

spring 1999

reef notes



Reef Environmental Education Foundation

Protecting Marine Life Through Education, Service and Research

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What's Happening Now???

Sustainable Seas Expedition : Venture to the Deep

Jules Verne watch out! The Deepworker 2000 is on the loose. Last fall REEF responded to a call for proposals to be a part of the Sustainable Seas Expeditions (SSE). Funded by the Goldman Family Fund and headed by renowned scientist, Dr. Sylvia Earle, SSE is a cooperative effort between the National Geographic Society and NOAA's National Marine Sanctuary Program to explore the deep regions of the twelve National Marine Sanctuaries (NMS). The exploration will be carried out using the Deepworker, a one-person untethered sub, capable of diving to depths of 2000 feet and mission times of up to eight hours. REEF was awarded three research spots aboard the Deepworker and, in January, REEF's own Laddie Akins traveled to Monterey, California for pilot training. Among the trainees was renowned National Geographic explorer Emery Kristoff. Two training dives were made in Monterey - a fascinating spectacle for curious onlookers. Laddie is now ready for his research dives to take place this summer in the Flower Garden Banks NMS, Grays Reef NMS and Florida Keys NMS. Numerous scientific studies will be taking place during the five-year project, including REEF fish surveys conducted by both Laddie and Dr. Earle. Watch for updates on REEF's involvement with SSE.



Laddie Akins gets ready to pilot the Deepworker 2000

For more information about SSE check out their web site at <http://sustainableseas.noaa.gov>

Inside :

- ***REEF'S science & covservation efforts,***
- ***Volunteer of the Year***
- ***and more !!!***

Director's Corner



Dear Fish Friends!

Lot's of news to report from this corner. First, REEF added two valuable members to its staff. This was made possible, in part, by the overwhelming response to our spring solicitation for monetary support. We welcomed long-time volunteer and supporter, Dr. Christy Semmens, as our new Scientific Coordinator. The position is jointly funded through REEF and NOAA's National Marine Sanctuary Program and will allow Christy to work on detailed analysis and reporting of the REEF data we've all been collecting. In addition, we welcomed Denise Mizell as part of our office team. She has been driving almost 300 miles each week to volunteer in the REEF office, so we decided it was time for her to become part of the staff. Denise will handle membership and general inquiries at the office two days each week in addition to teaching ID seminars on a regular basis.

Sadly, this month will see the departure of REEF's Director of Administration, John Pitcairn. John has been a valued staff member and long-time friend, and we will miss him greatly. He will, however, continue to be very involved with teaching and leading fish surveys as a volunteer. Good Luck, John! You have been and will continue to be a large part of REEF's success.

New projects abound! REEF has teamed with the Sonoran Sea Aquarium to initiate expansion of the REEF Fish Survey Project to the Gulf of California. We will be participating with National Geographic and NOAA on the Sustainable Seas Expeditions. REEF has been retained by National Marine Fisheries Service to monitor newly designated sites in the Florida Keys National Marine Sanctuary, and by the Living Oceans Society to expand the Pacific Northwest Survey Program into the "Living REEF Program". All of this is in addition to the Great American Fish Count, PADI Project AWARE and ongoing REEF Fish Survey Project. REEF activities are now taking place throughout the greater Caribbean, Gulf of Mexico, California through British Columbia, and the Southeastern US. We have over 15,000 surveys in our database and it continues to grow!

How is all of this possible? Through you! Generous financial contributions by our members allow us to continue to expand our programs and partnerships. Equally important are personal contributions of your time to help us with speaking engagements, the Great American Fish Count, REEFNotes, and other critical projects that enable REEF to continue and to expand. Thanks go out to all of you who have volunteered your time, money and survey effort to REEF.

A parting thought: here's a phrase that should remain in the forefront of your mind as you dive this year...Marine Protected Areas. REEF data is being used in a number of locations, for scientific and management decisions, but perhaps nowhere is it as useful as in helping prove the effectiveness of marine reserves. The concept of no-take zones is rapidly gaining favor among decision-makers as the easiest and most cost-effective way to preserve the marine environment. REEF data is a critical component of the case to support these reserves. Initial data from the Florida Keys suggests that the return to "normal" marine conditions and fish species populations in protected areas is both rapid and dramatic. The REEF data you collect contributes greatly toward understanding these changes. So keep it up and please continue to give your utmost support to these effective marine management programs!

