

Undercurrent®

The Private, Exclusive Guide for Serious Divers

Vol. 18, No. 8

August 1993

Salt Cay, Turks and Caicos Islands, B.W.I.

—A Great Place to Visit..., and the Diving is Pretty Good Too!

Dear Reader,

I must be getting soft. I used to judge any trip that required lugging dive gear through Miami International solely by the diving. True, amenities like good food, clean rooms and a lack of blood thirsty insects did play into the analysis, but my conclusions were either, "Mediocre diving, skip it!" or "great diving, worth all the topside suffering!" Well, at the risk of having Undercurrent ship me to Travel and Leisure, this time I had a great trip even though the diving was often less than spectacular.

Skimming over the turquoise waters that surround the archipelago nation of Turks and Caicos (550 miles southeast of Miami), I arrived at Salt Cay after a 5 minute flight from Grand Turk. As the small prop plane banked for the final approach, I noticed the assemblage of small houses and neatly drawn roads that surrounded a quilt-work of man-made ponds. After bouncing down the unpaved air strip, the pilot flipped open my door, leaving me to retrieve my bag from the rear compartment before he revved up for the return flight. Next to a small shack with the sign "Salt Cay Airport," a portly, middle aged, sun burnt man alighted from a golf cart. I shook hands with Bryan Sheedy, owner, manager and jack-of-all-trades at the Mount Pleasant Guest House and Porpoise Divers.

After rumbling down an unpaved lane, we turned into the yard of what struck me as an English country cottage - red roof, stucco walls and green shutters. Sea Safaris, Bryan's state side agent, had counseled me that Mount Pleasant Guest House was not a hotel. Many times during the week I heard Bryan preface his pitch over the phone with a disclaimer to the effect, "This is not the Hyatt Regency, you know." To that, I can only say "hallelujah."

Rooms are clean and simply furnished. There is no air conditioning, although a constant sea breeze, supplemented with ceiling fans, kept both insects and the temperature down. To take full value of the breezes, the house is perforated with vents. I pitied the couple who had the room next to mine. Although

INSIDE UNDERCURRENT

Promote Diving?	2
Rehydration	3
Roots	4
Talk to the Animals	6
<i>Isla Mia, Roatan, Honduras, C.A.</i>	
—Have It Your Way	7
Shark Attacks in Australia	
—Cozumel, too?	8
Why Divers Die: Part III	10
Hunting While Being Hunted	
—Free diving for 200 pound tuna	11

I kept a low profile, I knew that they knew that I could hear their most intimate whispers. They had the one room with the private bath, which left me for most of the week with the communal hall bath as my own. Bryan's two daughters, Cheyenne (8) and Lacey (11), also sleep on the second floor but were never underfoot.

During my stay, there were at most seven guests, some of whom stayed at the Annex, a hundred yards from the main house. It's adequate for a raucous group up to 15. The second floor is furnished dormitory style with seven single beds. Downstairs has three bedrooms - one a double, and two with both a double and a single bed. There is also a small living room, and a single full bathroom.

The center of activity at the Mt. Pleasant Guest House is a covered porch behind the main house. During the evenings, guests saunter up to the gazebo-style bar to sample Eloisa's latest concoction, such as the Iguana Margarita (made with a touch of Midori.) Dinners were superb. Choices included grilled fresh fish with a light butter, shallot and lime sauce, inch-thick grilled pork chops, New York strip steaks, grilled or boiled lobster or cracked conch, among other items. Assuming supplies are in, there is always a fresh vegetable-Wannetta's wonderful rice with okra, for example - and homemade ice cream. Breakfast and lunch, also served on the porch, were equally delightful. I recommend one of Bryan's sumptuous California omelettes. And the lobster salad is to die for! Great french fries too!

Promote Diving?

The entire industry is out to promote diving, to get more and more people in the water. That's good for the industry, but not necessarily good for you and me.

Since May, 1990, new hotel construction along the renowned Seven Mile Beach on Grand Cayman Island has been prohibited. No new hotel properties have been constructed in the Cayman Islands since 1989 when the 330-room Radisson Resort opened.

On June 1, the ban was lifted. With tourist arrivals expected to reach one million this year, developers argued the island was ready for an expansion of its hotel capacity. No plans are afoot to expand the sizes of reefs or the numbers of fish,

Bryan's dive shop, Porpoise Divers, is simply an air compressor (sans cascade) within a small building. Their sluggish converted beach landing craft, advertised as providing effortless entries and exits, is uncomfortable, at best, and dangerous in high seas with its slapping landing platform. So fragile, the craft was out of commission getting a new transmission for my first three days: we used a small outboard fishing boat with no proper ladder to get to the dive sites. We were once caught some distance from shore when the outboard refused to start until beaten several times with a pipe in frustration. Not to worry. A 30 foot custom dive boat, with a forward cabin and Bimini top, capable of

holding 24 divers and traveling at 20 knots, was due the July 4th weekend. This will permit the landing craft to serve in its more appropriate role as a transport ship for supplies.

