law firm Bisnar Chase. At the time of this dive, he had logged a little more than 150 dives, all from boats in relatively calm, warm waters and high visibility. This dive trip was his third with the Aggressor Fleet.

Underwater Photos with Digital Compacts

no strobes or heavy gear needed if you use these cameras right

Last month, we ran a story by our gear pro, John Bantin, about why he preferred full-frame to compact digital cameras. Undercurrent subscriber and photographer Michael Zagachin (Peabody, MA) wrote us to disagree. "The article may confuse the average vacation diver into thinking that more expensive equipment will make his pictures better. I use a digital compact, with no flash or strobe, and the critters in the photos on my website (www.redberryphoto.com/underwater) came out pretty good. I'd like to address necessary skills and tips for using simple, inexpensive equipment that can produce good underwater images for the amateur underwater photographer." Here is his piece.

Many divers these days use compact digital cameras underwater, but their images are often poor, whether they have strobes or not. There can be many reasons for that, but the most probable are lack of basic photographic skills and unfamiliarity with the incredible capabilities of their tiny cameras. There are numerous reviews of underwater photo equipment that not all of us can afford, but articles about underwater photography on a budget are rare.

Those superb underwater images you see in dive magazines were not made by equipment but rather by very experienced photographers with years of practice. Like buying a bike from Lance Armstrong will not make you a better cyclist, spending your kids' inheritance on expensive photo equipment won't make your pictures better. Even learning a basic understanding of composition and exposure would make wonders to your pictures.

Equipment Essentials

Compact digital cameras offer a unique opportunity for those of us with no aspirations to be published in *National Geographic*. We can bring home quality images from a dive without exorbitant cost, bulk and hassle. Of course, you need good diving skills to do that, meaning you must comfortably control your position underwater using just your lungs and fins. Hands are for operating your camera.

Select a camera with features such as custom white balance, spot metering, continuous shutter release, auto ISO and macro capability. Also pick the camera with the fastest ($f/2.8$ at least) and the widest (28mm at least) lens you can get. Canon has recently come out with a terrific digital compact S90 that has an even faster $f/2.0$ lens with a larger than usual sensor. These two features are very important to the quality of underwater pictures. Other manufacturers will probably follow shortly.

Another important feature is a large LCD; that will be a big help underwater. Ignore the megapixels hype; all cameras have more than enough of them these days.

Getting Colors and Highlights Right

If you need to buy a camera, make sure a housing for it is available. The housing is generally just slightly larger than the camera itself. It should be rated to a depth of 130 feet, dedicated to a specific camera and provide control of each and every camera function. The camera/housing combo needs to be neutrally buoyant. Canon makes a set of small weights that attaches to the tripod socket of the housing to control camera buoyancy.

Image sharpness is the hardest issue to overcome underwater. Everything moves, including the photographer and the camera itself. Setting the camera to aperture priority mode, and setting the aperture to the widest (smallest f/number) will ensure the fastest shutter speed for available light. Combined with the ISO set to Auto, this will help to get the sharpest pictures possible under the present lighting conditions.

Yes, the depth-of-field and noise will be sacrificed to some extent, but it is the out-of-focus images that are deleted first. Most digital compact cameras suffer from shutter lag – that is the price we pay for their size. However, using the continuous shooting mode dramatically increases the probability of producing a sharp image. Reducing image-display time right after the shot or shutting it off completely will make the camera work a bit faster.

To make things simple, I don't use strobes, so getting the colors right is a challenge. That's why the custom white balance is so important. Adjusting the white balance before every shot is critical. Variation in depth even by a few feet will affect the colors. The red part of the spectrum disappears and reappears very quickly with change in

Judge Calls Mistrial For a “Too Taxing” Stranded-Diver Case

A Los Angeles judge declared a mistrial in the case of a diver left at sea because -- get this -- the trial was taking too long. Daniel Carlock, 51, filed a \$4 million lawsuit against Ocean Adventures Dive in Los Angeles and Sundiver Charters in Huntington Beach in 2005 after he was left seven miles off Newport Beach during a group dive. Since Carlock only spent five hours drifting, he's looking for about \$800,000 an hour.

