

undercurrent®

THE PRIVATE, EXCLUSIVE GUIDE FOR SERIOUS DIVERS

P. O. Box 1658, Sausalito, California 94965

Cable Address: Gooddiving

Vol. V, No. 2

February 1980

Crystal River, And Ginnie Springs, Florida

The Heinie Of A Manatee, The Dark Of A Cave

As the price of gold bounces up and down, as our relationships with the Iranians and Soviets become unglued, as our personal purchasing power shrinks, two types of attitudes seem to emerge from traveling divers. The first is manifested by the diver who believes the world is going to hell tomorrow, so today he spends everything he has to get to the Maldives or Mauritius for his diving. The second attitude is manifested by the diver who thinks the world is going to hell the day after tomorrow, so to hold out that long he spends frugally for his diving, seeking auto trips to warm water where he can find \$11 hotel rooms and 89¢ Big Macs. Normally, that's the Florida Keys, which we reviewed sometime ago. For divers on the road, however, a surplus of other diving opportunities are scattered throughout northern and central Florida, where lucky divers may frolic with the walrus-sized manatee, sample an easy cave dive, or float down a gentle river.

Now even experienced divers who have been to every reef in the world flock to Crystal Springs to photograph the manatees, so this month's review is relevant to those who harbor that fantasy. Just as important, this review is suitable for the family that has to tote the nondiving kids along, since there are plenty of diversions along the way for everyone. Florida accommodations range from campgrounds, to country cabins, to Holiday Inns, and the repast ranges from cookouts, to BLTs on white bread, to fresh oyster platters.

INSIDE UNDERCURRENT

Traveling To Florida?	p. 2
The Red Sea	
Update Of The Sun Boat And La Mer Tours	p. 4
North Caicos	
Cancel Your Reservations Until Further Notice	p. 5
The Shotgun, The Aquamax, \$13 Snorkels	
One's For The Pros, One's For The Amateurs	p. 5
Clearing The Snorkel An Easier Technique	p. 7
The Business Of Diving: Part I	
Why To Invest Your Efforts Elsewhere	p. 8
A Primer On The Dive Business	p. 9
Dear Undercurrent:	
Mail Order Film Processing And Lost Slides	p. 10
1980: The Year Of The Coast	
And A Year For Action	p. 11

Crystal River, winter home of the manatees: About 85 miles north of Tampa, 75 miles east of Disneyland, and 300 miles northeast of Miami is the Crystal River diving area, where friendly manatees come to munch water hyacinths from the month of October to March if the conditions are right. Having recently read several nicely illustrated articles in national magazines about diving with manatees, I had no doubt I would return from Crystal River with a series of shots certain to command four figures from National Geographic. Instead, I never got a picture. As I was

to learn, we amateur sport divers can spend a few days in Crystal River anytime during the regular manatee season and not see much more than an enormous heinie or two as the giants lumber away from our lenses. When the Florida Gulf waters turn cold in winter, manatees migrate into spring-fed, 72°^o, Crystal River. As many as 40, 60, or even 80 may congregate. But if the Gulf warms, which it does off and on during the winter, the manatees exit. During my two days I visited six of the major manatee habitats and saw two creatures. Each was too shy to approach me and since the law, which is rigorously enforced, says no one may chase a manatee by boat or by flipper, 25 feet was the closest I could get. From the surface I did see several manatees feeding in a reserve area, but the U.S. Fish and Wildlife Service slaps a \$10,000 fine on anyone entering the refuge. So how do magazine photographers and writers get their photos and stories? They get long distance calls when the manatees are in; they have pilots in small planes scout their location; they get out at sunrise, long before the boat rental shops are open and tourist divers have scared the creatures away. The pros have advantages that we, the average sport diver, can't quite muster.

Crystal River diving has more than manatees, though one dare not compare it to the Keys or the Caribbean. I rented a 16-foot aluminum boat with an outboard for two days and visited several springs. Where no divers frolicked, visibility ran about 50 feet, but on one dive, for example, six other divers in the water (and a dozen snorkelers) kicked up the silt resting on the rocky bottom and reduced water clarity substantially. Around the sides of the springs plenty of bluegill (called "bream" here) busied themselves; and on one occasion a school of mullet hovered overhead, but I saw no other fish species. Depths range from 10-50 feet. I found no noticeable current. The main spring, as other areas, is an easy dive, frequently the site of

open-water checkouts. At the back of the spring is a large cavern to be explored by light, but I found little of interest other than the sense of being in a large cavern. For an experienced diver, there's barely reason to come here unless the manatees are in. I recommend calling any of the dive shops for current information prior to driving across the state. But remember manatees, like mantas, know how to swim so their presence one day is no guarantee of their presence the next.

Crystal River offers solid, middle-American vacation amenities. I stayed at the Plantation Inn, a rambling old plantation-like building with 100 rooms (\$31-\$42/night), with tennis courts, an 18-hole golf course and a dive shop at the marina, and had hearty, moderately-priced meals at the Plantation Inn and Cliff and Peggy's Oyster Bar. The four dive shops rent gear (all require c-cards), and I found such little variance between prices (could it be collusion?) that comparative shopping is of no value: tanks, \$5; with regulator and submersible

Traveling To Florida?

