

REEF

notes

REEF ENVIRONMENTAL EDUCATION FOUNDATION

PROTECTING MARINE LIFE THROUGH EDUCATION, SERVICE AND RESEARCH

REEF

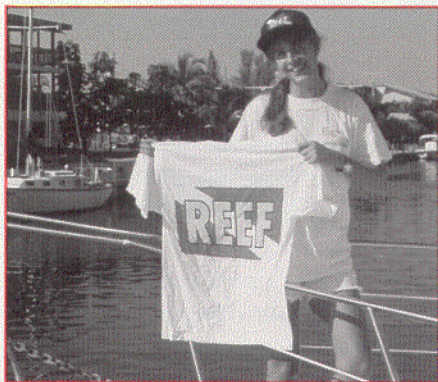
1994 SPONSORS

- Anthony's Key Resort
- American Express
- Atlantis Dive Center
- Coco View Resort
- DEMA
- Florida Association of Dive Operators
- Florida Scuba News
- IBM Corp.
- The Nature Conservancy
- The Norcross Wildlife Foundation
- The PADI Foundation
- Rodale's Scuba Diving
- Sea Frontiers
- Under Currents
- Underwater USA

REEF Recipient Of Rodale Environmental Award For 1994



(L to R) Paul Humann, Co-Founder REEF; Laddie Akins, Executive Director REEF; Dave McAfee, Publisher Rodale's Scuba Diving; Steve Blount, Editor Rodale's Scuba Diving; Ned DeLoach, Co-Founder REEF; John Pitcairn, Dir. of Finance & Administration REEF.



New REEF Gear, see inside for details.

The 1994 Robert Rodale Environmental Award was presented to the Reef Environmental Education Foundation at an August banquet in Key Largo, Florida. A beautiful plaque crafted by marine life sculptor Robert Straight and a check for \$10,000 were accepted in behalf of the REEF membership by the foundation's Executive Director Laddie Akins and Administrator John Pitcairn. Presenting the award were Rodale's Scuba Diving's publisher David McAfee and Executive Editor Steve Blount.

The award is named for Robert Rodale, longtime guiding light of Rodale Press and

visionary who believed that all life on Earth is connected and that we should treat our planet as we would have others treat us. Mr. Rodale died tragically in an automobile accident in 1990, but his inspiration and ideas are still improving the environment through the work of the company and its research groups.

REEF was chosen for the prestigious environmental award because of its innovative approach to marine wildlife education and its involvement of volunteer divers. 🐠

Reef Environmental Education Foundation

Nonprofit Org.
US POSTAGE
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Key Largo, FL
Permit No. 57

FORWARDING & ADDRESS CORRECTION REQUESTED

P.O. BOX 246
KEY LARGO, FL 33037



Director's Note

Laddie Atkins,
Executive Director of REEF

I see it all too often; people come up after a dive on a beautiful reef site that is absolutely loaded with marine life, and when I ask them what they saw, many just shrug and say, "Not much." This happened with a pleasant young couple just the other day; good people, educated and decked fin to

mask with top-of-the-line Scuba gear. When pressed for details, they mumbled something about a moray and barracuda and hoped that the next dive would provide more "action".

To help keep my sanity when this happens — I just think back to last June when the same boat, chartered by divers attending REEF's Key Largo Field Survey, visited the same site. Even before the fishwatchers were up the ladder and the second stages dropped from their mouths, they were talking excitedly.

"Beth, what about that Barred Hamlet."

"It was great, thanks for pointing it out. Joe and I also found a Diamond Blenny." Beth replies with a grin. "The first we've ever seen."

"Where?"

"Just past the large star coral, at the end of the sand cut. Did you see the school of Creole Wrasse that came in during our safety stop? Now I know how to tell the difference between the terminal males and adults. Those guys are unbelievably beautiful if you take a close look. How many species do you have on your slate?"

Thankfully things are starting to change for the better. Presently, there are almost five thousand of you who have added a new dimension to diving by becoming fishwatchers and actively surveying marine wildlife populations for REEF. This is something we all believe in for the survival of our coral reef habitats; and, collectively, we're doing something about it. You're diving, surveying, discovering and learning, and are never bored underwater. It's fantastic! This year alone, members have donated more than 1,600 hours of survey time and completed over 2000 surveys for reef communities from Bimini to Bonaire.