Testimony in the case began March 9, and Los Angeles Superior Court Judge Soussan Bruguera had expected it to be over by the end of the month. But after the lawyers told her on March 22 there were 13 more witnesses still to be called, Bruguera declared a mistrial, saying the three-week trial had evolved into 'Alice and Wonderland.' "It's too taxing for the jurors and too taxing for the (court's) calendar." She said another court with a less packed calendar should handle the case.

On the morning of April 25, 2004, in foggy conditions, Carlock was left at an oil rig off of Newport Beach, separated from about 20 other divers. He was swimming with three dive buddies when he had problems equalizing the pressure in his ears and fell behind. He tried following his partners' bubbles but he lost them. He decided to end his dive after 15 minutes but when he surfaced, he was 400 feet down current from an oil platform where the *Sundiver* was anchored. He couldn't make the up-current swim and decided to wait, blowing his whistle and waving a yellow inflatable tube. A Boy Scout troop from San Diego sailing back from Santa Catalina Island rescued Carlock after five hours.

Testimony to date in the now-abandoned trial centered on whose fault it was that Carlock was left after the *Sundiver* continued on to a second dive site 10 miles away, where staff members finally noticed Carlock was gone. But they called the Coast Guard to the second dive site to look for him. Defense attorneys maintain Carlock is to blame because he was careless for not staying by the oil rig as instructed.

During the trial, Captain Ray Leslie Arntz testified his job was to steer the *Sundiver*, not oversee who left and returned during the voyage. "I would probably not have that knowledge," Arntz testified. "My job was to navigate the vessel and keep it from getting too close to the rig." He said keeping track of the divers was the job of Zacarias Araneta, the on-board dive-master and Andy Huber, the divemaster in the water. Arntz testified that he cut the first dive short because of choppy water. He learned Carlock was missing when Araneta told him after the second dive. He then confirmed Carlock was not on board. The two sides disputed whether Huber was Carlock's dive buddy.

After the boat went to the second location, someone wrote on the dive roster that Carlock left the ship for a second dive at 11:17 a.m., though he was still at the first site. Araneta testified that when he took roll call, someone answered for Carlock but he didn't know which of the seven divers onboard it was. He acknowledged that he usually looks at each diver as he takes roll, but didn't do so that day.

depth, turning your whites into ugly pinks or blues. The camera needs to know what white color is at every depth in order to get the rest of the spectrum right. I aim the camera on the palm of my hand to set the white balance every time my next potential “model.” appears. I never use built-in flash; it is nearly useless underwater.

Another challenge is blown highlights. On a sunny day, the difference between light and shadows is tremendous. Spot metering for highlights will produce underexposed images but that can easily be corrected in post-processing, unlike blown highlights.

Another trick is to set the exposure compensation to -2/3. Not being a big fan of sitting at the computer, I keep post-processing to a minimum: adjust levels, add a bit of saturation, contrast, and un-sharp mask. If the image requires a lot of work, I delete it.

Safekeeping is Key

It is a good idea to set as many camera functions as possible before the dive, leaving only a minimum of settings to be adjusted underwater. The display is the biggest power-drainer in compacts. Even though I dive with my camera turned on, I keep the LCD display off until the worthy subject appears.

Once during a dive, I watched with horror as water droplets were collecting into a little pool inside the housing. Luckily the camera survived, but now I keep the housing with the camera out of the sun so condensation doesn't collect when it cools off underwater. I usually wrap the housing in a towel on the way to the boat, and then keep it in the water bucket most dive boats provide. Soak the housing in fresh water after diving, and push every button several times to flush salt water out of the button o-rings. Maintenance of the housing is minimal and limited to applying just a touch of silicon to a single o-ring.

Now to economics: My digital compact camera and its housing set me back about \$400 two years ago, which is about three times what just a housing would cost for my Nikon D300 DSLR. If the housing floods, the DSLR body and the lens will be damaged probably beyond any reasonable repair. If the compact camera gets flooded, it can be replaced for a fraction of its original cost because they drop in price almost daily – so much so that I am thinking of getting a spare one . . . just in case.