I made 12 dives during my stay. Despite Bryan's assertions to the contrary, the best dives were away from Salt Cay. One day, we took the hour-long ride in the Porpoise (20 minutes in the new boat) to Grand Turk. The afternoon was spent lunching and visiting the delightful museum in Grand Turk while Bryan provisioned. That morning, we dived Coral Gardens and Coral Canyons, off the south shore of Grand Turk. While the soft and hard coral population was not up to the

© Copyright 1993, by Insightful Newsletters Corp., 175 Great Neck Rd., Suite 307, Great Neck, NY 11021. All rights reserved. *Undercurrent* (ISSN: 0192-0871) is published monthly, except for combined issue November/December by Insightful Newsletters, Corp. Copies of this guide are not available on newsstands, but are furnished directly to the diving public by mail subscriptions only. To maintain its independence *Undercurrent* carries no advertising. Copying by any electronic or mechanical means, including information storage and data retrieval systems, without written permission from the publisher is strictly forbidden. News media may use no more than one quarter page of material per issue, provided that *Undercurrent* is credited. Permission to photocopy articles herein is granted by Insightful Newsletters, Corp., to libraries and other users registered with the Copyright Clearance Center (CCC) for internal and personal use only at the base

fee of \$10 per article plus \$1 per page paid directly to CCC, 21 Congress Street, Salem, MA 01970. Serial Fee Code: 0192-871/89\$10+\$1. POSTMASTER: Send address change with old label to *Undercurrent*, 175 Great Neck Road, Suite 307, Great Neck, NY 11021. Second Class Postage paid at Great Neck, N.Y. and additional mailing office.

To receive the accurate, inside diving information *Undercurrent* offers, send \$58 (U.S. funds only) for a one year subscription to *Undercurrent*, 175 Great Neck Road, Suite 307, Great Neck, NY 11021 and get a valuable FREE gift. Or call toll-free 1-800-237-8400 Ext. 523. Or FAX: 516-466-7808.

Salt Cay standard, the fish were significantly more abundant. At Coral Canyons, a shallower dive at 60 feet over a deep ravine that runs into the drop-off, I found a grouper, a french angel, a hogfish and a queen trigger all performing an odd dance over the carcass of a large crab. There was a large nurse shark and an abundance of large grouper. Thankfully, the fish are not fed by divers, allowing for a more natural encounter. These sites at Grand Turk were set apart from the wall dives at Salt Cay by their architecture. These were dramatic, awesome places where a diver felt the magnitude of the wall, the drop-off and the abyss beyond. With perhaps one exception, Salt Cay did not offer the same power.

Another day, after a two hour trip (Bryan says only 40 minutes in the new boat!), we anchored in the middle of the open ocean, where one might expect an anchor to find no purchase. "Rediscovering" Endymion Rock and its resident wrecks required using GPS satellite navigation equipment and towing divemaster Michael behind the boat with mask and snorkel. Just as I was surprised to discover mounds of fire coral only six to thirty feet below, so was the captain of the Endymion in a 1703 storm. Fortunately for the 560 British troops and seamen, the Endymion's sister vessels were close at hand. Bryan, as he will proudly tell you, discovered the wreck two years ago and will not divulge its location to anyone. He wants to assure that it will not be salvaged, leaving it as an underwater museum for divers who dive with him. Four huge anchors, measuring over 15 feet in length, with flukes over seven feet, are strewn on the sea floor. I counted eighteen cannons, almost all perfectly preserved under thin coats of coral. While the wood has disappeared, the copper pegs that held the keel still stand in a straight line leading to the pinnacle describing the ship's demise. A Civil War era steamer, perhaps a blockade runner, has left its large boiler and other artifacts on the ocean bottom. The boat also decorated the site with yards of anchor chain - the evidence of a lost struggle to free the ship.

Beyond the man-made attractions, several swim-throughs are lavishly decorated with richly colored coral. Given the depth and the abundance of props, the site is the ideal spot for photography. On return, we stopped off at Great Sand Cay, a small island inhabited only by giant iguanas, thousands of curly-tailed lizards, an osprey and a derelict lighthouse. Covered with prickly pear cactus and other low-lying shrubbery, it has perfect beaches and limestone cliffs. In June, Bryan claims the island's small bay is packed with breeding nurse sharks. In the winter, breaching whales are commonly seen from atop the island's promontories. I had to settle for a relaxing snorkel in the bay among an endless collection of pink and pearly queen helmet conch.

A word on the whales. From January to March, whales cruise by Salt Cay and the neighboring islands with some regularity. Bryan described "once in a lifetime experiences" in which divers were able to snorkel with the humpbacks. But

Rehydration

Dear Undercurrent,

Your article on dehydration and DCS mentioned the diuretic effect of coffee and tea. Is this true of beverages that have been decaffeinated? Can decaffeinated coffee count toward the daily fluid intake necessary to stay hydrated while diving?"

*Larry Gottlieb
Bridgeport, Conn*

Dear Larry,

The author, Andrea Zeferes, told us, "Yes, both decaf coffee and tea do help keep your body fluids up. As do low or no caffeine soda pops. Water and fruit juices are still the best for hydration."

In those areas of the world where the water is questionable, then bottled water, fruit juices, caffeine-free soft drinks (either canned or bottled) are the suggested drinks to keep you running to the bathroom. If you are not urinating often, you are not drinking enough fluids. And if you are not drinking enough fluids, some believe you have increased your risk of bends.

Ben Davison

my overall impression was that encounters usually were limited to sightings from the boat and never involved scuba. Understandable - but not exactly the implication from some of the ad literature.