You are pioneers: the first to take part in a large scale, long-term reef-life monitoring program, and the good news is spreading.

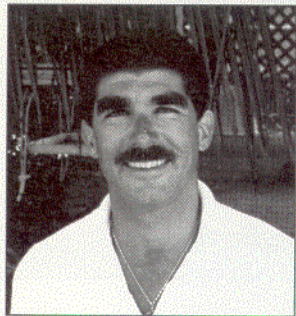
Rodale's *Scuba Diving* magazine, an early supporter of REEF's grass root efforts, has honored us by awarding REEF their 1994 Robert Rodale Environmental Achievement Award. *Sea Frontiers* magazine continues to encourage membership in their publication, most recently (October 1994) in a wonderful Bonnie Gordon editorial. She applauded REEF's energetic and enthusiastic members. Fifty new Field Stations have become a part of REEF's work since the beginning of 1994. (Look for the listing of these Field Stations in the newsletter and give them your support and encouragement in their support of REEF). So, as you can see, good things are happening. Thanks to you, our charter members.

REEF now has some great new recognition materials for you to show off: t-shirts, ball caps, and waterproof stickers/tank decals. Of course, proceeds from the sale of these goodies benefit REEF's projects and activities. We also continue to offer the new Deluxe Survey Kit that will turbo-charge your fish surveys and help get beginning fishwatchers off and running quickly. The Kit contains specially designed waterproof survey sheets, a custom notebook, an improved slate, and extra computer scansheet survey forms.

We had a fantastic response to our 1994 REEF Fish Field Surveys. Unfortunately, the trips filled so quickly that many of you didn't have a chance to join in the exciting learning/vacations. So, for 1995, we've expanded our Field Survey schedule to seventeen, including several new locations.

Join us for a week of first class diving, identification seminars, fun, companionship and hands-on surveying experience. What a great way to become involved in the future of diving!

Finally, a big thank you to our member/volunteers at REEF HQ in Key Largo. We all appreciate your hard work and dedication. The world is beginning to take notice. 🍷

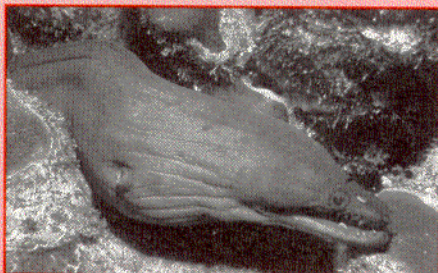


MORE MORAYS

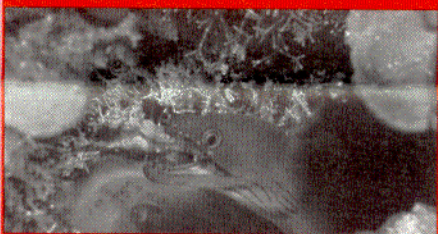
If you want to increase your chances of adding another moray to your lifelist, think night diving.

After dark, these odd, snakelike masses of muscles are occasionally sighted prowling free over the reef and surrounding sand flats. A sense of smell guides the scavenger/predator toward a dinner of small fishes, crustaceans and octopuses.

Even the more reclusive, rarely-sighted morays, such as the Viper and Chestnut, are drawn near the reef's surface at night.



VIPER MORAY
Enchelycore nigricans



CHESTNUT MORAY
E. carychroa

These two species, that make up the genus *Enchelycore*, share similar unpatterned, reddish brown bodies and highly arched jaws that give them a most menacing appearance. Vipers can be distinguished by their larger size (often growing to two feet), and stout bodies.

The Chestnuts reach only a foot in length, and are relatively slender. A series of small white rings, encircling pores along the outside edge of both jaws, visually identifies them to species.

Both species are wary and tend to draw back into the reef if approached too closely or exposed with an intense light beam. If this happens, slowly move away and explore another reef section. When you return a few minutes later, the moray will probably be visible once again. 🍷

⌄ 1995 Field Survey Schedule ⌄
FISHWATCHING IN PARADISE

1995 Field Surveys continue the tradition of fun, learning, and active involvement in the preservation of marine life. Each five day Field Survey typically runs from Sunday through Friday, including an abbreviated Wednesday schedule to allow for free time. Morning seminars include fish identification slide presentations, and survey workshops; afternoons and two nights are set aside for survey dives (a minimum of 12 dives are scheduled).