Do You Think Local Diving is Boring?

then here's how to change it

Sure, money is tight these days but that doesn't mean you have to let your diving suffer if you're postponing your next dive vacation. Diving locally on the cheap is far from boring, and it helps you stay sharp so you'll enjoy that dream trip even more. The trick is to plan a fun activity in local water, rather than hope something interesting happens. Work on a skill, maybe learning how to kick without stirring up a hurricane of silt or to hover motionlessly upside down. If you're normally a reef photographer, work on exposure and natural light. My buddy and I found a large concrete “dumbbell” that some folks made out of a pair of five-gallon buckets, eyebolts, and a 4x4. It's a challenge to lift it evenly, hold it at an agreed-on depth, bring it to the surface, and lower it gently back down. Here are a few ways to make the most of nearby dive sites.

Hone Your Navigation Skills. ‘Fess up. How many times -- in clear water -- have you “temporarily misplaced” your dive boat and surfaced 50 yards away? To hone your navigation skills locally, let's say you find an old sunken rowboat. Can you find it again? To do so, you will use all your brains and senses. How deep was it? Is it in a certain direction from another reference point? How far? Will you plan to find it by following a contour or by following a compass bearing? Here in Michigan, limited visibility means if I'm off by 10 degrees in 100 feet, I could miss my target entirely. Underwater navigation is a whole-body puzzle-solving experience worked out in 3-D.

Local Dive Highlights: Graveyards, Shark Teeth, Bowling Alleys

We know many divers are forgoing warm-water dive trips overseas but at the same time they're eschewing local diving, which they find either cold or boring. So we asked readers how they have fun diving locally. Here are a few responses.

Reese Davis (Greenville, SC) likes two lakes in South Carolina for their assortment of objects and conditions. "Lake Jocassee has two boat ramps for divers, and a portion of the cove is buoy-protected. The Wall has a Chinese junk at 50 feet, a basketball goal, two motorcycles and a unique underwater "flamingo crossing." At 135 feet is the Mt. Carmel graveyard made famous in the movie *Deliverance*. Divers call Lake Keowee, in the shadow of Oconee Nuclear Station, the "Hot Hole" because the water in the winter will average 70 degrees while the surrounding waters are usually 50 degrees. A favorite activity is to drop off a ledge at 18 feet and swim down and into the current for a wild 100-foot-long ride."

While the zebra mussel is classified as an invasive species in North America, it makes the St. Lawrence River extremely clear and great for viewing its multiple wrecks, says Eric Peterson (Bothell, WA). "Within five miles of camp, I can dive as many as 20 wrecks. I can drift along rock walls and see some huge fish, from black and northern bass to muskies and sturgeon that grow to be larger than me. In early August, the temperature can be 70 degrees at the surface and the bottom too, because the river flow circulates the water. I can wear a 3-mm wetsuit."

Wilt Nelson (Leesburg, FL) collects prehistoric shark teeth off of Florida's public beaches. "After a dive or two, most divers can collect about 100 teeth per dive. Some collect them to sell, others use them for jewelry."

In Pennsylvania quarries, it's common for locals to dump unwanted items, from tires to TVs, but Mike Bachich (Philadelphia, PA) and his buddies use them to their advantage. "We put a railroad tie with one end on the roof of a car, the other end on the nearby bank. Then we placed bottles on it, like on a shelf. We then stacked tires, placed railroad ties across them, then put a TV on it. We found chairs and a satellite dish to make an entertainment area, even found a kerosene heater to help keep the water warm in the winter months. We set up his and hers toilets, made a Flintstone mobile out of railroad ties and tires, and we even have a bowling alley." See YouTube videos of his Flintstone mobile (www.youtube.com/watch?v=F4o9XhIb78E) and the bowling alley (http://www.youtube.com/watch?v=gzy_dtSKaHY).

