August, 1977

P.O. Box 1658, Sausalito, California 94965

Cable Address: Gooddiving

# St. Croix, U.S. Virgin Islands:

## The burgeoning business of beach diving.

Whenever I'm trying to figure out where to take my next dive vacation, I quickly realize that I'm a captive of the printed word. I won't select a spot about which nothing is written, whether it's an article in Skin Diver or now Sport Diver (but it's late August and where is the summer issue?) or even an advertisement or brochure produced by the hottest copy writer in forty fathoms. I must have proof that I can get tanks and air and that guides will lead me through the mysterious new waters; I need some indication that the coral is alive and the fish swim about. After that, "Ah pays my money and takes my chances."

I was once diving in St. Thomas and considered mounting the flying goose, one of those Antilles airboats which skims migratory-high over the whitecaps between the Virgins, to St. Croix, but I could only find inadequate little ads for "guided tours" and everyone on St. Thomas said anyway "you don't want to go over there,—the natives are restless." So I didn't. Novice that I was, I needed to see pictures of fish on the reef, divers on the boats and girls on the beach before I made the trip. I, who fantasized about diving into the unknown, discovering hidden treasure and picture book reefs, decided to stay in St. Thomas a few days to drink beer in Sparky's, forgoing exploring an island 40 miles away that I couldn't find a decent brochure about.

Now for Undercurrent I must explore unknown places, but I prefer sites more exotic than St. Croix. For example, we will cover St. Lucia soon. St. Croix, however, earned our attention because we respond now and then to a well-orchestrated hustle. In January a letter arrived from the President of V.I. Divers, Bret Cilliam, saying he would "like to host one of your writers to see how we fare in your evaluation. We aren't perfect, but we like to think that we do a pretty good job of taking care of our guests." Not long after, the Virgin Islands Tourist Board wrote "Y'all come see us some time, hear?"

# INSIDE UNDERCURRENT Aluminum vs. Steel Tanks—an Update: Steel still may be your best bet. p. 4 Do Shiny Chrome Gadgets Attract Predators? Who cares, most divers prefer pizzaz, p. 7 A Reminder to Resort Operators and Dive Guides: Traveling divers deserve what they pay for p. p. 9

St. Croix has been an obscure speck on tourist maps because a flock of local henchmen gunned down a flock of visitors a few years back. Caribbean islands have had nasty incidents, but the brutality of these murders on U.S. territory killed tourist trade. Only now is St. Croix back to a 60's tourist level. With no high rolling divers hitting the beaches, St. Croix dive trips

were offered by a handful of guides in business more for sun than income, Bret Gilliam included. Gilliam however, had his eye to the future and after a guide gig or two he opened his own business, expanded, and continued to expand. Now he has the only full service dive shop on the island, and owns <u>Virgin Diver</u> which operates one week charter trips out of British Virgin ports. Along with being an enthusiastic diver, Gilliam's real skill seems to be tough-minded management. Gilliam will bust his buns to get tourist trade, and I don't doubt he'll be successful. He expects an avalanche of visitors from Skin Diver's forthcoming coverage, and when I was in his shop boxes of new gear were arriving and he was continually on the phone hustling new staff to handle the onrush. That's sound planning and that's why Gilliam's getting St. Croix on the divers' map.

I selected St. Croix because Gilliam offered a one week certification course which I sought for a newly recruited buddy, (we'll review the course next issue) but only after we had answered his earlier invitation saying that he would learn of our visit when he read about it in Undercurrent. He replied "you're right. Booking as a regular diving customer is really the best and most objective way to conduct a review. . . Good luck with Undercurrent." So Bret, we booked as a regular customer. I was the guy you promised to have a dive for the first day, but didn't--that's a grievous sin, since it cost me \$450 by air to get to your place for a week and I didn't appreciate spending the day sitting on the dock particularly when I learned another shop did have a dive that day--and I was also the guy who couldn't get his strobe to work (what's new) and also the one who dragged his regulator through the sand at Cane Bay--you know, just as the beginners do.