Join a REEF Field Survey and take a dive vacation that counts! Each Survey is limited to 18 divers, so please reserve early. (The dates given below include one travel day before and after each program). Except where indicated, contact REEF Headquarters, (305) 451-0312, for additional information and reservations:

April 1 - 8 (Sat. - Sat.)

ROATAN \$1,435

Includes air fare from Miami, hotel (7 nights), transfers, meals, diving, and seminars.



April 22 - 29 (Sat. - Sat.)

GRAND CAYMAN \$900

Includes hotel (7 nights), breakfast, transfers, diving, and seminars.



May 6 - 13 (Sat. - Sat.)

TORTOLA \$890

Includes hotel (7 nights), continental breakfast, transfers, diving, and seminars.



May 20 - 27 (Sat. - Sat.)

*Advanced Field Survey/
Volunteer Survey Leader Seminar*

KEY LARGO \$510

Includes diving and seminars.



June 3 - 10 (Sat. - Sat.)

BONAIRE \$900

Includes hotel (7 nights), transfers, diving, and seminars.

Contact Maduro Dive Travel:
(800) 327-6709



June 10 - 17 (Sat. - Sat.)

DRY TORTUGAS \$760

Liveboard *Spree*, departing Key West; includes accommodations, meals, diving, and seminars.

June 17 - 24 (Sat. - Sat.)

KEY LARGO \$460

Includes diving and seminars



July 2 - 8 (Sat. - Sat.)

TURKS & CAICOS \$1,650

Peter Hughes' liveaboard *Sea Dancer*; includes accommodations, meals, diving, and seminars.

Contact Lisa Diaz at
American Express Travel
(800) 752-9438.



July 15 - 22 (Sat. - Sat.)

KEY WEST \$460

Includes diving and seminars.



July 15 - 23 (Sat. - Sun.)

Invertebrate I.D. Seminar

ROATAN \$1,295

Liveaboard *Isla Mia* with Paul Humann and Ned DeLoach; includes accommodations, meals, diving, and seminars.

Contact *Isla Mia* Office at
(800) 874-7636.



July 23 - 30 (Sat. - Sun.)

Coral I.D. Seminar

ROATAN \$1,295

Liveaboard *Isla Mia* with Paul Humann and Ned DeLoach; includes accommodations, meals, diving, and seminars.

Contact *Isla Mia* Office at
(800) 874-7636.

August 5 - 12 (Sat. - Sat.)

ISLAMORADA \$460

Includes diving and seminars.



August 12 - 19 (Sat. - Sat.)

NASSAU \$989

Includes hotel (7 nights), breakfast, transfers, diving, and seminars.

Contact Neal Watson's
Undersea Adventures at
(800) 327-8150



August 12 - 19 (Sat. - Sat.)

ST. LUCIA \$1,249

Includes hotel (7 nights), meals, transfers, diving, and seminars.



August 19 - 26 (Sat. - Sat.)

MARATHON \$460

Includes diving and seminars.



September 2 - 9 (Sat. - Sat.)

BELIZE \$1,750

Peter Hughes' liveaboard *Wave Dancer*; includes accommodations, meals, diving, and seminars.

Contact Lisa Diaz at
American Express Travel
(800) 752-9438.



September 16 - 23 (Sat. - Sat.)

*Advanced Field Survey/
Volunteer Survey Leader Seminar*

KEY LARGO \$510

Includes diving and seminars.

STEALTH BASS

Genus *Liopropoma*

by Laddie Akins

I just finished reading an interesting post card from REEF members Doug and Jane Rorex from Ohio. Doug and Jane were with us on the October 1993 Key Largo Field Survey and have since surveyed several reef sites in the Caribbean. Now and again, they drop me a note about underwater discoveries they've made.

Their latest note includes a drawing and description of a fish that I immediately deciphered to be a Cave Bass, a species that brings a smile to my face because I remember my first encounter with these beautiful, cryptic, little seabass.