About the best dive guide we've seen for any American waters is Ned DeLoach's *Diving Guide to Underwater Florida*. Not only are there descriptions of what you'll find at any of 216 underwater sites in Florida, but DeLoach provides explicit directions to springs, caves, sink holes, offshore wrecks and reefs. Imagine trying to get to the West Sink Hole, where you can observe saltwater fossils embedded in the limestone walls, with only an AAA guide in hand. Here's how DeLoach tells you to find it:

From Tallahassee travel S on S-61. Two miles south of Wakulla Co. line turn left on sand road (first road on left past a white fence on the right side of S-61). Bear left for 300 yards to the sink. Enter water about midway on west side of sink.

Advertisements give specific information about services available and brief articles explain the laws, location of recompression chambers, the difficulties of cave diving and the joy of spring diving. For the 160 page guide send \$4.45 to New World Publications, 1861 Cornell Road, Jacksonville, Florida, 32207.

Undercurrent (ISSN: 0192-0871) is published monthly by Atcom, Inc., Atcom Building, 2315 Broadway, New York, NY 10024, (212) 873-3760. Second-class postage paid at New York, New York. This guide is available to the diving public by mail subscription only. To maintain

its independence, *Undercurrent* carries no advertising.

If you wish to receive the accurate, inside information *Undercurrent* offers, please send your check for \$19 in U.S. funds. Send new subscriptions and address changes to the address shown above.

fill, \$2 for aluminum 80, 3000 psi; weights, 10c/lb. I preferred the ambience of the Plantation and Talley's dive shops. One needs a boat to get to the dive sites (\$20 a day for a 16-footer with motor from the Plantation Marina), but on weekends one may take a \$2 shuttle to the main spring, the most likely location for manatees. For accommodations, one may camp at Turtle Creek Campground or bunk at the Sheraton, both at nearby Homosassa Springs, bed down in the Crystal River Holiday Inn or in any of the following, which also have dive shops. The list is ordered by hotel quality. Correspondence may be addressed to the hotel or dive shop, Crystal River, FL 32467.

Plantation Inn (904/795-4211); Marina and Dive Shop, (904/795-5797)
Port Paradise Hotel and Dive Shop, (904/795-3111)
Crystal Lodge and Dive Center, (904/795-3171)
Talley's Lodge and Pro Dive Center, (904/795-2776)

Ginnie Springs: A privately owned and operated recreation site 75 miles north of Crystal River on Route 236, Ginnie Springs has the same relationship to underwater caves for serious cave divers as does a miniature golf course to Pebble Beach. Nevertheless, it provides a safe introduction into the claustrophobia of caves. I paid my \$2 to enter the grounds (which also entitled me to overnight camping) and another \$4 for diving. I found myself the only visitor to the area. After changing clothes in the bathhouse (where I also took a hot shower after the dive), I donned my gear at the car, parked just a few steps from the dock, where stairs into the water are provided for easy entry. The cave entrance begins in six feet of water. I drifted downward into the first chamber, about 30 feet wide and 10 feet deep, then continued to drop down into the next chamber, as wide as 70 feet and extending to a depth of about 60 feet. Long ago the owners had vacuumed the silt from the cave to ensure clear water, and I could look back the full length and still see light. At the end of the chamber are two tunnels, both closed with iron gates. I poked around with my light, but saw no fish or attractions, other than walls and water. I began the trek back after using one-third of my air--a good rule to follow in any cave. To ensure safety, a line extends from the end of the final chamber out to the first chamber, which a diver may follow for easy exit, although getting lost seemed an impossibility. I admit, however, to a few trepidations even in this simple cave: would my regulator fail? my light burn out? my tank run dry? would the ceiling crumble? This is a cave for novices; other Florida caves are for trained divers with the proper equipment. An untrained sport diver should begin and end his cave diving here. As to other diving at Ginnie Springs, I noted a few small fish, but nothing to keep my interest beyond a single tank. Ginnie Springs is a fine place to stop to relish a first cave dive, to picnic with the family, or to camp overnight. It's nothing more. And nothing less. For information and a map, write Ginnie Springs, Route 1, Box 153, Highland, Florida 32643, or call (904) 454-2202; there are 42 campsites with hookups, canoe rentals, a dive shop pumping 5000 psi, and c-cards are checked.

Ichetucknee River Run: At Ichetucknee State Park, 20 miles northeast of Ginnie Springs, a diver in a wet suit or a kid in an innertube can make a three hour float down this undeveloped, gentle 72° river. Two cars or prearranged transportation is needed in the off-season to get back to the point of departure; a \$1 shuttle service is provided May to September. I sampled a small section of the run and must say if one has the opportunity to float the Ichetucknee on days when there is little company, the peace and tranquility is unparalleled. The Ichetucknee is a pleasant diversion for the vacationing family diver.

Ample and inexpensive lodging or campsites can be found nearby. I stayed, for example, in the nearby metropolis of Branford, population 800, in a tourist cabin (Steamboat Bill's), circa 1945, for \$11; no TV, no phone, a bed, peeling paint, and a shower, but the owner loves divers. The county is officially dry, so BYOL. I supped at the Suwannee River Cove, where for \$6.50 I had a plate piled high with trout, mullet, oysters, shrimp and a stuffed crab.