St. Croix diving is well suited for the diver who brings his own tank and buddy, who feels confident in new water, and wants to explore the reefs on his own, because there is more than enough beach diving to keep one occupied for a vacation. In fact, Gilliam doesn't even run guided boat dives on St. Croix.

The two shops that do motor almost exclusively to shallow sites outside of Buck Island National Park which is reserved exclusively for snorklers. Gilliam rents a tank and pack for \$7/day, which is why you ought to bring your own, but claims to encourage people to head off on their own and will provide a map of beach dives for anyone who has demonstrated on a guided dive that he can handle himself. A single tank guided dive is \$25, even with your own equipment, and \$35 for two, an exhorbitant fee that only a novice should pay more than once. For people wanting a week of guided dives, you get more for your money on other islands, but for clubs and confident beach divers, St. Croix indeed rates well. Gilliam, however, has two competent guides, Ronnie Cutler and Bill Walker, also a gentle and excellent instructor.

For the macro photographer, Frederickstad Pier, a half hour by car from Christianstad, will provide critters almost impossible to find elsewhere. On each of three dives between my buddy and me, we encountered several sea horses hidden among the unique range of sponges, corals and anemones clustered on the pilings. I also discovered a small frogfish with a fishing lure dangling from his forehead. Nightdives are spectacular, I'm told, yet in the week I was there only one was scheduled, and I could not attend; a photographer who did spent a roll of film on batfish. Beneath the pier the bottom is littered with junk (there are still a few bottles and other artifacts beneath the silt), but large trumpet fish or schools of disciplined bait fish can keep the diver without a camera interested for a couple of dives.

I suppose half the guided tourist dives on St. Croix are made at Cane Bay,

minutes from Christianstad. As a California diver, I felt at home because the diving begins 200 yards from shore—that's why VI Divers rent their tanks with back flotation devices. Nearly all guided entries are from one point, although the dropoff stretches for miles. It's a steep dropoff, not a vertical wall, adorned with pleasant but unspectacular coral heads occasionally separated by sand valleys. Most of the corals and sponges were available, decorated with very large sea fans. At 75 feet a few twigs of black coral sprouted here and there. But I was aware that the drop off was so accessible to divers, that the unique and fragile fish were not to be seen. There were no live or even dead shells, and fish of eating size were already on dinner plates. What could be a spectacular site was indeed interesting, yet picked over and predictable. Of the half a dozen dives between my buddy and me, a three foot hawksbill turtle was the highlight.

A conversation with guide Cutler explained the problem. He had speared the world's record dolphin, he said, at the drop off. Although there are no lobster on the reef, Cutler said that after three months in New York he returned to find about 20 which he feasted on. VI divers permit no spearfishing, or taking of live creatures, says the brochure, but it's a double standard for staff. Cane Bay is a nice dive for tourists. If the Government wants to keep them coming they may have to protect easy reefs from locals.

Buck Island dives are worth a trip and we found now-departed guide Michael of Caribbean Sea Adventures and B. Max Friedman of Pressure Limited careful and competent. B. Max is excellent; he leads trips anywhere and offers a week's certification course, all with a sprinkling of unnecessary sarcasm. His rates are identical to V.I. Divers while Caribbean Sea Adventures charges \$2.50 less. All three shops are within a 3 minute walk of each other, but Caribbean Sea Adventures also operates out of the Bucanneer Hotel and is the only shop to offer regular Sunday dives. Find B. Max at 59 Kings Wharf, Christianstad (809/773-2678)

St. Croix is expensive, but so is most of the Caribbean. For people on a budget, money will evaporate faster here than at dive resorts where diving is at your beach front. A car is required to get to the dive sites and about the best price with unlimited mileage is \$100-\$120/week from Olympic (Bassin Triangle, Christianstad) or Antilles (Caravelle, Christianstad). Write ahead on business letterhead and you might get commercial rates. To economize further, try weekly apartment rentals. In town, the Royal Scotia rents apartments for \$125/week summer, \$150/winter (43 King St., Christianstad) or outside at The Waves at Cane Bay (roughly \$175/week, double, with kitchen). The Vista Mar (809/773-2138) advertises one bedroom units with kitchen for \$120/week.