Cave Bass are one of four species from the genus *Liopropoma*. All live deep within reef recesses. Because of their secretive nature we fondly call members of the group stealth bass. The underwater light, which is necessary to substantiate an ID, often causes the fish to retreat from view. Although shy, these little bass also have the innate curiosity typical of all members of the seabass family and will slowly but surely return, providing a brief second view before once again sliding back into the safety of their hideaway.

I found my first Cave Bass last year in Belize. It was inside a small cave on a wall at a depth of eighty feet. The three inch bass has a solid salmon colored body without striping characteristic of the closely related Peppermint and Candy. The best way to find a Cave Bass is to drop down a wall to a depth of 80 to 90 feet and slowly work your way up, looking for pockets two or three feet wide. Once you find one, keep looking in similar pockets and you should find others.

The Peppermint Bass, *L. rubre* is the most common member of the genus. The small, 1 1/2 to 3 inch bass inhabit reefs as shallow as 10 feet, but are generally found deeper. Often, they are the first "hard to find" species discovered by a beginning fish-watcher. Typically, they are sighted inside small recesses located near the bottom of a high profile reef systems.

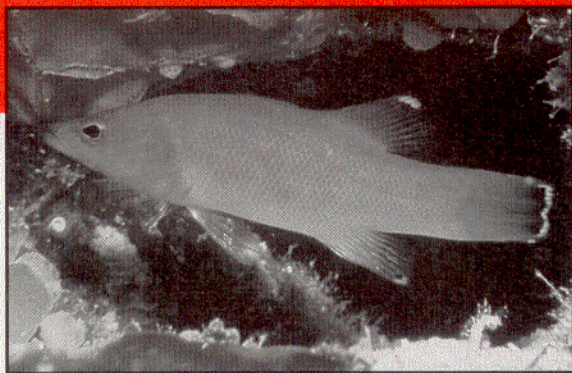
Peppermint Bass are boldly marked with distinct black, maroon, rose, and gold stripes running from their pointed snouts to their

broad, flat tails. They remind me of the 5¢ stick candy I used to buy at the corner drugstore. The margin of the tail is black with an electric blue outline. The tips of the rear dorsal and anal fins, which the fish tends to keep erect, are also marked in black with identical electric blue outlines.

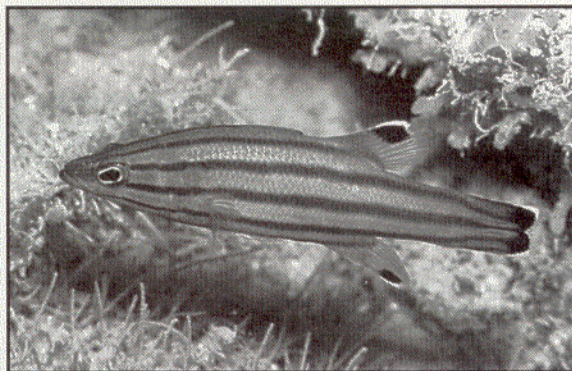
The Candy Bass is so rare and reclusive that for a while I wondered if it actually existed at all. Well, it finally happened. During the Bimini Field Survey in May, I got a fleeting glance of what I thought was a small Peppermint. The two inch fish was hovering a few inches off the bottom in a small coral pocket. My light was on it for only a few seconds before the fish disappeared; not enough time to notice if it had a clear anal fin — one of the visual features that distinguishes it as a Candy. I moved away from the area for a few minutes; when I returned, the bass was exactly where I sighted it the first time. This time I got a good look at the anal fin — no spot; I had found my first candy bass!

I was up and out of there looking frantically for Ned DeLoach and his camera. Our luck was running. My little Candy Bass now appears on page 165 in Paul Humann's 2nd edition of *Reef Fish Identification*. The first photography ever published of this cryptic species.