Summing Up: Unless you seek the manatee, this is a trip for people who live close by, divers on a shoestring, or families needing to entertain everyone. There are scores of other spring-diving locations throughout this part of Florida, so before undertaking the journey I would recommend ordering Ned DeLoach's Diving Guide to Underwater Florida, which provides maps, directions and information for diving the Springs, the Keys, the East or West Coasts. (See insert.)

The Red Sea

Update And Mini-Review Of The Sun Boat And La Mer Tours

In January, 1979, we reviewed the Red Sea, indicating that the quality of the diving was every bit as good as popular articles and advertising claimed; from magnificent sharks to bright red nudibranch, the sea life is stunning. Undercurrent reader Barbara Hunziker, diving there in December, found some dead and damaged coral, due in part to an unusual flood in October which damaged the reefs as well as two dive boats used by the Red Sea Divers. The hotels, too, suffered and contamination caused several divers to get ill, according to Hunziker. We spoke with Oren Most, U.S. Representative for Red Sea Divers, who told Undercurrent that the hotels are now operating normally after making the repairs and solving the contamination problems. The Red Sea Divers have replaced their old boats with a new 60 foot boat, capable of handling 20 divers, and with four sailing yachts, each with overnight capacity.

Questions still surround the transfer of the Red Sea shoreline from Israeli to Egyptian status. Egyptian President Anwar Sadat has conveyed his desire to maintain the integrity of the Red Sea to a team from National Geographic, which included scientist Eugenia Clark and photographer Dave Doubilet. No one knows whether hotel and dive operations will continue under current ownership, or be forced into new hands.

Live aboard boat diving in the Red Sea offers opportunities to get to remote reefs unavailable to shore-based operations. Currently, the Sun Boat, a 96x22 foot converted trawler, makes frequent 10-day tours of the Sea to visit distant reefs. We have written enough of the splendors of Red Sea diving, but a brief look at the services and amenities provided by the Sun Boat would be useful, so we are publishing an edited and condensed version of a report sent to Undercurrent by Ruth Jacobson, a New York writer, who spent a week aboard the Sun Boat in late August:

What the Sun Boat lacks in speed, it makes up for in stability and diver convenience. Six tiny cabins sleep 12 people; each cabin has two bunks, a washbasin, a small closet, a compact shower and no portholes. While the air conditioner was turned off at night during my trip, forcing people to sleep on deck, I've since learned that generator repairs permit the air conditioning to operate during sleeping hours. Dining space is ample and the deck for lounging is large, partially shaded, and a great place to watch the sunset. Individual gear boxes provide tidy stowage space, however, the tanking-up area was crowded prior to organized dives. Because of travel time between reefs, and a union crew which does not travel all the time, only 2 dives a day were possible on my trip. The owner, Amos Nauchoum, has informed Undercurrent that the itinerary has been changed to make 4 and even 5 tanks possible in a day, however, since so much of the pelagic scenery is in water deeper than 100 feet, 4-5 tanks might be difficult. The crew was excellent, quick to help with gear; their steel tanks had been modified to hold 2800 psi. Meals, too, were excellent, however, not gourmet; breakfasts were eggs, cheeses, toast and coffee (how I missed my juice!), lunches and dinners included unusual treatments of chicken, turkey and

beef. Amos Nauchoum accompanies each tour from the airline desk at Kennedy to the reefs of the Red Sea and back again, providing assistance with baggage, ordering food in restaurants during the tour of Jerusalem, and pointing out delicate red nudibranches. Each diver appreciated his knowledge and hospitality.

All in all, the Sun Boat rates with the best of the live aboard dive boats.

For information on the Sun Boat, write La Mer Diving Seafari, 823 United Nations Plaza, Suite 810, New York, NY 10017 (212) 519-0886. The 15-day, 14-night tour is \$1,850, plus air fare.

North Caicos: Cancel Your Reservations Until Further Notice

We have learned of a number of serious problems in the hotel and diving management at the Prospect of Whitby Hotel on North Caicos. We will explain the problems in the next issue, but for the time being we recommend that all reservations be canceled.

The Shotgun, The Aquamax: \$13 Snorkels

One's For The Pros, One's For The Amateurs

A snorkel is a snorkel is a snorkel.

To most divers, that's a truism. Although there are some subtle breathing differences due to barrel length and diameter and some comfort differentials between mouthpieces, not all divers care much about the variations. The color of the barrel or the name of the manufacturer may be more important in selection.

Last year, however, Scubapro introduced the Shotgun snorkel which they claim doesn't require the same effort to clear required by other snorkels; a purge valve empties much of the water from the barrel before the diver blows. This year, Marketing Control Corporation is distributing the Aquamax, a snorkel with a cap that supposedly prevents water from entering. Both are



A PURGE VALVE EXTENDING FROM THE BARREL OF THE SCUBAPRO SHOTGUN SNORKEL PERMITS WATER TO CLEAR FROM THE SNORKEL AS THE DIVER BREAKS THE SURFACE.

significant departures from the common snorkel. We have recently tested both, but before we offer our report, we'd like to discuss three variables of snorkel performance which affect all designs, new or old.

The greater the internal diameter of the tube, the easier it is to draw air. For a free diver, getting as much air as possible is important since every breath is coming through the tube; having to work hard for an hour or more to breathe because the snorkel barrel is too narrow is tiring and unnecessary. For a scuba diver (who uses the snorkel as an accessory), the dimensions are less significant unless he gets himself in trouble and has to snorkel a long distance. Having to struggle to draw air could conceivably aggravate his problem. Just how significant a difference exists between a 21 mm barrel and a 23 mm. barrel is uncertain, but to get a feel for the difference, all a diver needs to do is travel to a dive shop and compare breathing through barrels of different diameters.