A night dive on a coral encrusted Caribbean wall - Shark's Point - offered the best diving of the week. The intense color of the soft coral and the furry white frosting on the hard coral that had opened to feed provided a magical backdrop for our encounters with the creatures of the night. A large, lacey basket star spread its tentacles off the wall, curling its little fingers around small fry frantically charging my light. I saw a monstrous coral crab bounding down the wall's face, using the coral protrusions like an expert repeller. Several spotted morays were free swimming among the crevices. Indeed, each crevice seemed to house some denizen of the deep - spiny lobsters, hermit crabs, cacooned parrotfish, even a three-foot nurse shark startled by our lights. The star attraction, however, was a fist-size, orange ball anemone found undulating inside a small hole in the wall. With its transparent arms punctuated with small, bright orange balls, the creature looked more the product of a Hollywood imagination than of nature. I wish I had been able to convince the group to go night diving more often.

Other dives had their moments. At Northwest Drop-off, I was greeted by three porpoises gallivanting past me. Two swam upright while the third swam beneath them upside down. Northwest Drop-off offered the most dramatic topography. Only a ten minute ride from the dock (all sites are within minutes of the dock), it feels exposed and rugged, like it should offer more encounters with "big" things. In fact, a group of divers who had come over from Grand Turk to dive Salt Cay and have lunch at the Guest House claimed to see a hammerhead cruising the wall here. (These were the only other divers we saw during the week, and then only at the bar at the Guest House.) I swam with a large eagle ray cruising the wall and a large hawksbill turtle. The spot offers the shearest drop-off, lots of huge black coral trees fanning in the current, a healthy coral garden atop the wall, and the most fish of the Salt Cay sites. It also comes, unfortunately, with the strongest current and the worst visibility - neither of which are really too bad.

At Rock's Paradise, I found a vibrant coral garden at 30-40 feet with a great range of healthy hard and soft corals. At Turtle Gardens, I did indeed find a small turtle to play tag with. Otherwise, the site offered an uneventful, yet pleasant dive over a slanting drop-off and ubiquitous healthy coral. Narrow Black Coral Canyon drops from 60 to 130 feet. Along one side are large stands of black coral whose fingers vibrate in the undersea wind. At 135 feet, we came to a

Roots

Members of the National Association of Black Scuba Divers memorialized victims of the African slave trade by installing a memorial marker on the site of a wrecked slave ship. In an emotional ceremony 35 miles west of Key West, a commemorative bronze plaque was lowered on a one-ton concrete base into the Gulf of Mexico at the site of the "Henrietta Marie," a British slave trade vessel that sank in 1701.

Words inscribed on the marker proclaim, "Henrietta Marie. In memory and recognition of the courage, pain and suffering of enslaved African people. Speak her name and gently touch the souls of our ancestors."

"It was a certain eerie feeling," said the Association's president, Ric Powell of Miami. "After we got it in place, we felt the need to clasp hands in a show of unity that we had accomplished our goal to mark the gravesite of our ancestors."

The plaque now rests with remaining ship's remnants that were discovered in 1972 by Key West treasure hunter Mel Fisher. Fisher's team retrieved such artifacts as beads traded for slaves, two cannons, pewterware, a bronze bell labeled "The Henrietta Marie, 1699," and various sizes of iron shackles once used to imprison slaves and their children.

The wooden sailing ship, 80 feet long and 20 feet across, transported up to 350 slaves during the two-month journey across the Atlantic Ocean.

United Press International

sand shelf under a large overhang. Suspended like alien chandeliers from the overhang were a variety of more bizarre corals and sponges, including some very large purple tube sponges, feathery black coral and a huge orange ball-shaped coral I haven't been able to identify. At one point, I amused myself with a field of garden eels. Pulling their synchronized periscope routine, we floated over them, leaving a vanishing footprint in the pasture of eel heads. Point Pleasant had mounds of coral, topped with huge stands of elkhorn that decorate an otherwise uninterrupted sand bottomed bay. Although there is a little surge, it's a relaxing dive that yielded a very large nurse shark and a truly monstrous lobster.

Substitute divemaster Michael was pleasant and very accommodating. The regular divemaster, Ed Dickenson, had gone off my week to help out the Sea

Dancer. I met Ed at the end of my stay and he seemed affable enough. I suppose he has the same "we'll do what you want to do" attitude. Depth and bottom time were up to my own computer although most dives began as guided tours of a wall site. Michael often surfaced long before us to ready the boat and help us with our gear. This in itself was fine since he had already guided us to a spot below the boat. He didn't concern himself with a couple diving the tables, even though we had clearly exceeded bottom time for a table dive, but it was an easy schedule with no one pushing the limits. Still, the couple took a real risk, and Porpoise Divers not only let them, but seemed unaware.

Although the offer of unlimited diving seemed sincere enough, the wishes of the guests on hand set the schedule; the group I found myself with fell into a two-dive-a-day routine - the number of dives per day will largely depend on the appetite of whoever happens to be staying your week. My companions were happy to sleep until nine and dive twice. And I wasn't complaining. But, like I said, I must be getting soft.

So, we filled the time with other activities. Cheyenne provided a wonderful horseback tour of the island. But, don't make the mistake of wearing only shorts! I was still paying for that mistake on the plane home. Bryan keeps a small stable of horses, and guests are free to go riding whenever they want. Despite his more recent residence in New York's Greenwich Village, Bryan has Wyoming in his blood and can still throw a lasso. For the more urban, there are also bicycles.