See you in the water soon!

A handwritten signature in black ink, appearing to read 'L Akins', written in a cursive style.

Laddie Akins
Executive Director



REEF and PADI Project AWARE Launch Fish Identification Specialty at DEMA 99

DEMA 99 saw the official unveiling of PADI Project AWARE's Fish Identification Specialty. The new product was designed in association with REEF, whose founder Paul Humann was on hand to teach the specialty for the first time. As expected, REEF received an enthusiastic response to this new product, which introduces students to fish identification in a simple, yet effective way, and enables both novice and experienced divers to conduct REEF fish surveys within a matter of hours. The teacher's pack contains everything needed to teach the basics of fish identification and monitoring. It includes colorful slide images by Paul Humann and an easy-to-use teaching curriculum designed to engage aspiring marine life enthusiasts. In addition, the teachers pack includes the REEF data collection manual "Surveying Coral Reef Fishes"; an underwater slate; a waterproof survey form; a fish ID card; formatted hand-out sheets; a fish ID quiz; and computer-scannable REEF Fish Survey data sheets. Student packs are also available with the course. They include an underwater slate; a fish ID card; a waterproof survey form (good for two dives); and two REEF survey data sheets. As a bonus, they also include "Fish-in-a-Pocket" (an underwater vest pocket-sized fish identification booklet), a REEF decal and a REEF BC Tag.

Students who complete the Fish Identification Specialty will receive a one-year membership in REEF. In addition, those who subsequently complete two surveys for the REEF Fish Survey Project will be recognized as Level Two Fish Surveyors.

The Fish Identification Specialty has five modules, each concentrating on the fish of one geographic region. The regions include Florida, the Caribbean and Bahamas; South Atlantic; Pacific Northwest; Northern California; and Southern California. If you've been putting off joining the survey effort, now is the time to get wet. Contact your local REEF Field Station or PADI dive center and take a course that really counts!

For more information or to order your Project AWARE Fish Identification Specialty Curriculum contact Deena Feeley at (904) 454-7809 or through e-mail at reef052@aol.com



Linda Schillinger Awarded 1998 Volunteer of the Year

With over 15,000 REEF members, it might seem difficult to single out one person for recognition. But this year, member #834 stands out above the REEF! She is long-time volunteer, Linda Schillinger, who was recently honored in Ft. Lauderdale as REEF's Volunteer of the Year for 1998.

Residing in New York, Linda works to dive. She has been an active REEF member since 1993, joining us on eleven week-long REEF Field Surveys. In addition, she conducts surveys on her own dive trips and now has contributed over 300 surveys! In the process, she has identified 273 species of fish!! Because of her demonstrated expertise, she was selected to become a member of REEF's elite Advanced Assessment Team. Linda is a great asset to REEF staff and team members on our Field Surveys and Advanced Assessment dives, where she helps new members with



identification and manages survey forms. Linda has become an invaluable volunteer, one who we hope many will emulate. No wonder she was chosen to be our Volunteer of the Year for 1998!



Linda Schillinger receives Volunteer of the Year Award

Congratulations Linda!

REEF's Conservation and Science Efforts

We all know how fun it is doing REEF fish surveys - the satisfaction of knowing the names of fish you are swimming with and the excitement of finding a new species for your life list. However, the data you and other REEF members are collecting serve a larger purpose in the realm of science and conservation. To date, REEF's database contains over 15,000 fish surveys. This large amount of data can serve to augment scientific research programs. In addition, REEF's roving diver method and its unique database are being incorporated into scientific programs. Read on for a few examples.