However, there's a hitch. As the internal barrel diameter increases, the volume of water held by a snorkel also increases (assuming the length remains constant), thereby making it more difficult for a diver to clear the snorkel. That can be significant to the free diver who, after extending himself below, demands air as he breaks the surface. Other variables influence the effort required to clear a snorkel, including design of the tube and the angle at which the snorkel breaks the surface. For example, with the proper head tilt much water runs out without any effort. Furthermore, if a diver has mastered the displacement method of clearing a snorkel (see insert), then clearing the snorkel offers little difficulty. Most divers, however, are unaware of the displacement method and simply blast away upon surfacing. To them, the effort required to clear a

snorkel becomes an important variable in the purchase.

One last variable is significant. A snorkel which bends over one's head has less drag than a straight tube. The diver's head, like the bow of a boat, spreads the water. Some divers claim they notice the difference, others indicate no awareness.

So, if your current snorkel does score well, should you rush to your corner dive shop and buy a new, standard version, or opt for either the innovations of the Shotgun or the Aquamax? These are our observations:

"...the Shotgun offers a significant improvement over the standard snorkel, with no impairment in other aspects of performance."

The Scubapro Shotgun: A relatively large bore snorkel (about 21 mm.) with the now-standard bend over the diver's head; the only difference from the usual design is a one-inch purge-valve extension near the mouthpiece which permits water to run from the snorkel as the snorkel breaks the surface. Indeed, we found that less than three inches of water remained in the snorkel upon surfacing. The only difference in using the Shotgun, compared to other snorkels, is that one must wait about a heartbeat for water to drain, and then blast the snorkel clear. Of course, one may blast immediately upon surfacing, but then the snorkel behaves as would any other snorkel.

A person adept at using the displacement method may find the Shotgun offers slight advantage over a

standard snorkel. But, as we mentioned earlier, most divers blast and in that case the Shotgun offers a significant improvement over the standard snorkel, with no impairment in other aspects of performance. If blasting a snorkel is a technique you do not relish, then we suspect the Shotgun will be very much to your liking.

The Aquamax: The advertisers claim that the Aquamax "keeps water out of the breathing tube.



THE CAP OF THE AQUAMAX LIFTED ABOVE ITS NORMAL POSITION TO DISPLAY THE EXTERIOR THREADS ON THE BARREL. WHEN THE CAP IS IN NORMAL POSITION, THE THREADS PREVENT WATER FROM ENTERING BY HOLDING AIR IN PLACE IN THE CAP.



Hey!

Tired of waiting to get your copy of **UNDERCURRENT** second hand... or missing out altogether?

NOW is the time to take the plunge—while you can still get **UNDERCURRENT** at the same old low rate of \$19 a year.

Start with the upcoming issue and get in on all of the summer fun. Find out the inside information about all the newest equipment—the best buys, the most dependable brand names. Upcoming issues will be packed with diving excitement taking you to new underwater adventures you may want to check out for yourself. With your very own subscription to **UNDERCURRENT** you'll be able to keep a back-issues file—a valuable factual resource you will refer to again and again. Return this order form today.

Start my subscription to **UNDERCURRENT** with the very next issue. I enclose \$19. Or charge it to my
 Master Charge Visa Exp. Date _____
Card No. _____
Signature _____
Name _____
Address _____
City _____ State _____ Zip _____

UNDERCURRENT
2315 Broadway, New York, NY 10024

Even in waves and choppy water.”

Sure enough, no matter what our divers did, including perform 360° rolls (while following the instructions to exert the slightest pressure on the mouthpiece), barely a drop entered. Perched on top of the Aquamax is a three inch long, two inch in diameter plastic cap, which is screwed over large threads on the snorkel barrel. When submerged, the cap and the threads trap the air preventing water from entering. Upon surfacing, our divers could begin breathing immediately, without the risk of inhaling water.

Nevertheless, the Aquamax has its liabilities. Our divers found their breathing uncomfortably restricted at times, due both to the relatively small barrel (about 19 mm) and the threads on the barrel through which air must wind its way. During easy snorkeling or free diving, our divers experienced no problem, but once a full tank was strapped on and surface swimming speed was increased, the effort of breathing seemed much greater than necessary. In fact, our divers wondered if they were to be faced with adverse circumstances—having to struggle against a current or becoming panicked—the work of breathing might be such that they would need to discard the snorkel to get all the air they would need. Some divers might not find the work of breathing as restrictive as our divers did. So before purchasing the Aquamax, one would be wise to do a little dryland comparative testing in a dive shop with other snorkels and preferably, in the dive shop pool if still in

continued on page 8

Clearing The Snorkel An Easier Technique

Having to blast a snorkel clear after an extended free dive, when you know you simply haven't an ounce of air left in your lungs, is a rather uncomfortable experience. It can be avoided by yanking your snorkel from your mouth as you break the surface and gasping for air, or it can be avoided by using the simple and easy *displacement method* of clearing.