The island provides a wealth of destinations - none of which involves shopping, credit cards or even shoes. Besides a picture perfect expanse of beach on the northwest side of the island and a resident Giant Iguana named Iggy, Salt Cay was, for more than 300 years, the source of the finest sea salt produced in the world. Those flats, so nicely edged in stone and guarded over by a handful of windmills, were periodically filled with sea water that was left to evaporate, leaving salt to be raked, loaded into small boats, and taken to waiting ships in the harbor. The buildings that line the west side of the island, between the sea and these "salinas", are standing memorials to the history of this industry. Another, sadder memorial is the complete lack of marine life along the wall in front of town. Perhaps centuries of salt spilling into the water so altered the salinity of the waters in front of the main docks that life was stripped from the walls. Although abandoned for 20 years, huge blocks of salt still remain in the storage bins awaiting ships that will never come.

Salt Cay, Turks and Caicos Islands, B.W.I.

Diving for Experienced	★★★
Diving for Beginners	★★★
Accommodations	★★★
Food	★★★★★
Ambience	★★★★★
Moneysworth	★★★★★

★ poor. ★★ fair. ★★★ average. ★★★★ good. ★★★★★ excellent

Other distractions include an evening of friendly dominoes and pool at the local tavern (Bryan will even loan you the golf cart for the night) or cable television in Bryan's library which houses a wonderful book collection (including a few valuable first editions). Keeping in mind that it is most assuredly not the Hyatt, the Guest House is full of interesting diversions - from Navajo rugs in the rooms to an enormous collection of Neil Simonalia, from Eloisa's stories of life in her native Dominican Republic to the interesting story of Bryan Sheedy himself.

So, a great trip with pretty good diving, no crowds, and a do what you want schedule. I felt like I was with a bunch of friends, which made every moment of the trip enjoyable.

Except getting there: Beginning in July, only American Airlines will be flying to the Turks and Caicos Islands, stopping only at neighboring

Talk to the Animals

The latest research on dolphins challenges beliefs that only people are capable of showing love, enjoying sex and thinking creatively about abstractions such as the future and the past. This research suggests that dolphins live in a highly advanced and complex undersea society.

"These are cultural animals," said naturalist Ken Norris, who researches spinner dolphins off Hawaii. "We're dealing with an animal for whom cooperation with its fellows is life itself."

"Some of that cooperation seems surprisingly human," said Randy Wells, a conservation biologist with the Mote Marine Laboratory in Sarasota, Fla. Wells has followed an extended family of about 100 Atlantic bottlenose dolphins in his research boat for 22 years. The dolphins, which can range up to 12 feet long and 1,000 pounds in deep-water populations, may live more than 50 years. They often travel more than 30 miles in a day, as deep as 900 feet.

Dolphin mothers spend more than five years raising each calf and recognize offspring throughout their lives. Fathers protect the pod, and young females look after younger siblings while young males bond, make mischief and learn to fend off sharks, Wells said.

Dolphins are not monogamous and appear to mate year-round. In human terms, their qualities are not all admirable. In the wild, they have been observed to engage in a violent form of mating (scientists call it "gang-rape"), in which groups of males isolate and mate with an unwilling female.

Scientists have long considered dolphins to be highly intelligent, partly because their brains are larger than humans' and have twice the convolutions. Now one researcher is trying to prove it - by making dolphins watch television. Louis Herman, director of the Kewalo Basin Dolphin Laboratory in Hawaii, set up a 13-inch monitor opposite an underwater window where dolphins could see the image of a trainer giving commands.

"The dolphins watched, turned and immediately carried out a whole series of instructions correctly," Herman said. Chimpanzees, by contrast, need months of training to master similar activity which requires abstract thought.

"The ability of dolphins to understand abstraction as representing the real world, I think is a very high level of symbolic thought," Herman said.

Dolphins can see only one-tenth as well as humans, but can hear 20 times better. They communicate with whistles, clicks and body language. The dolphin's sonar, in which clicks of sound travel through water more than 3,000 feet, can stun fish at close range.

Scientists think dolphins keep all that noise straight by prefacing messages with their own "signature" whistle and addressing them with the identifying whistles of other dolphins in the pod.

A typical dolphin message might be something like "I'm So-and-so, I hear you, I'm over here and I'm frightened," Norris said.

"Dolphins are here-and-now animals," and obviously can't store thoughts in books like humans can, Norris said. But "they can carry on a discourse about things that don't exist, like the past and future and concepts. They also teach each other, which to me is the concourse of culture."

Using underwater video and sound recorders in clear Bahamian waters, the Wild Dolphin Project there has compiled a dictionary of more than 50 phrases of sounds and movement, from simple commands like "dive down" and "turn left" to expressions of emotion made during mating and conflicts, said research director Denise Herzing.

Researchers are cataloging such messages in hopes of creating a computer system that will transcend the basic command-response language of dolphin trainers and allow the animals to initiate conversations with humans.

Michael Warren and Associated Press Reports

Providenciales. To get to Salt Cay, you have these choices, none of which is particularly appealing: (1) Take Turks and Caicos Airlines to Grand Turk for \$13, then connect only on Monday, Wednesday or Friday to Salt Cay at \$50/person; or charter a flight from Grand Turk for \$100; (2) Charter a Turks and Caicos plane from Provo for \$300 (which can be bargained down to \$275).

Call Bryan to help you figure out the most economical combination (the week I visited, many of the charter operations were grounded for not keeping up with scheduled maintenance.) Go to Turks & Caicos with a sense of adventure and a great deal of patience. It may take a little more time (and money) to get there than you had expected.