We stayed at the Bucanneer. Summer rates of \$51 are awfully high, but it's attractive and relaxing, with nice swimming and sunning, not much snorkeling, and acceptable and varied cuisine. In town, the Club Commanche (\$24 summer), the Kings Alley(\$32) and the King Christian (\$28) are good choices, but they are without a beach and tourists abound in the streets. However, you can walk to the dive shop and to the many good restaurants in Christianstad. For fine dinner, we loved the Commanche. We didn't enjoy the appetizer of quail eggs garnished with salmon eggs, but the cat beneath the table did. The Top Hat was tops, and Captain Weeks provided inexpensive native fare. For the tight pocketbook there were plenty of possibilities for sandwiches and beer. Black Bean soup and a Heinekens is a lunchtime winner at the outdoor Cafe de Paris.

The locals? They're a taciturn lot, neither friendly nor hostile. We never felt edgy on the streets, only ignored by everyone but the cabbies seeking a \$1.50/person fare to the Buccanneer. St. Croix's past problems have passed.

So, beach divers, give it a shot if you care to explore. Who knows what you might find. Start with VI Divers (write Pan Am Pavilion, Christianstad, 809/773-6045). Or try the local dive club president, Don Hinkel (773-2027).

# Aluminum vs. Steel Tanks-an Update:

## Steel still may be your best bet.

"I've got a four-year-old steel tank, about ready for a hydro test, but now I'm considering replacing it with an aluminum tank. I'm 5'5", 120 lbs, and would sure like to pack around less weight. Although I do have annual inspections, I'm still afraid of rust in the tank and I understand aluminum is rust-free. I can sell the steel tank to a friend, so the cost to me for the new aluminum tank will be about \$80. I think it's worth it. Do you agree?"

So writes a woman from Pensacola, Florida, one of several divers who have written in the last year with similar questions. Our answer is "no." We don't agree.

The diving industry and sport divers themselves have lauded aluminum tanks since their introduction into the United States in the early 1970s. John McAniff, a director of the University of Rhode Island scuba safety project, has participated in studies of both aluminum and steel tanks and clearly selects aluminum. "We are very high on aluminum tanks for sport divers," he says.

Not considering the cost, aluminum probably is superior. Yet there's still a lot of bunk circulating about aluminum tanks, some of which can be attributed to advertising copy such as exists in an ad recently run by "DEW". DEW advertises an aluminum pony tank claimed to be "100% rust free," made of "light weight aluminum, lighter than steel," with "walls twice as thick as steel" and "stronger on a pound for pound basis than standard steel,"

We have not analyzed the tank, but it's just about certain to be the same alloy used in larger tanks, and and for aluminum tanks of 50 cu ft and larger, those statements are distortions and essentially irrelevant.

#### Aluminum: 'Rust'-free, not Corrosion-free

Yes, aluminum is "rust-free" because rust is iron oxide, and aluminum is not made from iron, as is steel, and therefore does not produce iron oxide. Aluminum does, however, corrode, and the corrosion can weaken the tank just as rust weakens steel. Stating that aluminum is "rust-free" is an advertising executive's sleight-of-hand-and-pencil trick.

Fresh water corrosion in steel is possible, while in aluminum the effect is sleight. It can happen at least two ways inadvertently. Sucking a tank dry can cause a little vapor to form, just as can bleeding a tank too fast. If, for example, you're about to board an airplane and the ticket agent forces you to bleed your tank in a hurry, you'll most likely get condensation inside, the precursor of corrosion.