When ascending, tilt your head back and look at the surface, permitting the barrel of your snorkel to be roughly parallel with the surface. Just before you break the surface, blow gently into your snorkel, displacing the water with air. When you break the surface, your snorkel should be free from all but a few drops of water, which you can blow gently to clear. A diver adept at the displacement method, however, should be able to arrive at the surface with a clear snorkel, ready to breathe immediately.

Even less air is required if you exhale into the snorkel as you begin your ascent. The air expands as you rise, forcing water from the tube, and again, if you're adept at the technique, you break the surface ready to breathe.

Introduce your friends to UNDERCURRENT FREE!

Send a copy of **UNDERCURRENT** to a friend (or four of them) on us—FREE. Just write their names and addresses below and we'll send them a FREE copy, no strings attached. We'll even tell them the issue of **UNDERCURRENT** is sent with your compliments if you wish. Please specify your permission to do so below. Thank you.

Please send **UNDERCURRENT** sample issues with the compliments of _____
to the following friends. (fill in your name)

Name _____

Address _____

City _____ State _____ Zip _____

Name _____

Address _____

City _____ State _____ Zip _____

Name _____

Address _____

City _____ State _____ Zip _____

Name _____

Address _____

City _____ State _____ Zip _____

Please return this form to: **UNDERCURRENT**, 2315 Broadway, New York, NY 10024.

doubt. Of course, breathing resistance could be decreased if the manufacturer increased the internal barrel diameter, but the resistance posed by the threads on the barrel may continue to pose a problem.

Two other problems may face the free diver. With the cap on the top, the snorkel conceivably could snag and become entangled in a strand of kelp or a stray fishing line. Furthermore, the extruding cap—and the straight barrel—cause slightly greater drag in the water than the standard snorkel. Our divers noticed the drag, but did not consider it a significant factor. An avid free diver, however, trying to streamline himself for maximum efficiency, may find the drag excessive.

To the scuba diver, the Aquamax offers even less advantage, because when beneath the surface, water enters the mouthpiece when it is not in the diver's mouth. Once on the surface, our divers could blast most of the water from the barrel, but some remained to gurgle with each breath. Aquamax advertising states that the device has a purge valve, but the snorkel we picked up at the DEMA show has no valve, and a spokesman told us that the valve has been eliminated.

Conclusion: The Shotgun will find a place among serious and experienced free divers and scuba divers. Once again Scubapro is an innovator. Once again Scubapro has a winner.

As to the Aquamax, it should find a strong market among people who fashion themselves as snorkelers. It will be especially good for people who loll around warm waters ogling fish and for kids getting started in the sport. For people who have gone beyond snorkeling and label themselves free divers or scuba divers, the Aquamax has too many limitations to overcome its single advantage of taking in no water. There is a place for the Aquamax, but you can damn well bet it won't show up in the mouths of the Calypso crew on the next Jacques Cousteau special.

The Shotgun is available at any dive shop carrying the Scubapro line. The suggested retail is \$13.00. The Aquamax is for the time being available only by mail order, however, national distribution is underway. We caution serious divers to test it before ordering, but snorkelers in a hurry may obtain the device by sending \$12.95 to Marketing Control Corporation, POB 2643, Palm Beach, FL 33480.

The Business Of Diving: Part I

Why To Invest Your Efforts Elsewhere

Many divers fantasize about going into the diving business, assuming that their love for the sport will lead to a full cash box and frequent trips to distant reefs, paid for by other divers on tour. It doesn't always work that way.

In this two part series, Jon Hardy, past NAUI Executive Director, provides the reasons: a sport diver should set aside his fantasy and keep his present job. Recognizing, however, that most divers don't exhibit rational behavior as their strong suit, Hardy then goes on to explain the factors you must consider if you decide to forget the odds and pursue a dive business.

Hardy is the author of *The Business Of Sport Diving: A Guide To Business Management For Customer Satisfaction At A Profit* (see insert).

The dive business is a serious business. For most people considering whether to jump in, there are a lot more reasons to forget their fantasies than to pursue them. To be explicit!

More than 80% of the small businesses in this country, including the dive business, fail. The owners lose all or part of their investment, sometimes the investment of others, and they may lose both their confidence and reputation. Almost always, the reason for failure is poor management.

Many people leave secure positions in quest of independence, not realizing the serious constraints placed by their creditors, employees, the government, customers, competitors, insurance companies and even their families. Independence, they soon learn, is a myth.

In a small dive business, the profit potential is small when compared to other opportunities for your capital. To get an idea, multiply your current assets by the annual percentage you could expect on other investments (e.g., the minimum would be 12% in a T-bill account) and add your annual income to that figure. The sum is most likely much greater than you will ever receive from a dive business during the first several years.

Initial capital requirements are high. Inventory needs to be purchased. A new compressor runs between \$8-20,000. The capital required for a dive boat or resort is, of course, much greater.

When investors are required to start a business, one risks less capital, but much of the profit ends up back in the investors' account.