Divers Compass: A six night/seven day package (with no single supplements) includes unlimited boat diving, three very good meals a day, taxes and gratuities for \$695 (plus seven percent guest tax and gratuities); For that rate, call Bryan directly at (809) 946-6927; Sea Safaris at (800) 821-6670 or (800) 262-6670 in California offers the same package for \$100 more, but includes gratuities. . . .E-6 slide processing was handled in a converted closet in the house. . . .Bring your own gear and make sure it works. Turks and Caicos Airlines: 809 946-4255.

Isla Mia, Roatan, Honduras, C.A.

—Have It Your Way

Choices still exist. One can read Skin Diver or Undercurrent. Eat at McDonald's or dine on mom's home cooking. Dive from a freshly-minted crew ship or one like the Isla Mia.

So, why choose one over the other? Same ocean, different ships. Many opt for the newer slickly packaged ships. But, like every McDonald's, you know what to expect - no surprises. Dining at mom's is different- it could be your favorite specialty or (surprise!)- liver and onions.

Returning to the Isla Mia was like going home after being away for a long time. She's a lot older and worn from what I remembered from four years ago, but still comfortable and friendly. There were only nine of us aboard so there was plenty of space in individual cabins and on deck. Captain Jonathan Tromm is very laid back and has a wide range of knowledge, so he's interesting to chat with when he's not busy tending to his ship's needs. Long time assistant Moncho is still with the ship and assists in the diving activities along with Milthon. They always checked our air, logged us in and out of the water, and handled our cameras in a quiet but friendly professional manner. Margaret and Marna kept us fat and happy by preparing our varied meals and keeping the ship tidy. Special dietary requests in advance are honored.

The biggest surprise was that I had forgotten the joy of unstructured diving devoid of all the rules other ships often have. We were asked to follow a few simple procedures: always let a crewperson know when you start a dive, don't put anything in the toilet that you haven't first eaten, and don't forget to turn off the water. Want to dive your butt off? Fine- anytime you want to, if prior arrangements are made. Want a beer for lunch? Great- along with the diving afterwards. How 'bout computers? Love those machines! Can I have three eggs over easy and the waffles? Yes, of course. I'd love to make a deep dive on this wall- will you accompany me? Sure- want to try 150 feet? Jon accommodates any reasonable (and sometimes unreasonable) request. After a few hours on the Isla Mia you feel right at home. This is diving for adults.

The Isla Mia is no floating mansion; some of its cabins are not spacious (but request cabin G aft— it's large enough for four but is called a double). The three heads are large but worn. The air conditioning in the main salon doesn't exist and, in the aft cabins, it fights but doesn't win the battle against the high 80's temperatures we experienced. However, the beer and soft drinks, available under the honor system, were always cold (beer \$1.25 and soft drinks \$1US).

Shark Attacks in Australia *Cozumel, too?*

While it's not our intention to fill our fellow divers with fears of sharks, three incidents in June remind us divers that we are not at the top of the food chain and some caution is advised.

A great white shark devoured a honeymooning scuba diver 400 miles north of Sydney, Australia, near Byron Bay. Early June, John Ford, 31, was diving with his bride, Deborah, 29, when the shark lunged at them. He pushed her from the path of the shark and she and three other divers were unharmed. Mr. Ford's fins, torn pieces of his wet suit and his weight belt were later found in the water.

Fishermen searched for the shark and caught a 16-foot great white — apparently the same one — with a hook and net. But the shark (called a white pointer in Australia) rammed the boat, which was just two feet longer than the shark, dragged it for miles and spat out a human torso as well as pieces of wet suit and a face mask before struggling free.

Scientists have asked the hunters not to kill other sharks indiscriminately, saying the creatures were crucial to the marine environment. "The great white is like the lion of the sea," said John Paxton of the Australian Museum. "When people occasionally get attacked by lions (we) don't go out and kill a whole lot of lions."

A few days before, 34-year-old Therese Cartwright was killed by a 12-foot great white while diving near a seal colony off the northern coast of Tasmania. During the attack, her husband and five children, including 6-year-old quadruplets, looked on helplessly from their boat. Searchers later found one of her legs more than a mile away.

Scientists theorize both attacks were cases of sharks mistaking divers in wet suits and flippers for sea mammals, such as seals. Marine researcher John Fairfax said shark attacks may become more frequent because commercial fishing is depleting fish stocks. "The creatures are starving because their food chain is diminishing," he said. "Sharks are coming closer to the coastline looking for something to eat."

In 200 years, about 100 Australians have been killed by sharks. There have been a few incidents of the great white attacking divers off the California Coast.

And, while the great white doesn't swim in the

Caribbean, other sharks do.

Mary Alice Eggenmeyer of Dallas, Texas, disappeared during a night dive on Cozumel's Santa Rosa Reef on June 11. Apparently, she became separated from her dive buddy and the rest of the dive group.

She was not found until the next day, when her body, mutilated by a shark, washed ashore.

The coroner, Dr. Marco Antonio Carrillo Flores, ruled the death due to drowning; however, he said it was "medically impossible" to determine whether Eggenmeyer was attacked before or after she died.

Cozumel officials stopped all night diving, added security personnel to supervise the beaches and used naval vessels to patrol the most popular swimming spots. George Burgess, Director of the International Shark Attack File with the Florida Museum of Natural History at the University of Florida, was called in to assist officials in determining what steps should be taken.

Burgess argued against hunting sharks and discounted the rogue shark and man-eater theories. He pointed out that this was an isolated instance and that the additional security personnel and naval patrols were not necessary. What was important was not to dive the drop-off at night.