One way sea water can enter your tank is when it's filled. If tiny drops of water from your last dive are on the tank valve and the dive shop operator hooks up the compressor, then opens the valve, some of this moisture will be forced into your tank. Frank Parish reports that in his dive shop, Del Mar, in Wichita

Falls, Texas, they simply open the tank valve a second before attaching the compressor to blow out hidden water. Parrish wrote us that "it has solved 100% of our tank rusting problems, except those from waterlubricated compressors like [those] used in filling the Scott Air Packs for firemen."

Tanks should never be stored full for in the concentrated oxygen corrosion thrives. A full tank, sitting for some months, particularly with moisture inside, could mean trouble—serious trouble.

The University of Rhode Island scuba study program uncovered the death of a diver who had used his tank after storing it full for several months. During storage, a wee bit of corrosion (which apparently had previously started in the tank) used up about 90 per cent of the oxygen in the tank. Oxygen feeds cortosion, so the oxygen content was subsequently reduced to about two to three per cent of the air. The normal share of oxygen in air is 20 per cent. The diver died of suffocation in 12 feet of water.

Because steel corrodes much faster than aluminum, such a problem would be more likely with steel, but a well maintained steel tank stored with 100 psi and filled when a diver is ready to dive will never cause diver suffocation.

In a seriously rusted steel tank, it's also possible for rust flakes to break off and clog the intake. We have no evidence that this causes a problem in aluminum tanks. Even so, a well maintained steel tank will not

... there's still a lot of bunk circulating about aluminum tanks, some of which can be attributed to advertising copy...

produce flakes of rust.

Obviously steel tanks are more susceptible to all forms of corrosion, but both aluminum and steel tanks require annual inspections and owners' care between inspections. A well cared-for steel tank will be corrosion-free for your lifetime.

#### Surprise: Steel Is Lighter

Aluminum is stronger than steel pound for pound, but because it is much less dense and weighs less than steel, much more of it must be used in order to construct a tank that is safe. The amount of aluminum necessary to make the walls "twice as thick"—the amount for a safe tank—causes the aluminum tank to weigh more than a steel tank of comparable volume.

A study published late last year by Jim Hall in Skin Diver demonstrated the differences. An empty 71.2 cubic foot aluminum tank (which, by the way, requires a 3000 psi compressor to fill) weighs 31.35 pounds; a standard steel tank weighs in at 29.5, nearly two pounds less. Another way to look at the difference is to consider the air capacity in relationship to the weight. Bob Campbell, writing last year in the Sub-aqua Journal, found that "steel cylinders have the better capacity/weight ratio," Aluminum cylinders tested ranged from 1.9 cu ft to 2.3 cu ft of air per pound. Steel cylinders held from 2.2 to 2.8 cu ft of air per pound of tank. It is possible for the manufacturer to reduce the weight of aluminum tanks, because excess weight is retained at the bottom of the tank and is not trimmed. Apparently, it's too expensive to round the bottom to reduce the weight, but the flat bottom does permit the tank to stand on its own.

If you shop where aluminum and steel tanks cost roughly the same, purchasing aluminum is purchasing insurance against corrosion. . . Yet steel tanks can be found at nearly half the price . . . and when that's the case, we think steel remains the best buy.

The greater weight of the aluminum tank does not mean that the diver can carry less weight around his waist. According to Hall's figures, which have been overlooked by many other studies, the aluminum has a negative buoyancy of three pounds; when filled, the steel tank has about five pounds of negative buoyancy. When empty, the steel tank is neutral, but the aluminum tank has a positive buoyancy of about 2.4 pounds. That means that you'll need to carry two to three pounds more weight with the aluminum tank than you need with steel.

Therefore, when diving with an aluminum tank, a diver may need to earry four or five pounds more weight than he would if using steel. That figure may not mean much for a 220-pound jock, but it might mean a great deal for a 120-pound female. The four to five pound savings may also be important for divers who have to hike in with their gear or for those who want to be as light as possible when they wrestle with the surf.

### LIMERICKS

The closing date for entries for Undercurrent Contest #1 has been extended to October 15.