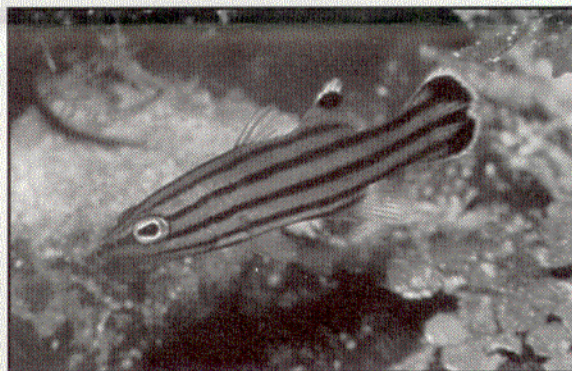
I'm still looking for the last of the *Liopropoma* known as a Wrasse Bass. This species has only been reported off the east coast of Florida. When I get a chance, I'm heading for a deep reef off West Palm. I know my fish is out there, waiting to give me another underwater thrill. 🍬



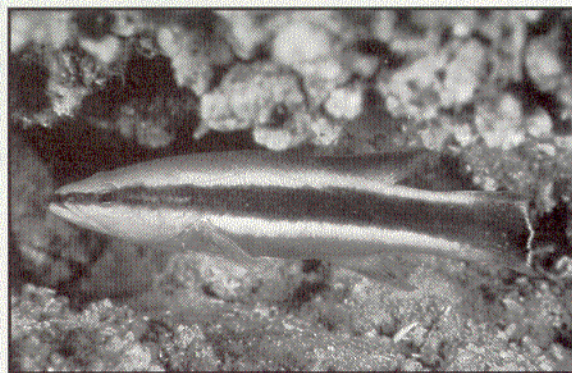
Cave Bass *Liopropoma mowbrayi*



Peppermint Bass *Liopropoma rubre*



Candy Bass *Liopropoma carmabi*



Wrasse Bass *Liopropoma eukrines*

Fall 1994 REEF Field Survey Volunteers

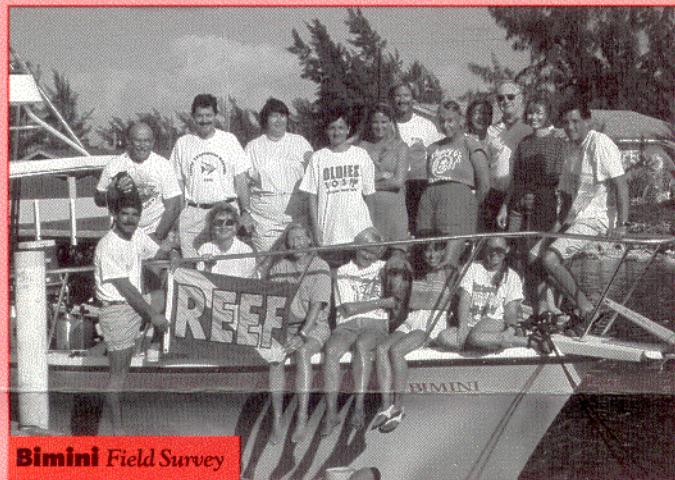
BELIZE (Right) — Sharon Bailey-Bok, Linda Pratt, Susan Dristy, Margaret Hornbaker, Susan Fuchs, Lou Ann Stewart, Hal Stewart, Ann Hunt, Laddie Akins, John Pitcairn, Jim Pratt, Curtis Bok, Rebekah Wesateke, Leroy Wesateke, Bob Bishop, Kevin Peck, Tom Todd, Judith Lampley, Tom Lampley

BIMINI (Below) — Cindy Hanlon, Louise Sutherland, Emily Ross, Melinda Williams, Jim Stutesman, Ed Gerrard, Donna Gerrard, Ann Hunt, Janet Levy, Keith Austin, Anna O'Donnell, Laddie Akins, Leslie Koontz, Dan Wagner, Bianca Piccolo

CAYMAN (Right Below) — Laddie Akins, John Pitcairn, Ned DeLoach, Eric Riesh, Emily Schmitt, Claudia Campos, Walter Briney, Glen Thiel, Patrick McAlpin, David Mulvey, Elaine Morden, Carol Reichert, Kathleen Scott, Lynne Hubert, Rob Antonelli, Jean Gasen, Ann Hunt, Rueben Torres, Nick Naidella, Becky Wittley



Belize Field Survey



Bimini Field Survey



Cayman Advanced Field Survey/Volunteer Survey Leader Seminar

FIELD STATIONS

The dive centers, resorts, boat operators, and instructors listed below demonstrate their support for REEF by volunteering as Field Stations. Each serves as a distribution point for survey forms, and actively recruits new members. Most offer beginning and advanced fish identification courses, organize survey dives, and sell related fishwatching materials. Stop in, say hello, and let them know how much you appreciate their service.