Burgess told *Undercurrent*, "Three factors contributed to this attack. First, it was a night dive, when sharks normally feed.

"Second, the dive was on a vertical wall where sharks might well be expected.

"Third, the victim became separated from her buddy and thus became a potential target. Sharks normally do not feed from schools of fish. Thus the more divers around the less likely a shark is to attack."

Burgess said that "the incidence of shark attacks on humans around the world is fairly consistent at about 75 per year. But as more and more people take up recreational diving there will be more sightings and potentially more attacks."

Hawaii has 6-8 attacks per year and Florida averages 10-15 per year, though nearly all are swimmers, snorkelers or surfers.

Compiled by Ben Davison from articles by Geoff Spencer, AP, UPI, and interviews.

Meals were adequate, varied and nourishing. Standard fare served for breakfasts were the usual: eggs, omelettes, bacon, waffles, etc. Buffet lunches included: excellent conch salad, fish sandwiches, hamburgers, spaghetti, turkey tacos, and always fresh fruit. Dinners were served and included: whole roasted turkey, baked fish, conch creole (delicious!), roasted chicken, cauliflower, green peas, sweet corn-on-the-cob, rice and beans. Homemade desserts included: coconut and banana cream pies, peach cobbler, and chocolate cake. Special pre-breakfast and mid-afternoon snacks were served each day (fudge brownies, blueberry muffins, tortilla chips and salsa, fried plantain chips, peanut butter and oatmeal cookies).

Jon takes pride in the fact that all the food served on board is prepared from scratch, claiming it saves money. But, my bet is that he knows that good ol' home cookin' keeps people coming back for more. Yes, indeed, dear readers, you can do it "their way" on some dive boats or have it "your way" on the Isla Mia.

But, any ship you choose is something you get on to go diving. So let's do it. Jon piloted the Isla Mia around the entire 35 by 4 mile wide island, visiting his moored anchorages far from any land-based resort and never in sight of another dive boat. We dove vertical walls starting at 30 feet which then sloped at 250 feet. Most reefs were spur and groove formations. Here are some of the highlights: Disembero (south side), hamlet city plus lots of lettuce, plate and finger coral; Royal Crack (south side), vertical wall starting at 30 feet down to 150 feet with 100 foot visibility; Black Morat (east side) with 125 foot visibility, six foot tube sponges, a wall of sea fans, and numerous azure vase sponges; Cathedral (north side) - my favorite spot- a washed-out hole from an ancient waterfall with coral crabs, midnight parrots, and scrawled filefish; and Bakin Swash (north side) with its high spurs and deep grooves with caves containing glassy sweepers.

Night dives were always available but most were not spectacular due to Jon's desire to safely anchor inside the reef line. The corals, both hard and soft, were alive and well, but, during my week, few large fish thrills occurred. It's interesting to note that four years ago I made the following comment regarding my sixth dive at that time, "Still no large fish". After two trips and travelling completely around the island, I can only conclude that the large fish are few and far between. Indigo, butter and shy hamlets abound; french, grey and queen angelfish are numerous; orange-spotted filefish are common; small groupers eyed us warily. Highlights of my recent trip included a golden-spotted moray free swimming during the day, schools of blue tangs attacking algae-covered racks like groups of piranha fish, and a few magnificent midnight parrot fish. The healthy coral reefs included a lot of stately pillar coral and some fine thickets of antler corals. Brain, lettuce, plate, star and finger corals thrived. Pencil urchins had numerous hiding places. But, no big fish.

So what's my take of the Isla Mia and Roatan, Honduras? Good diving, great seascapes, few large fish, but all aboard a ship that treats its guests as part of its family. The Isla Mia tries damn hard to provide the best services afloat with few questions and restrictions.

Diver's Compass: The Isla Mia is outfitted with smoke detectors, oxygen and

Isla Mia, Roatan, Honduras, C.A.

Boat Comfort	★ ★ ★ 1/2
Diving for Beginners	don't go
Diving for Advanced	★ ★ ★ ★
Overall Ambience	★ ★ ★ ★
Diving Sights	★ ★ ★
Overall Rating	★ ★ ★ ★

★ poor, ★★ fair, ★★★ average, ★★★★ good, ★★★★★ excellent

fire-fighting equipment, along with numerous 120 v outlets. . . .E6 processing is available for \$8/roll. . . .The price is \$995 for seven nights, six days; \$1095 next year, with a 10 percent discount for repeats; hidden costs: \$25 hotel tax, \$17 departure tax, \$6 decompression chamber fee (a worthy voluntary donation) plus a tip if deserved; reservations 1/800 874 7636. . . .The Isla Mia provides re-confirmation of out-going flights, arranges for boarding passes, and pre-checks bags for the airline, eliminating hot, humid waits in lines. . . .If you want booze, bring your own, duty-free. . . .Airfare from Houston: \$367.

Why Divers Die: Part III

The National Underwater Accident Data Center (NUADC) at the University of Rhode Island has been recording diving fatalities involving U.S. citizens for 20 years. To further your awareness of the causes of death so that you may dive more safely, Undercurrent has been reporting their analysis for 15 years. The 1991 report on scuba fatalities is the second joint effort by DAN and NUADC.

Ben Davison

Some presumably healthy individuals die suddenly and unexpectedly. The victim is usually not rescued in time to allow resuscitation at a medical facility. The cause is nearly always cardiovascular disease.