In the April NAUI News, Gordon McBride and Perry Klein reported that the aluminum tanks they were using had developed an odor that is, a bad taste in the air similar to that from oil contamination. But their careful analysis of the compressor output found that the air, however rank, was clean. At the suggestion of Dacor, they prepared a solution of one quart of vinegar and one box of baking soda mixed in a gallon of water. Tumbling the liquid in the malodorous aluminum tank for at least six hours sweetened their breath.

Apparently, the problem developed in manufacturing and most of the offending tanks on the market have been returned to the manufacturer. If your new tank leaves you with a bad taste in your mouth, don't fail to let whoever sold it to you know about it.

Aluminum tanks may have one final problem. That occurs when the two dissimilar metals of the valve and the tank freeze together. This can happen after the valve has been loosened a turn or two. U.S. Divers recommends a procedure using Molykote #557 to prevent freezing. This procedure was explained in the June, 1976, issue of *Undercurrent*. Once frozen, the valve has to be sawed off and the tank must be rebored. If your tank has the gall to freeze, seek repair costs or replacement from your dive shop or the company that produced it.

#### Buy a New Aluminum Tank?

If you shop where aluminum and steel tanks cost roughly the same, purchasing aluminum is purchasing insurance against corrosion; for most people who can pack the extra weight, aluminum is the superior product. Yet steel tanks can be found at nearly half the price of aluminum, and when that's the case, we think steel remains the best buy.

We see no reason to replace a well maintained steel tank with aluminum, unless a new look is important to your appearance. A well maintained steel tank will last your lifetime, and since in your next life you'll probably come back as a fish, you won't need your tank then, anyway.

# Do Shiny Chrome Gadgets Attract Predators?

Who cares; most divers prefer pizazz.

Edward R. Ricciuti, an ex-staff member of the New York Zoological Society, writes in his book, Killers of the Sea, that "because they hunt by sight, barracudas tend to make passes at flashing objects

such as chrome or steel wrist watches or bracelets."

11. David Baldridge, in his definitive work entitled Shark Attack, reports a study using large floating bags in which survivors at sea would await rescue; by

remaining within the bag, which floats open at the top, a survivor would not be visible to predators below and would not be emitting blood or human smells into the water. The experimenters found that the color of the bag was relatively unimportant in influencing shark behavior, but "reflectivity was considered to have been very important... The incidence of approaches and contact by sharks were both found to rise with increasing bag reflectivity, reaching maximum values in tests on a highly reflective bag which had been covered externally with a silvery foil. . . . It was recommended that colors having a high degree of reflectivity be avoided."

Baldridge reports another study in which dummies were placed in life vests with different colors and gadgetry. After observing the incidence of shark attacks on differently outfitted dummies, the government researchers concluded that "highly reflective and attractive hardware such as chrome-plated carbon dioxide inflation cylinders, buckles, and snaps normally found on life vests should be of black non-reflective material." Baldridge adds that "it would appear prudent for designers of diving and other aquatic sportswear to also take note of these recommendations."

Jacques and Philippe Cousteau, in *The Shark*, write about testing shark responses by putting a dummy named Arthur in the water dressed exactly like one of their divers. Philippe says: "I kept my camera pointed at Arthur, whose face mask was now reflecting the sunlight in blinding rays. . . . The rays of the sun glittering from his mask constituted a virtual call to murder."

Bruce Halstead, M.D., writing in Richard Strauss' Diving Medicine, says that "sharks have a predifiction for attacking . . . reflective objects. . . . In selecting diving and swimming gear, it is wise to avoid . . . shiny objects." He adds that flashing objects also are conducive to barracuda attacks.

#### From Theory to Practice

Do you dive with a shiny chrome regulator? What about that glearning tank valve? Or the buckles on your B.C. or weight belt? Have you ever considered yourself as a swimming advertisement for a fish feed? Your flashing baubles and buckles are as appetizing to the big fellows as an abalone steak smothered in lobster sauce might be to you.