Dr Christy Pattengill-Semmens
pattengill@excite.com

Florida Keys National Marine Sanctuary - Evaluating Human Use Zones

During the past two years, REEF has contracted with the Florida Keys National Marine Sanctuary (FKNMS) to conduct fish surveys inside the newly established no-take zones and at reference sites that have no-harvest restrictions in an attempt to monitor the effect of the zones. These surveys, conducted by REEF's Advanced Assessment Team (AAT), are among more than 4,000 conducted in the sanctuary by REEF volunteers since 1993. Because many of the REEF surveys were conducted in the no-take zones prior to July 1, 1997, when the protection was implemented, the database serves as a baseline for detecting changes in populations. Although it is still too early to expect much change, preliminary evaluations on snapper species at Western Sambo's Ecological Reserve (the largest protected area) suggest the zones are working. REEF will continue its AAT Florida Keys project for several years. The AAT data will be used by the sanctuary in concert with fish survey data collected by the National Marine Fisheries Service to evaluate the effectiveness of the zones over the next four years.

A Management Plan for the Parque Nacional del Este in the Dominican Republic

REEF volunteer surveys have been put to good use in the Dominican Republic's national park, Parque Nacional del Este. Through a partnership between the park, The Nature Conservancy, and the National Aquarium of Santo Domingo, REEF data will be combined with other fish data and coral reef population information to develop a management plan for the park. Look for REEF to return to the Dominican Republic to conduct a Field Project in the near future.



AGRA - To Rapidly Assess Coral Reef Health

In June 1998, REEF staff joined 85 scientists from 21 countries to discuss the condition of Caribbean reefs and review the proposed Atlantic and Gulf Reef Assessment (AGRA) protocol. AGRA, the brainchild of Dr. Robert Ginsburg of the University of Miami, was created to rapidly assess and identify the occurrences of decline and degradation of the Atlantic and Gulf reefs using standardized methodology. The monitoring focus includes fish, corals, algae, and sea urchins.



After a few days in the field during the AGRA workshop, it was obvious that REEF's roving diver method and database were a perfect fit. Over the next year, scientists will conduct AGRA assessments throughout the region. The information gathered will then be compiled into a report. REEF is proud to be a part of this important effort, and that the REEF/TNC database will be enhanced by the data collected.



AGRA scientists including Rick Nemeth, Ken Lindeman, Laddie Akins, Jim Bohnsack, Ken Marks, Peter Sale, Rudolpho Claro & Jerry Ault, **participate in field workshop**

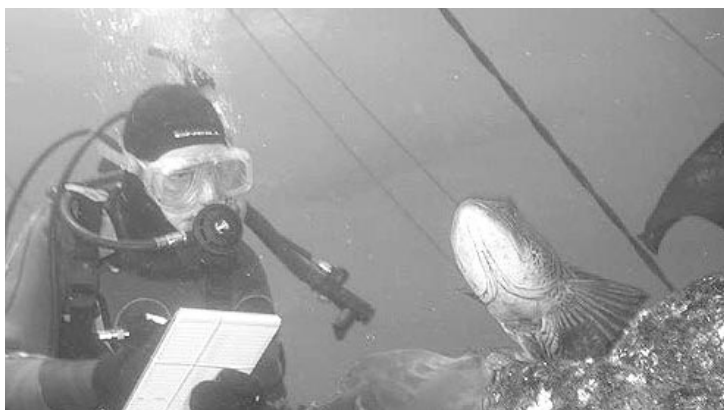
REEF Brings Volunteer Monitoring to Oregon, Washington and British Columbia. Sailfin Sculpin, Quillback Rockfish, Mosshead Warbonnet -- just waiting to be sighted!

Although the water is cold in the Pacific Northwest, there is good reason to conduct a fish survey there. Jacques Cousteau considered the area one of the most diverse and amazing dive locations in the world! That's why, in the summer of 1998, REEF teamed up with the Olympic Coast National Marine Sanctuary, the San Juan County Bottomfish Recovery Project, and British Columbia's Living Oceans Society to launch the REEF Pacific Northwest Pilot Project. The goal of the pilot project was to evaluate the feasibility of implementing REEF's volunteer fish monitoring program in the area. A standardized fish identification course was developed for the Pacific Northwest and taught to the project's team members in May. Participants then conducted survey dives throughout the summer. By the end of the project, a total of 85 divers in nine teams participated, and 208 surveys were completed. The survey data from the project can be seen on REEF's website.