To survive, many dive businesses are subsidized in a number of ways: with profits from another operating business, by taking a low salary from the dive business, by taking two jobs, or by putting the spouse or kids to work, either in the dive business for no income, or in

A Primer On The Dive Business

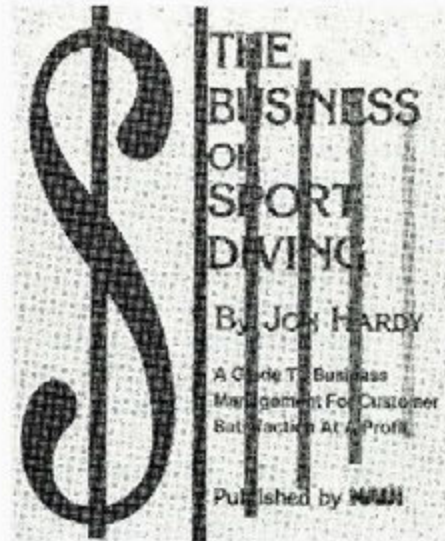
Anyone about to jump into the dive business—or anyone in the business who is concerned about managing it—will need a copy of Jon Hardy's book, *The Business of Sport Diving: A Guide To Business Management For Customer Satisfaction At A Profit*. Hardy brings together a wealth of business information and puts it in a dive business context. Nowhere else is it available in one or even a dozen volumes.

Although the text occasionally slips into a bit of pedantry (e.g., "Robbery is the stealing, or taking of any valuable object by force, violence, or the use of fear."), much of the information which will appear simplistic to the reader is the very essence on which good management depends—the careful selection and training of employees, how to use newspaper ads, and how to engage in successful personal selling. Entrepreneurs who overlook the basics are often the entrepreneurs who go bankrupt.

For people who think they know all there is to know about the human side of enterprise, Hardy's excellent discussions and worksheets on purchasing, profits and losses, and tax and insurance planning should be of great benefit. The chapters include:

- Concepts and Going Into Business
- Marketing
- Advertising
- Financial Management
- Personnel Practices
- Business Operations
- Legal Aspects
- Insurance Planning
- Tax Matters

One can obtain the 124 page, 8x11 paperback volume by mail for \$15.75 (California residents add 90¢ tax) from NAUI, P.O. Box 630, 785 Colton Ave., Colton, CA 92324.



outside jobs for supplementary income.

In many small businesses, the key services—instruction, air, even dive travel—may be loss-leaders. In the next decade many small businesses will face bankruptcy if they cannot turn a profit on these services.

Dive businesses have a great legal liability. When accidents occur, people often sue. Insurance costs are high and policies may be difficult to acquire.

Government regulation is complex and time-consuming; the commonly recognized laws regulating taxation and workmen's compensation, for example, are supplemented with more obscure regulations which affect advertising, protect the consumer and the environment, or require health, safety and fire inspections.

"Too few professional business people enter the diving field, too many amateurs play at the business of diving. Narrow thinking from amateurs dominates...."

The potential customer base for dive businesses is not large. Once potential customers learn they will not achieve the glory of Mike Nelson (Lloyd Bridges), they may not return. The sport is expensive and demanding. Certification is complicated. A majority of divers (customers) drop out during their first year after certification. In most parts of the country, the diving conditions cannot keep people interested, so they must take long trips to enjoy their sport. To be successful, a

diving business must not only create customers, but also provide opportunities to enjoy the sport.

Too few professional business people enter the diving field, too many amateurs play at the business of diving. Narrow thinking from amateurs dominates the industry. Too many employees enter not for the career but for the fun. They never learn to handle their jobs well and they do not stay at their jobs long enough to advance their employers' interests.

Among the manufacturers, there seems to be little progressive thinking and, if anything, intentional thwarting of progress. The instructional associations often create as many problems as they solve. Engaged in petty politics and useless paperwork they establish obsolete standards and are slow to respond to change. They compete excessively among themselves, concerned as much with their agencies' image as their training results.

Dive stores, rather than striving for business excellence, often compete by criticizing their competitors, creating a poisoned business atmosphere which turns off potential new divers. It is not uncommon to find lack of cooperation between instructors and their stores, between manufacturers and stores, and between stores and the travel industry.

So with all these complexities, someone entering the dive business must put in long and arduous hours, but curiously enough, a surprisingly large percentage of people try to make it a part-time endeavor, entrusting

their nest egg to others while they continue in their current employment. In those cases, the chances for success drop even farther.

So You Might Take The Plunge Anyway

Nevertheless, you decide to ignore the admonitions, claiming there remain too many good reasons to enter the dive business. Indeed, there are good reasons.

For one who both enjoys and is proficient both at diving *and* at business, a combination of the two can be rewarding, challenging, add zest to one's life, and make it possible to live out an American dream—turning a hobby into a business. Although independence is a myth, entrepreneurs have more control over their fate than do those in the employ of others.

And, the business can be lucrative. If you are a good business person who has picked the right business at the right location, then you can make a good salary plus a return on your investment once the business is established. With skill, you may be able to parlay a small business into a larger one, perhaps by expanding a dive business into a multi-purpose store, or by starting or acquiring other dive stores. That is, if you are sharp enough.

Businesses can have significant tax advantages, including being able to depreciate the property owned and writing off legitimate expenses, including diving and entertainment. If you run your business right, it appreciates in value. If you own property, its value, if the trends continue, might even skyrocket.

The Future Economics:

Diving, like all recreational businesses, is sharply affected by economic swings. The 18-month recession from the fall of 1974 to the summer of 1976 had a severe impact on many businesses. Some did not remember their lessons and are affected once again by the recession occurring today. Of course, the diving business is affected by inflation, recession, devaluation of the dollar, unemployment, and the reduction in discretionary income available to consumers. Reduction in gas availability and gas rationing hurts local

travel, and as oil prices push up air fares, diving vacations may become fewer.