A first, knee-jerk reaction to the chrome question was to wonder why the manufacturers continue to permit divers to advertise their presence to predators, so we asked Tom Setta of U.S. Divers. Setta's answer was simple. If U.S. Divers could sell nonreflective equipment, the company would produce it. But divers don't buy it.

It seems that a few years back U.S. Divers test marketed two regulators, one with a black oxidized finish and a second with a nonglare matte finish on chrome. Neither item would sell at all and U.S. Divers concluded that divers are just as attracted to flashy diving gear as the predators they try to avoid.

The military was interested in the nonreflective

gear, but for different reasons. They required antimagnetic diving gear for Navy divers working with live mines. The black oxide finish worked well. The finish became washed out from sunlight, which obviously did not concern the Navy. But sport divers, whose preference for faded Levi's doesn't extend to faded regulators, wanted to continue to look sharp when underwater and wouldn't buy the regulators. After all, who knows whom you'll run into at 80 feet.

Other regulator manufacturers, such as Dacor, watched the U.S. Divers effort closely. Shiny chrome was far more costly to produce, and if they could market other finishes, they could either reduce the retail tab of their products or increase their profits—you guess which. When U.S. Divers silently removed the nonshiny regulators from dive shops, other manufacturers discarded their plans to switch from the polished chrome. Some regulators—Poseidon, for example—use both shiny and nonshiny material, but none have entirely removed the polish.

The folks at Scubapro told us that "as technology permits we are replacing some chrome parts with plastic." Valve knobs which were once chrome, for example, are now plastic. This reduces overall reflective surface and has the second benefit of reducing the weight a diver has to carry. The weight loss for knobs alone is inconsequential, but as other items are changed, a pound or two might be saved.

The problem of marketing nonreflective gear assumes that it must be sold in competition with shiny gear. That might not be necessary if the only gear available were nonshiny. Then nonreflective gear might sell just as well (unless a significant portion of divers now replaces functioning old gear just because the luster has been lost). However, for companies to agree to produce only nonshiny gear would create a kind of collusion among the companies, and collusion here might lead to collusion elsewhere. That could mean price-fixing.

#### The Bottom Line

One question still must be asked. Does reflection really affect safety? Many experienced divers, regard-

... divers are just as attracted to flashy diving gear as the predators they try to avoid.

less of the findings of researchers, think not. To some, the notion of a shark or barracuda attacking because of a gleaming regulator or shiny tank is balderdash. A spokesman for Dacor says this idea appears to be related to the use of highly reflective lures which fishermen have found effective in attracting and catching big fish. There is no data which suggests that a diver has been hit either by a shark or barracuda because of the reflective metal used on his equipment.

We agree that the data is surely not conclusive, and is, in fact, very sketchy. Aside from the studies reported by Baldridge, most data indicate attacks may be associated with shiny, reflective material, but not caused by that material. That is a very large and comforting difference. We could locate no specific case in which flashing chrome could be cited as a cause of an attack.

But, don't rest easy. If you've ever flashed your knife at a big barracuda, watched his eye roll backward as he glided past, seen him stop, turn, and begin to move slowly toward you, mouth agape, you have a prerty firm belief about what attracted his attention. At that point, you probably put your knife away, pre-

suming that had you continued, that barracuda, too, would have continued, and shortly would not have discriminated between your knife and your forearm. For us, that's evidence enough that shiny objects at least attract predators. But suppose chrome is replaced. What about shiny faceplates? Is non-glare glass a possibility for faceplates? What about strobe flashes? Are they related to attacks?

No one is certain. But what the manufacturers do know is that divers are more interested in buying shiny regulators than dull ones—and, divers will continue to get what they want.

# A Reminder to Resort Operators and Dive Guides:

## Traveling divers deserve what they pay for.

Every dive vacation has disappointments. Some can never be avoided, but a well managed dive operation will be consistently good, day by day, week by week, season by season, always giving what you pay for, and then some.