Due to the success of the project and local enthusiasm and support, a commitment has been made for full-scale monitoring open to all interested divers. REEF will be working in collaboration with the Living Oceans Society to coordinate training and survey activities. A goal of the Living Oceans Society is to add invertebrates to the survey protocol, many of which are key biological indicators of this unique systems health. This partnership is an exciting step in completing REEF's coverage of the North American Pacific coast.



Pilot participants get ready to count fish in Port Orford, Oregon. Pictured are (top row l-r) Ron Herbert, John Marconi, Peggy Marconi, Bill Ebert, Troy Landing, (bottom row l-r) Dana Africa, John Cheesman, Corrina Wood



Diver doing REEF survey in Edmonds Underwater Park, Seattle where fish like this lingcod have been protected for over 20 years.

A fishy "high five" goes to all our pilot project participants, and to the team leaders Dana Africa, Kirby Johnson, Mike Kaill, Neil Hurd, Greg Hiatt, Kurt Steinbach, Greg Volkhardt, John Tupper, Dana Haggarty, Susan Francis, Marli Wakeling, Majbritt Altenburg, and Glen Dennison. Special thanks also to Michele Malarney and the National Marine Sanctuary office in Sand Point, Jeff Christiansen and the Seattle Aquarium, and Dr. Andy Lamb and the Vancouver Aquarium. Contact REEF if you are interested in surveying the Pacific Northwest.



REEF Plans Expansion to the Gulf of California

Ever heard of fish surveying in the desert? Why not? REEF is joining forces with the Sonoran Sea Aquarium in Tucson to expand the Fish Survey Project to Baja and the Gulf of California where fish species abound in numbers comparable to the Caribbean. Many areas are under increasing threat of pollution and development, and, consequently, the need for information on the Gulf's marine life is critical. A pilot program is now underway to develop the necessary materials and database modifications to allow REEF members to survey this diverse area. The Sonoran Sea Aquarium and Mexican Instituto Nacional de la Pesca are leading this expansion. Look for the program to debut at the Desert Dolphin's Spring 2000 Diving Symposium in Tucson. For more information contact REEF HQ at (305) 451-0312.

1999 Field Survey Schedule

Each six-day Field Survey is hosted by highly regarded local resorts and dive operators and typically runs from Sunday through Friday. As a survey volunteer you will gather data at locations especially important to marine wildlife management and conservation officials. You will make a minimum of two survey dives each day and often additional dives are offered. Between survey dives you will enjoy colorful and interactive fish identification presentations by REEF personnel. You'll learn the most successful surveying strategies, participate in informative discussions, and get plenty of exciting fish behavior tips. You will be amazed at how much more enjoyable diving will be with your expanded knowledge of marine wildlife.

So why not join in?

Take a dive vacation that counts !

JOIN REEF FOR A WEEK-LONG FIELD SURVEY
AT A FAVORITE DIVE DESTINATION.

MAY 22 - 29 Los Roques National Park, Venezuela
M/V Antares III with Paul Humann
\$1700

**** Second week added ****

MAY 29 - JUN 5 Los Roques National Park, Venezuela
M/V Antares III with Paul Humann
\$1700

JUNE 12 - 19 Bonaire, Netherland Antilles
Sand Dollar Condominiums
\$814 per diver/double occupancy
(1 bedroom unit)

JULY 17 - 24 Grand Cayman, BWI
Sunset House Resort
\$969 per diver/double occupancy

AUG 6 - 11 Catalina Island Special Project (4 days)
Call for information

AUG 15 - 21 Texas Flower Gardens
M/V SPREE
\$600 per passenger

SEP 4 - 11 Florida Keys (upper) by invitation

SEP 11 - 18 Florida Keys (lower) by invitation---FULL

OCT 9 - 16 St. Croix, USVI
Ultimate Bluewater Adventures
\$718 per diver/double occupancy

NOV 6 - 13 Saba
M/V Caribbean Explorer
\$1195 per passenger

DEC 4 - 11 Cozumel
Allegro Diamond Resort/Dive Palancar
\$1044 all inclusive

Prices listed are for accommodations and diving only and do not include the \$200 tax deductible REEF Program Fee. Full cost of these trips may be tax deductible.