Robert Levine (Brooklyn, NY) loves local diving because it's there anytime he needs it, even at 2 a.m. on a hot summer night. "I catch the high slack tide, during a full moon on the Jersey shore. I check my tide chart, the ocean forecast, wave heights, water temps. I keep my pickup dive loaded and ready to hit the ocean, and I bring plastic jugs full of very hot water to shower with when I get out. Sometimes I slip back into bed at 5 a.m. My wife always asks, 'Well, was the mermaid there with her friends?' Late-night local diving -- it keeps me young."

Build an underwater amusement park. Just off one of my nearby lakeside parks, local divers have gathered an amazing collection of non-polluting objects that were already sunk, moving them to one central location for divers to enjoy. The underwater playground includes a full set of railroad tracks 70 yards long (ties and all), a beautiful old wooden rowboat, antique iron tractor wheels, and other interesting artifacts. My buddy and I added our own attraction – and got plenty of lift bag practice – moving cinder blocks lost by local fishermen (they make cheap anchors) to build a low circular "fortress" that is now home to a number of smallmouth bass. Others have added to our fort, sticking "cannon" (sunken limbs) from the ramparts.

Volunteer for Public Safety Dives. Many local agencies take volunteer divers but you will have to fund your own equipment. Since volunteering with my local sheriff's department, I have been trained in techniques like search and recovery, ice diving, river diving, line tending, managing operations, interviewing witnesses, evidence recovery and more. And it's great adult camaraderie.

Dive a Regional Hotspot. Talk to the local dive shops in your region and it's amazing how many interesting dives you will learn about. The owners of Gilboa Quarry, southwest of Toledo, OH, have created their own underwater amusement park that includes a Grumman Gulfstream aircraft, Sikorsky helicopter, school bus, even a semi-trailer, at 130 feet. Bonne Terre Mine near St. Louis, MO, offers crystal-clear water and guided dives in a brightly lit cave environment, filled with remnants of mining activity. I know of divers in San Francisco Bay who find 19th-century bottles among the crumbled pilings. There must be thousands of bottle-diving sites in the U.S. and Canada.

Participate in Local “Wednesday Night Dives.” Many dive shops or clubs organize weekly group dives during the local diving high season, a great break from the normal workweek. They can include underwater treasure hunts, poker nights, pumpkin carving, and so on. Plus, they are typically followed by a trip to the local pub for continued fellowship.

And Get a Drysuit. Your chilly local water will seem to warm up when you wear the right drysuit and undergarments. The extra hassle with gear goes away with experience (and proper weighting) but the process of gaining that experience creates its own fun. In Michigan, when most recreational divers get their gear out between Memorial Day and Labor Day, a scant three months, I’m able to dive two to three times more than that, making the per-dive cost of gear more affordable. It’s a kick to know you can walk through the snow to an open lake. For me, the brisk feeling lets me know I am alive, and the bragging rights are a nice bonus.

Paul Selden, originally certified in 1980, is a PADI and NAUI certified master diver who has done 100-plus dives in the past year.

Problems with Peeing in Drysuits

The need to pee while wearing a drysuit during dives has led to the development of techniques and devices that facilitate urination. Male divers either use absorbent diapers, or a condom catheter attached to the penis that is connected to a plastic or rubber tube exiting the drysuit via a special bulkhead valve known as a “P-Valve.” Female divers also use diapers or devices like the Shewee Go or She-P, a latex or silicone cup held against external genitalia that drains urine via a tubing system identical to the condom catheter. P-valve systems come in two varieties: unbalanced or balanced. In the unbalanced version, a screw valve on the outside of the drysuit is opened for urinating, then closed afterwards. The balanced P-valve uses an additional chamber, inside the suit, to equalize the pressure inside the tubing with the ambient pressure.

Use of P-valves isn’t free of complications. Problems with their use include catheter squeeze, urogenital infections and pneumaturia, or the passage of gas or air in the urine. For the journal *Diving and Hyperbaric Medicine*, Richard Harris, a dive medicine physician in Adelaide, Australia, highlighted some cases, including one of his own. Before submerging into an Australian cave, he stood chest-deep in 44-degree water and opened his unbalanced P-valve to pee. At that moment, Harris distinctly felt cold water flow through the condom catheter into his bladder. Two days later, he began to feel malaise, followed by diarrhea and night sweats. The next day, Harris experienced painful and frequent urination. At the emergency room, he was treated intravenously with the antibiotics cephalothin and gentamicin but when symptoms were slow to subside a week later, Harris was switched to norfloxacin for genital tract infections, with good effect.