From the questionnaires divers have returned to Undercurrent, from letters, and from our own experiences, we've prepared a list of bad surprises which a traveling diver can encounter on a trip. Our grievances are directed to dive resort operators and guides in the hope that they might review their weak spots and correct them. Dive resorts operate under tough constraints imposed by their relative isolation. Thus the management of the Decompression Inn on tiny St. Germain shouldn't be compared with the Million Dollar Dive Shop on Key Largo. At the same time, the management of the Decompression Inn shouldn't promise what it knows it can't deliver. Some managers advertise a diving nirvana of sorts, resulting in drowned expectations of divers who have dipped deep into their pockets for the trip of their lifetime.

Some resorts are consistently well managed, often because of competition close at hand. For example, most of the lodges at Grand Cayman rate well, and for good reason. If you don't get what you want at Gin Clear Inn, you go down the road to the No Narc Hotel. When, however, you've selected the Turbid Waters Lodge on Outer Bannana in the Bahamas and there's no other place to go until the bi-weekly plane arrives, you're at the mercy of the shop. Luckily many of the resorts in the outer reaches are reasonably well managed, but—oh, the misery when you've made a bad choice.

So, to the diving entrepreneurs on all those marvelous tropical islands, we address our grievances in the spirit of good diving. If you make our next trip unforgettable—because of the pleasure, not the pain we'll be back again. And our friends will follow.

1. When a diver gets off the plane and arrives at your door, he's anxious to dive; you've got a responsibility to see that he gets in the water. If you're closed certain days, you should indicate that fact in your advertising brochure. If you don't permit diving on the

day of arrival or departure, say so. If you have agreed ahead of time to have dives scheduled for certain days, you have an obligation to perform. If you have to cancel a trip, help your diver find a trip with another shop, if possible. We've had many dive shops in the Florida Keys cancel trips after we'd arrived at the shop, but they have also gotten on the phone and found another boat ready to take us. If you're the only shop on an island, you have a special obligation to be prepared for diving every day.

Remember, if someone spends \$1000 for a trip to your spa and you cancel a day's diving or even a single tank dive, he'll be disappointed, angry—and he'll remember when he tells stories to his friends.

- If you advertise "unlimited diving," you should be providing as many tanks as a diver wants, whenever he wants them. It's up to him to control when he goes diving, not up to your office hours. Three tanks a day is not unlimited diving.
- 3. Don't accept reservations from divers if you don't have enough well maintained gear to go around. If you don't supply regulators, B.C.'s and other accessories, indicate so in your advertising. A lady friend of ours recently went to the Tahiti Club Med, expecting to dive every day. When she arrived, she was abruptly informed that the equipment was in short supply and that she would not be able to dive. She was not permitted a single dive.
- Fill tanks to capacity: 2250 + 10%, or 2250 for older tanks. Pumping less air to get divers out of the water faster is pure chicken pukey.
- 5. A diver ought to be permitted to stay down until 100 psi remains. Requiring divers to be back to the boat with 500 psi is safe, however conservative, but the diver with the lowest air consumption should be required to leave the water only when the diver with the next-to-lowest air consumption is down to 100 psi.

We're especially annoyed by the guide who gets cold at the end of every dive, then chatters away in front of divers with 800 psi left, hoping they'll feel sorry for him and decide to leave the water early.

Some divers like to cover a lot of territory on a single dive; others like to study areas more closely and blend into the environment. Divers ought to have a say in the dive plan so that both styles can be accommodated. On two-to-three tank trips, each type of dive could be offered. People who like to poke along should not have to play catch-up with a guide who travels the reef at the speed of a speared barracuda.

7. Consider the special needs of diving photographers in a boat filled with novices. Either the guide should be patient with photographers who need to move slowly, or else he should let two or more photographers do their own thing. Novices ought to be instructed ahead of time to point out unique life to a photographer, but novices also ought to know they should not bother the photographers when they're shooting and shouldn't flutter around photographers' subjects, kicking up the bottom.