The cardiovascular response to diving stems from different kinds of stress. Physical stress from exercise and cold results in increased oxygen consumption and increased work load for the cardiovascular system.

Emotional stress may result in an acute anxiety reaction causing a very rapid heart rate, elevated blood pressure and hyperventilation. These stresses may result in dysrhythmia, angina and sudden death in the presence of cardiovascular disease.

Anxiety can produce a rapid and forceful heart rate of which the individual becomes acutely aware. This awareness can result in rapid breathing which, in turn, creates a reverberating circuit of increased, anxiety-associated heart rate and respiration rate. The panic or acute anxiety may cause high blood pressure and pulse rate of 170-180 per minute.

Normal breathing rate is around 15 breaths per minute. A person in panic, breathing rapidly, may achieve a rate of 35 breaths per minute. Dr. Glen Egstrom at UCLA found that a diver at 60 feet, with approximately 300 psi of air remaining in the tank, breathing at 35 breaths per minute, will overbreathe the average regulator. The regulator simply cannot handle this exaggerated level of breathing requirement and will not provide needed air.

These stresses demand increased output from the heart and an increased blood flow. If disease is obstructing, blood flow becomes inadequate for the working

heart. The result may be chest pain, lethal rhythm disturbances or heart failure.

Cardiovascular disease was a factor in half the deaths of divers older than 40. There were nine deaths immediately caused by myocardial infarction and an additional five deaths from drowning after myocardial infarction (heart attack). Four more victims had a cardiovascular disorder such as hypertension and coronary artery disease.

In the age 40 and under group, there were two deaths from drowning with cardiovascular disease as a contributing factor. Thus, at least 20 victims had cardiovascular disease severe enough to have disqualified them as divers.

A heart attack that happens to a tennis player or jogger does not place the individual in further jeopardy from the environment. However, a diver who develops a heart attack during a dive may drown. Divers with risk factors for coronary artery disease — age, smoking, hypertension and other life style characteristics — should have a careful examination to search for the disease.

*“...at least 20 victims
had cardiovascular
disease severe enough
to have disqualified
them as divers.”*

A 51-year-old experienced scuba diver and a member of an elite US military organization was hypertensive and a smoker. He had experienced difficulty on previous dives because of shortness of breath. He and a companion were diving in 5-10 feet of water, where he died of cardiac arrest. The autopsy disclosed coronary atherosclerosis.

A 72-year-old male diver had a history of emphysema and tobacco abuse. On entering the water, he immediately developed distress and shot to the surface. He was rescued and placed in the boat followed by CPR, but died from a heart attack.

An obese 58-year-old female (clearly not physically

qualified for scuba diving) got into difficulties while diving in the tropics and died of a heart attack. A male with morbid obesity, hypertensive cardiovascular disease, and diabetes experienced cardiac arrest at the end of a dive.

A female who had made 150 dives had no known medical problems and had undergone a physical shortly before the dive trip. She developed difficulty on the first dive while at about 40 fsw. She surfaced conscious and speaking, but developed cardiac arrest during rescue. Autopsy disclosed coronary artery disease.

A male who had known coronary artery disease with two previous heart attacks and a three vessel coronary artery bypass graft procedure was making his first dive since surgery one year prior. He surfaced, called for help and then developed cardiac arrest at the end of a relatively uneventful dive. The cause of death was determined to be acute myocardial infarction.

Fainting

A syncope is a sudden loss of consciousness —i.e., fainting. The most common cause is decreased cardiac output, often caused by arrhythmias and either slow or rapid heart rate (35 or below 150-180). Other causes may be decreased return of blood to the heart through the veins, low blood volume, and obstruction to cardiac output. Fainting in apparently healthy people is common.

The simple faint is a form of syncope due to peripheral dilation of blood vessels as a result of many different stimuli. The person who faints due to apprehension about a needle stick or minor injury is familiar to all. Anxiety, which may range from mild to the panic attack, may produce syncope by hyperventilation, which causes low CO₂ content in blood) producing cerebral vasoconstriction and causing unconsciousness.

Exercise syncope may occur in the person with obstruction to cardiac output so that normal activity is tolerated, but there is insufficient response to the demand for cardiac output from the exercise. A sudden drop in blood pressure on assuming upright position occurs in individuals taking certain blood pressure medications as well as in a few apparently normal individuals taking no medication whatever. Seizures, hypoglycemia (low blood sugar), and anaphylactic reactions, nitrogen narcosis, oxygen toxicity, excessive carbon dioxide, contaminated breathing gas, and insufficient oxygen in the breathing gas may also cause fainting.

Several drownings occurred after the diver appeared to lose consciousness. The drowning itself was the probable cause in most cases. The diver with an interrupted air supply may lose consciousness during reflex breath-holding prior to inhaling water.

***“Searchers found
the woman with her
octopus regulator entangled
in kelp and her buoyancy
compensator inflator
hose disconnected.”***

A 52-year-old male was diving on an offshore wreck at 80 fsw with one buddy. The buddy pair surfaced down current from the boat and were unable to reach it. The surviving buddy was picked up by another boat, which then came across the diver who had dropped his tanks and weight belt and was floating on his back with his buoyancy compensator inflated. His heart had stopped. The combination of cold water, hypothermia and mild coronary artery disease with maximum physical effort in swimming against current seem to have been the cause.