USA

ALABAMA
Birmingham Scuba Ventures Inc.
Montgomery Adventure Sports II Inc.
CALIFORNIA
Danville The Marine Conservation Network
San Jose Classic Scuba
COLORADO
Boulder Rocky Mountain Diving Center
FLORIDA
Allamonte Springs Scuba III
Ft. Lauderdale Good Time Divers
Islamorada Lady Cyana Divers
Key Largo Atlantis Dive Center
Lake Worth Michael Dougherty, Instructor
Lantana Splashdown Divers Dive Locker

Marathon Florida Keys National Marine Sanctuary
Miami Austins Diving Center Inc.
Miami Beach Team Divers South Beach
Riviera Beach Dive USA
GEORGIA
Atlanta Divers Connection
Stockbridge Wet Set Scuba
St. Simons Island Island Dive Center
LOUISIANA
Kenner Square World Dive Center
Shreveport Scuba Ventures
MONTANA
Missoula Odyssey Diving, Inc.
NEBRASKA
Omaha Midcoast Scuba Center Inc.

NEW JERSEY

Lawrenceville The Lawrenceville School
NORTH CAROLINA
Morehead City Olympus Dive Center
OHIO
Akron Deep Six Specialists, Inc.
PENNSYLVANIA
Wexford Smiley's Dive Shop
TEXAS
Houston Houston U/W Club
Kenlee's Scuba West
Sea Sports Scuba
WWW Diving Co.
Humble
VIRGINIA
Richmond Virginia Institute of Diving

OVERSEAS

ANDROS

Dream Too (liveaboard)
Small Hope Bay Lodge
Sueno Del Mar Dive Resort
Cayos Cochinos Plantation Beach Resort

BAHAMAS

Bimini Scuba Bimini
Freeport UNEXSO
Nassau Custom Aquatics
Nassau Scuba Centre
Sunskiff Divers
Walker's Cay Walker's Cay Undersea Adventure

BELIZE

Palacencia Rum Point Divers
British Virgin Isls. Tortola Baskin in the Sun

COSTA RICA

Tempress Voyages

HONDURAS

Roatan Anthony's Key Resort
Coco View Resort
Isla Mia (liveaboard)

MEXICO

Cozumel Aqua Safari
Isla Mujeres Puerto Isla Mujeres Resort

PANAMA

Albrook AFB Balboa Dive Club

PUERTO RICO

San Juan Scuba World

ST. LUCIA

Anse Chastanet Dive St. Lucia

TURKS & CAICOS

Grand Turk Blue Water Divers
Flamingo Divers

U.S. VIRGIN ISLS.

St. Croix Melissa Keyes, Instructor
VI Divers Ltd.

REEF Deluxe Survey Kit

Now Available!

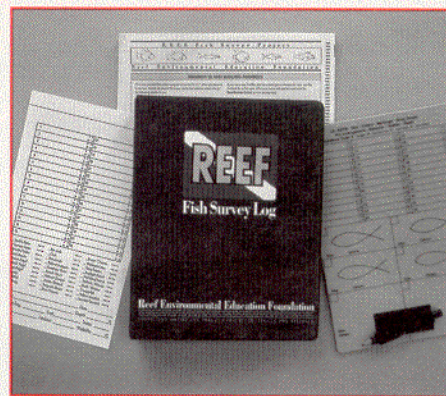
The new REEF Deluxe Survey Kit was designed to make fish surveying easier and more efficient. Each Kit contains 12 Marine Wildlife Survey scansheets, 24 underwater ID sheets, an underwater ID slate and a three-ring binder imprinted with the REEF logo and the wording REEF Fish Survey Log. The Kit provides volunteer divers with everything necessary to take reef fish surveys, to record data for REEF, and to keep a personal record of sightings.