8. At any resort or on any boat, divers have a diverse range of skills and experiences. A good resort will see that the experienced diver is challenged by his dives and will not subject him to a series of dives designed to accommodate the newly certified or noncertified diver. Someone who has logged 200 dives on Jersey wrecks does not fly 3000 miles to spend his week piddling in 30 feet of water because half the people at the resort just got certified in an Indiana quarry and are now seeing the ocean for the first time, "Gosh, sweetie, it tastes salty!"

Resorts which can meet the needs of experienced divers ought to advertise their policy. In fact, all resorts ought to set a few weeks aside during the year when only experienced divers are accepted and the only trips taken are unique or challenging. Boats such as the Cayman Diver, the Spirit of Adventure, and the V.I. Diver can provide more than average dives consistently. Capt'n Don's Aquaventures in Bonaire is one resort where experienced divers are permitted to take responsibility for themselves and can slip away from the crowd. For managers afraid of the liability, require the diver on foreign soil to sign a statement of his assumed responsibility. Many resorts are already doing so.

9. When one pays \$20 or more to get on a boat to go diving, one is paying for some service. No traveling diver wants to wrench his back toting tanks (it's a common injury) or struggle individually with heavy gear on the high seas. Divers should have no responsibility for loading or unloading the boat, Guides should stick tanks into the packs, then help divers don their tank. When the diver is completed, a guide should lift the tank from the diver before he climbs out of the water. Of course, all boats should have ladders or platforms for easy exit.

10. Although everyone likes to get to and from a dive site quickly, boats should not race over the water at breakneck speed—or breakback speed, as it turned out for one woman who told us she cracked a vertabrae on a speeding dive boat out of Maui. Many divers don't know how or where to sit in a fast-moving boat, don't recognize the liabilities of moving around, and need to be told prior to the trip. Many divers, particularly those over 40, aren't sufficiently agile to balance

themselves in a bouncing boat. Cut the speed a couple of knots; it will help to cut the unpleasantness and the potential danger.

11. Sexist comments are out. Some guides are humored by their own sarcasm. Most divers aren't. Divers like to feel competent, but some guides prefer them to feel incompetent. Some guides spear fish while the tourists watch, a good way to clean out popular dive spots and to keep the edge on novices who worry enough about sharks.

We particularly appreciate the guide who acts as tour operator, telling us what we'll see, spinning yarns of his experiences below, and perhaps even recommending a good restaurant in town. He gets our return business.

12. Vacation time is precious time. No one appreciates spending two hours at the pier waiting for the guide to show, waiting for more customers, waiting for some extra gas, or waiting for anything which stems from bad planning and management. Most divers unless they're natural light photographers—want early morning departures. For many 9 a.m. is the latest, so they have more daylight hours for more dives or for other pursuits. Set a schedule and keep it.

#### Conclusion

As a local restaurateur told us recently: "Why I'd always make people who come into my place feel like they owned it. I treated them like kings and queens, even serving them meals they requested that were not on the menu. They would always leave satisfied. They would always come back." He's right. He was a bit more expensive than his competitors, but we always left satisfied. Now he's sold his business, lives on the bank interest from his profit, and spends his spare hours diving.

P.S. to resort operators and dive guides: Sure, there's another side to the story. Divers who don't know their bee see from their pee pee descend on your shores like suicidal lemmings. Some are loaded with moisturizers and de-humidifiers, watches and bottom timers, Farafins and frog mittens, whistles and rescue lights and a brand new housed Nikon with two strobes, Invariably they ask, just before they jump in: "Has anyone ever been eaten by a shark in these here waters?"

Others tell about their lost certification card and their dives with Al Giddings, hook up their \$30 regulator backwards, register shock at the sight of a vest or submersible gauge, and then dive straight down to 100 feet, flapping their arms like a pelican all the way.

Yes, you've got your problems, too. They deserve to be published, too. Let us hear from you.

Correspondents located strategically in the major diving areas of the world as well as on all coasts and major inland waters of the continental United States.

The editors welcome comments, suggestions and manuscripts from the readers of *Undercurrent*.