A 40-year-old experienced diver was trying out new scuba gear in a shallow restaurant pond, when he died. An employee of the restaurant observed the victim swimming underwater, stand up, remove and replace his mask, and then resubmerge. Later the victim was found floating face up with his head underwater. The presence of coronary artery disease, along with the exertion of using scuba gear, suggests a cardiac event as the cause of death.

A male discontinued a dive and returned to surface where he denied difficulty, but was coughing. He stated that he would rest on the surface. A short time later he was floating face down in the water and, on rescue, was in cardiac arrest. Autopsy revealed acute myocardial infarction and coronary artery disease.

Continued Next Issue

Hunting While Being Hunted

— Free diving for 200 pound tuna

Tuna, wahoo and dorado are challenging game fish by any measure. They're big. They're mean. They travel

far offshore. They weigh two, maybe three hundred pounds.

They're kid's play for a certain hard-core group of blue-water hunters who free dive for them. No tanks—just masks, fins, wet suit, weights and six-foot long custom-made spear guns.

No one had taken blue-water fish until a southern California diver named Terry Maas speared a bluefin tuna off Mexico's Guadalupe Island 10 years ago. "That was really a watershed event," said Bob Jackson, a wiry, silver-haired, East Bay diver and real-estate broker, and an accomplished blue-water hunter. "Tuna have always been the ultimate game."

*"Tigers are sneaky
— they like to attack
you from behind.
You have to constantly
maintain a 360-degree
sweep as you hunt
to make sure you
pick them up
when they enter
your zone."*

Divers who stalk tuna in the offshore depths share some characteristics — superb conditioning and long free-diving histories foremost among them. "It makes no difference how good you are as a scuba diver," said Jackson. "Success in this sport depends on how long you can stay underwater at a depth of 20 to 35 feet, relying on nothing more than a lungful of air."

"Guys like Maas," Jackson told *Undercurrent*, "can hold their breath for a minute and a half. But my best time is 40 seconds." While a lot of amateurs take several breaths on the surface to fill their lungs with oxygen, serious free divers avoid the technique. "We don't hyperventilate when we dive," Jackson says, "so we don't have problems with shallow water blackout."

California's blue-water hunters favor the offshore Mexican Islands of Guadalupe, Socorro and San Benedicto which range 100 to 200 miles from the mainland. Here, relatively shallow water drops abruptly into the abyss. Game fish cruise the transition zones in large numbers, gorging on bait fish. Divers cruise with them, spending about 40 minutes of every hour underwater.

"While most divers will dive to 25 or 30 feet and hold there looking for big fish," Jackson said, "some stay on the surface and wait for a fish to come along and then dive for it. You don't have to dive deeper than 35 feet because pelagic fish are not deep. They are where the bait

fish are. Then, when a tuna or wahoo ventures close enough," Jackson says, "you shoot it."

The weapons of choice are a six-foot shaft launched by a customized spear gun fitted with five or six rubbers. The spearhead is affixed to 35 feet of stainless steel cable, which is, in turn, connected to 100 (or more) feet of float line.

"Once a fish is speared, you chase it as it hauls the float line around," said Jackson. "The diver has to take control of the fish in the water and deliver it to the boat — it's considered bad form to let the boatmen land the fish for you."

The world-record bluefin tuna, speared by Maas, is 398 pounds. Jackson was on the trip that brought diver Jay Riffe the world-record yellowfin tuna, a 285 pounder. Jackson himself has bagged a 170-pound yellowfin.

But if big fish are esteemed, big catches aren't. "We consider ourselves very lucky if each of us gets one tuna a trip," said Jackson. "Some of us will take a few wahoo or dorado as well. We aren't into killing a lot of fish — they're too valuable for that. We immediately bring our catch on board the boat, clean and fillet it and then freeze it. That way nothing is lost. The experience of stalking big fish on their own terms is what it's all about."

Jackson realizes that when he's hunting, he's not at the top of the food chain. "Mexico's offshore waters have lots of sharks, and at least three of the species attack people with regularity — Galapagos sharks, oceanic white-tip sharks and tiger sharks," said Jackson. Of the three, tiger sharks pose the greatest hazard. They have been implicated in scores of human attacks.

"We see at least one big tiger shark on every trip," said Jackson. "When one comes into the area, we get out of the water immediately."

"Tigers are sneaky — they like to attack you from behind. You have to constantly maintain a 360-degree sweep as you hunt to make sure you pick them up when they enter your zone."

Jackson advises prospective candidates to objectively evaluate their skills. "There's some danger involved, and it's physically very demanding," he said. "You have to train for it. It has to be important to you."

In the summer, Jackson swims laps three times a week and free dives off the north coast almost every weekend. He says that, during the winter, "I walk and run in the hills and pump iron in my small gym at home. But free diving for big fish is not just being in good shape; it is also being comfortable in the water."

"While my son and I dive most weekends, we do not shoot fish on scuba; only free diving. And we do that less and less each year because it just isn't sporting to shoot a ling cod that just sits there looking at you."

Want more information on diving for the big ones? Jackson says he's happy to talk to qualified divers. Call him at 510/283-0464.

This article originally appeared in the San Francisco Chronicle. Written by reporter Glen Martin, we have supplemented it with our own interview of Jackson. It is reprinted with permission of the Chronicle; we take all responsibility for editing errors and omissions.

LAST CHANCE! LAST CHANCE!

This is your last chance to take advantage of our Special Bonus Offer. Extend your subscription now and receive up to 4 great gifts. See the enclosed Extension Card for all the details.