In the past the common names of fish sighted were jotted down on a reusable yellow ID slate. Later, after transferring the collected data to a REEF Marine Wildlife Survey data sheet, the slate was erased for the next survey dive. This method made it difficult for volunteers to keep personal histories of their sightings. If a log was kept, the information from the last had to be rewritten onto

a separate page or photocopied. Now, by using REEF's new underwater ID sheets that attach to the slate, there is no need to erase or copy data. The quality, waterproof KIM-DURA plastic sheets are simply removed and permanently stored in your log binder.

The ID sheets have a tab at the top that is secured with a plastic slip-clip; the bottom is held in place with a rubber band. When the front page is filled with sighting data, the sheet is folded over the slate's top and resecured with the band. This allows space for an additional thirty species to be recorded.

The new sheet design differs from the old slate format in several other ways. Most obvious is an area with the pre-listed names of thirty commonly sighted fish species (Bluehead and Yellowhead Wrasse, Surgeonfish, Doctorfish, Yellowtail Snapper, etc.) The surveyor can now save time by simply checking



off these ubiquitous species. There are 70 additional spaces, front and back, to record the names of other fish sightings for a total of 100 recordings per sheet. Another addition is an area for survey site information necessary to complete a REEF Marine Wildlife scansheet (dive site name and location, date, depth visibility, etc.)

The Reef Deluxe Survey Kit can be ordered by sending a check for \$30.00 + 3.50 (S&H) to REEF, P.O. Box 246, Key Largo, FL 33037. 📧

REEF Contributing Members

The following members have not only generously contributed a portion of their dive vacations to conduct marine life surveys, but have also donated \$30 or more. REEF continues to maintain a "no fee" membership policy, in large part, because of the voluntary financial support from the members listed below.

REEF is a 501(c)(3) nonprofit corporation. As such, all contributions are tax deductible. Any contribution you make will be greatly appreciated and go a long way toward continuing our work. Please mail your contribution to REEF, PO Box 246, Key Largo, FL 33037.

Africa, Dana	Downs, Noreen	Kirkpatrick, Jean	Rafter, Jason
Anderson, Thomas	Fager, Kevin	Kitchen, Elizabeth	Sachs, Don
Bell, Randy	Flesner, Tom	Klebs, Bob	Saphier, Douglas
Betts, Nancy	Friedberg, Harris	Klein, Lydia	Seiffert, W. A.
Binkley, Dan	Fricke, Jim	Kruschke, Don	Silliman, Bill
Blankfein, Richard	Gaines, Carl	Kruschke, Pam	Smith, Kenneth
Briney, Walter	Goldsmith, Ilse	Lindsay, Sarah	Smith, Thomas III
Brinkley, Dan	Hubert, Lynne	McCombie, Mel	Stand, John
Burrell-Sahl, Helga	Halatek, Walter	Morabito, Jim	Sollins, Phillip
Chapman, Park	Harell, Carol	Mulvey, David	Taylor, Karen
Deaver, Ken	Hilbert, James	Nehms, Jeff	Taylor, Mike
Devon, Nancy	Isgar, Tom	Nutter, Guy	Weaver, Robert
Diaz, Lisa	Johnson, Nancy	Peterson, Thomas	Wheatman, Samuel
Dixon, Robert	Kirkpatrick, Bob	Pomento, Joe	Williamson, Jodi
Downs, Dave	Kirkpatrick, Mrs. R.L.	Rodriguez, Angel	

REEF Gear Now Available

[See photo on cover.]

REEF T-shirts and hats are a great way to proudly display your support of REEF. Our new REEF hats bear a red, black, and gold REEF logo patch on the front of an all black cap. Available in one size, these hats are perfect for those sunny days on the boat between survey dives! The white T-shirts are boldly emblazoned on the back with the three color REEF logo; the front reads "Reef Environmental Education Foundation CHARTER MEMBER." The shirts are available in three sizes: Medium, Large, and X-Large (sizes tend to run a bit large). Hats and T-shirts are both \$15.00 (plus \$3.50 for shipping and handling). Waterproof REEF logo stickers/tank decals (3 1/2" by 2 1/2") are available for \$1.00 each (including shipping and handling).

Please send your orders to:

REEF
PO Box 246,
Key Largo, FL 33037.