The dive business has benefited from the post-war baby boom that lasted through the 50s; currently, the population bulge between the ages of 20-30 has certainly stimulated the industry. There are millions fewer people in the 10-20-year-old age bracket, an ominous sign for dive shops in the next decade. So, unless older people are induced into the sport, the economic base will be shrinking.

And diving is affected by a number of unpredictable, noneconomic variables, ranging from bad weather, which if it lasts for a summer, can put a marginal business into bankruptcy, to movies like *Jaws*, which may be enough to discourage potential customers from entering a dive store for an initial look—the first opportunity for the store to make the sale.

"With creative thinking, something not often found in the diving world, it is possible to convert problems into opportunities and losses into profits."

Whether these problems will plague the industry in the 1980s is uncertain, but savvy, risk-taking business people make the most of others who are feeling the squeeze. There are opportunities to buy at reduced prices the inventory, the compressors, the assets and good will of established businesses. There are opportunities to convert other people's problems into opportunities for yourself.

For example, if local ordinances or a run of bad weather make beach diving difficult in a specific area, a charter boat business might capitalize on the people's inability to dive from the beach. As the gas crisis worsens, diving trips and services which alleviate the need for divers to drive will be in demand. As the population bulge becomes older, advertising appeals to older people will be important; resort and boat diving should be in greater demand. Pushing skin diving and snorkeling should attract the children of this older group. With creative thinking, something not often found in the diving world, it is possible to convert problems into opportunities and losses into profits.

End of Part I. Part II in the March issue.

Dear Undercurrent:

Mail Order Film Processing And Lost Slides

Dear Undercurrent,

Retinachrome, a Seattle, WA film processor and printer, advertises heavily in national dive magazines as specializing in underwater photographs.

Last August I sent them five, 35 mm. slides, ordering mounted and framed enlargements of the best four. After an extended trip, I returned home in late November, reviewed my order and found it unsatis-

factory, in no way representative of the quality of the work they advertise. Several other experienced underwater photographers agreed with me. The prints did not display the same color rendition and balance as the slides; they lacked contrast and appeared dark and underexposed relative to the slides.

Since Retinachrome offers no guarantee of satisfaction I would just write the whole thing off as an

expensive experiment, but *I have not received the original slides back*. They were obtained after considerable expense on dive trips to Fiji and the Caribbean and now, even after several telephone calls, I still have not received the originals. You might consider inserting a "customer warning" in *Undercurrent* to prevent some other unlucky photographer from getting the same treatment I'm receiving.

Dick Overman
NAUI Certified Divemaster
Carmel Valley, California

Undercurrent called Retinachrome and spoke with Ms. Jacqueline Sidbeck, a pleasant lady who seemed genuinely concerned about the problem. She told us it was impossible to pinpoint precisely why Overman did not receive his slides, but in 2-4% of their orders they return the slides separately by first class mail, if, in their estimation, including them in the same parcel with the prints could lead to damage of one or the other. They keep no records of mailing one or two packages, so she can only presume that Overman's slides were sent separately and lost in the mail, although she did acknowledge that Retinachrome could have accidentally mailed the slides to another customer. She said that the lag time between Overman's order and his complaint compounded the problem, because the staff often remembers specifics of orders processed a week or two earlier. She did indicate that the Post Office has occasionally returned slides that have been lost in the mail, and she has sent the Post Office a tracer on the Overman mailing, but admits she is not optimistic. Of course, there is no way lost slides can be replaced, she said.

Sidbeck had not seen the prints, so could not respond to Overman's dissatisfaction, but explained that because of his complaint she had offered him a full refund, even though they offer no guarantees. Overman refused her offer, she said. (Overman confirmed to *Undercurrent* that he had received the offer, but had rejected it because he realized there was no guarantee on quality.)

Retinachrome prints with "direct" process, which transfers the image directly from the slide to the paper. For an additional fee, they provide a custom service which employs the same process, but includes custom cropping, burning and dodging. Overman ordered a so-called "combo" (which includes mat-

ting and framing), but does not include custom printing. Had he ordered the custom service, Sidbeck said, he might have gotten results more to his liking. The custom processing, however, is not available with their combo offer.

The direct printing process does not necessarily provide prints with the bright, clear, and highly contrasting images underwater photographers see when they project their slides. Sidbeck said that to get an idea of what a print might look like, one can hold a slide at a 45° angle over a white piece of paper in normal room light. What you see through the slide is roughly what the print will look like. If that is unsatisfactory—if one is expecting to enter his photo in competition—then perhaps one should turn to the internegative process which is done in local color laboratories and not offered by Retinachrome.

Indeed, there is no way Overman can ever replace his slides and, unfortunately, that's the risk a photographer takes when he sends his slides for processing. We have no other complaints of lost slides from Retinachrome, so we can only presume that Overman's case was unique. We believe Retinachrome's offer to refund Overman's money—an offer made before *Undercurrent* got into the picture—was generous and we believe Overman's refusal indicated great integrity on his part. He's right. There was no guarantee. Money is no redress for lost slides. They are irreplaceable.

As for the quality of the prints, we have no way to judge, but Overman's disappointment was indeed real. We can note that we have received a few letters from readers during the past several years who were disappointed with the quality of prints from Retinachrome or other mail-order processors. But the prices of Retinachrome for noncustom work are as low as one can find anywhere. People who demand prints of top-quality, especially if they expect to enter competition, must turn to local labs who use the interneg process—at prices 2-3 times the prices at Retinachrome.