A 49-year-old diver performed a 60-minute ocean dive to 23 feet, using a condom catheter connected to a balanced P-valve. He attempted to urinate 25 minutes into the dive but immediately felt a sharp pain in his penis, forcing him to abort the dive. While ascending, he inflated his drysuit fully, which eased his discomfort somewhat. After exiting the water, he opened his drysuit to find the condom ballooned with urine, and a kinked tube. That night, he developed constipation, aches and general flu-like symptoms. He then developed a fever and the need to urinate frequently. He went to the hospital where he was diagnosed with a urinary tract infection and stayed for six days on intravenous antibiotics.

Harris believes the UTIs were likely due to the drysuit tubing. After diving, the drysuit is stored and residual urine or water will stay in the P-valve tubing, a perfect culture medium for bacteria that leads to UTIs. Thus, the most important strategy for preventing urinary sepsis is adequate cleaning of the P-valve tubing after use and before storage. Syringing an antiseptic like chlorhexidine, or a solution of denatured alcohol and acetic acid, through the tubing can accomplish this.

Harris did an informal survey of other drysuit divers and found numerous episodes of UTIs, genital squeeze and pneumaturia experienced by both men and women. Therefore, this is a potentially serious problem that could lead to long-term health problem for those doing prolonged dives in drysuits. Education in cleaning and caring of P-valve devices should become part of technical diving training.

“Genitourinary infection and barotrauma as complications of ‘P-valve’ use in drysuit divers,” by Richard Harris; Diving and Hyperbaric Medicine, December 2009, pages 210-212. This article is a condensed version of the study and Undercurrent accepts responsibility for any errors made during editing.



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Flotsam & Jetsam

Manatee Site Shutdown. Citing record manatee deaths this year, an environmental group wants to close Kings Spring in Florida to divers and snorkelers. It's the primary source of warm water an estimated 800 manatees use for thermal regulation, and one of the few places where swimming with them is allowed. But Public Employees for Environmental Responsibility says the annual 100,000 visitors often harass the animals, driving them into colder waters and causing stress-related illness. Dive operators agree manatees need protection but are opposed to bans and blanket no-touch rules, saying the problem is with private boaters and that more law enforcement officers are needed.

Shark-Fin视角 Protester Wins \$150,000. Randall Arauz of Costa Rica won the prestigious Goldman Environmental Prize this year for leading a campaign to halt shark finning in his country, the world's third-largest exporter of shark products. He secretly recorded video of a ship illegally landing 30 tons of shark fins (that's 30,000 dead sharks). The video caused national outrage, allowing Arauz to make the government enforce its endangered-species protection laws. Arauz, a

sea turtle biologist, says he'll use his six-figure check for off-road vehicles to get his staff to beaches where turtles lay their eggs.

Pony Bottle? No Problem. In our January issue, we wrote how airlines charge up to \$250 one way to pack a pony bottle. Reader Kevin Kuehn (Park City, UT) says skip that and bring it as a carry on, as the TSA allows it. "I've never had a problem, from my spare air to 30-cu-ft. tank. But you must have the valve completely removed before going through security. If you do pack it, best not to declare anything to the airline. Divers I know put a copy of the TSA regs for a scuba tank in the bag with their name and cell number in case anyone has questions."

A 61-Year-Old Meth Head Diver? Medical examiners discovered that James Mettee, who was found dead at Swami's Beach in Encinitas, CA, last December drowned in the ocean while under the influence of methamphetamine. A surfer found Mettee, 61, in the early morning, clad in a full wetsuit and flippers, face down in the sand and obviously dead. His brother said Mettee was an avid diver and had gone lobster diving a couple of days prior. Besides the meth, cardiovascular disease was also a contributing factor to the drowning.