In reviewing the problem, two adages—perhaps clichés—apply.

When it comes to mail order processing: "you pay your money and you take your chances."

When it comes to turning slides into prints: "you get what you pay for."

1980: The Year Of The Coast

And A Year For Action

America's 88,000 miles of coastline are in trouble. Wetlands are filled. Mudflats are dredged. Waters are polluted. Oil is spilled. On every available spit of land houses are erected.

The results, ever so-serious today, will be tragic

tomorrow. Yes, the beauty of the natural coast is being destroyed. And so are the habitats of the plants and animals of the coastal regions. The ultimate result is the destruction of the food chain, the depletion of rich fishing grounds, the end of crabs and lobsters, cod and

salmon, clams and oysters. Here are some important facts:

*Today's total annual harvest of Chesapeake Bay oysters is only half what it was a century ago.

*Between 1954 and 1978, 100,000 acres of wetlands, 36% of the national total, succumbed to the developers' bulldozers.

*Since 1960, California has lost 75% of its wetlands.

*More than 100 new fossil fuel and nuclear plants are scheduled to be built in coastal areas in the next 15 years.

*Routine flushing of tankers accounts for 75% of the oil that goes into the ocean each year.

*Two thirds of the edible fish species spend part of their lives in coastal estuaries.

*Between 1966 and 1975, \$226 million in potential revenue was lost when pollution forced the closure of shellfish harvesting grounds.

And the list goes on.

Last spring an alliance of environmental groups formed to proclaim 1980 as *The Year of the Coast*, a proclamation which President Carter has endorsed. Every significant environmental group is involved: the Friends of the Earth, the Sierra Club, the Oceanic Society, the National Resources Defense, the Environmental Defense Fund, the National Audubon Society, the American Littoral Society, and scores more. The Coastal Alliance, as the coalition is called, has established these goals:

*To inform the public of the immense value of the coast and its resources, and the need for rescuing it from further degradation.

*To encourage groups and individuals across the country to work for the protection of coastal resources and to promote beneficial uses of the coast.

*To encourage local, state and federal governments to strengthen policies and programs to protect coastal ecosystems.

*To protect human life and the public purse by discouraging private development and public investment in coastal flood and erosion-prone areas.

*To encourage the siting of development in urban areas and the revitalization of urban waterfronts.

*To encourage public accessibility to coastal resources.

The activities of the Coastal Alliance and supporting groups will range from presenting congressional testimony on all issues, to increasing congressional and state legislature lobbying for tougher implementation of the 1972 Coastal Zone Management Act, to arranging for speakers at, for example, local Lions Clubs. The activities will be national and local, political and educational. They will include efforts to seek stringent protection of California coastal lands as oil companies rush to drill in coastal waters; fights against the filling of 500 acres of coastal wetlands in Grays Harbor, WA; seeking an end to the Corps of Engineers' incessant fight against the shifting sands on Long Island, where millions of dollars of effort each year are, naturally, washed away by sea and wind; fighting to save Rhode Island's Narragansett Bay, where the jewelry industry pumps heavy waste concentrations of nickel, copper,

lead, and cadmium, which will eventually affect rich shellfish grounds nearby.

Along with rigorous political activity, the Alliance will be urging local groups everywhere to engage in a variety of creative educational efforts. In Miami, the Marine Wilderness Society is planning a major public relations campaign. A conservation group in Freeport, NY is planning a program for schools and service organizations. The Mendocino California Environmental Center will include items on its regular radio show. The Girl Scouts will carry coastal conservation articles in their national magazine.

Dive clubs could do a great deal to advance the goals of *The Year of the Coast*. The activities possible are limited only by Club members' imagination and willingness to work hard. These are just a few ideas:

*Invite knowledgeable speakers to a meeting to give you specific direction.

*Organize underwater cleanups.

*Stage public dives to highlight conservation.

*Send speakers to schools and organizations to discuss the beauty of the underwater environment and to emphasize its fragility.

*Raise money for the protective acquisition of key coast sites or further education.

*Survey areas for underwater pollution and take that information to the press or politicians.

What Can You Do As An Individual?

*Invite speakers to other organizations in which you are a member.

*Urge local politicians to endorse the concept of 1980 as *The Year of the Coast*.

*If your state has an approved Coastal Zone Management Plan, get involved in its implementation.

*Educate yourself on the issues.

*Join an appropriate conservation organization.

If you want to get involved, you may learn of local activity by writing:

The Coastal Alliance
The Year of the Coast
P.O. Box 2708
Washington, DC 20013
(202) 466-7260

You may also wish to join a conservation group active in the movement. Two of the most significant national organizations working on *The Year of the Coast* activities with local chapters throughout the country are:

Friends of the Earth 124 Spear Street San Francisco, CA 94105 (415) 495-4770	Sierra Club 530 Bush Street San Francisco, CA 94104 (415) 981-8634
---	---

Finally, to educate yourself, we recommend the excellent book by Anne W. Simon, *The Thin Edge: Coast and Man in Crisis*, published in 1978. It is available in paperback for \$2.50 at most bookstores. The publisher is Avon Paperback. Now, go to it!