Saba Field Survey, 1998

Bob and Connie Bishop, Robert Burnett, Ed and Barbara Butenhoff, Janet Earnshaw, David Inman, Mark Kaehler, Kathy McDermott, Ole Peloso, Michael Phelan, John Pitcairn, Linda Schillinger, Arthur Vall-Spinosa and Cassandra Warn

1999 Great American Fish Count : Coming to a City Near You!

Free Fish seminars! Once again the Great American Fish Count (GAFC) is coming to locations across America. The GAFC is a two-week event focusing national attention on fish surveying and the marine environment and takes place July 1-14.

The GAFC is a partnership between REEF, American Oceans Campaign and NOAA's National Marine Sanctuary Program. Fish-watching seminars will be held at key locations throughout the U.S. during May and June in preparation for the July dive dates. For more information and to register for a seminar or dive near you visit the GAFC website at www.fishcount.org or call (800) 862-3260.

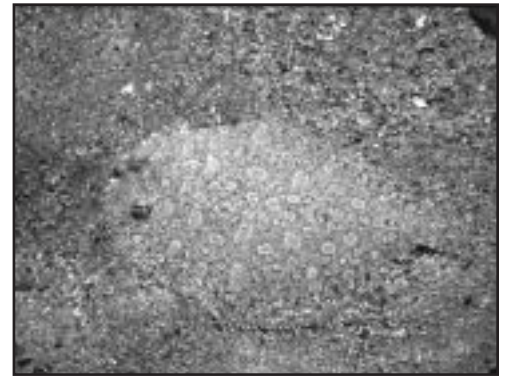


For more information and reservations call Waterhouse Phototours (800) 272-9122

Fabulous Flounders

When you're submerged on a coral reef, it's difficult not to marvel at the wonders of evolution - the disguise of the Scorpionfish and Frogfish or the rigid armor of the Boxfish. But who can fail to ponder the fabulous Flounders - those fantastic flatfish with eyes on stalks! These compressed fish that lie on their sides, not bellies, begin life with the features and symmetry of a typically shaped fish. But the bizarre development of the larvae magically transforms them into a flatfish. The most weird and wonderful part of this transformation is the migration of an eye from one side of the head to the other. The journey can vary from family to family, but the result is always the same - both eyes protruding from one side of the body. The eye migrates either to the right side or to the left depending on the species. Other body changes take place at the same time including a skull twist to bring the jaws into a sideways slanting position. Soon after the transformation the larvae comes to rest on the ocean floor on its "blind" side. The Flounder's markings are on the eyed side. These masters of camouflage use pigment cells, called chromatophores, to pale, darken, and change color and patterns to blend with the bottom. Most Flounders are ambush predators, often burying in the sand to further enhance camouflage. From their concealed positions they can suddenly pounce upon unsuspecting prey by rapidly gliding over the bottom with a wave-like motion.

The most commonly seen Flounders on Caribbean reefs are the Peacock and Eyed Flounders. Both are Left-Eye Flounders, Family Bothidae. The Peacock Flounder (*Bothus lunatus*) is most recognizable by its magnificent blue body rings and large size, up to 18 inches. It has a long pectoral fin which, when raised, has a feather-like appearance. This, coupled with the bright blue markings, reminds us of a strutting peacock, hence the flounder's name. A second, smaller expert at camouflage, is the Eyed Flounder (*Bothus ocellatus*), named for two dark spots or "eyes" at the base of the tail. It's easy to distinguish from the Peacock by its small size (less than 6 inches) and pale brown rings and spots, never blue. If you've yet to come across the Eyed Flounder, it's worth venturing into the sand just around dusk. You might witness two Eyed Flounders immersed in one another's charms, flicking their feathery pectorals and once in a while leaving the safety of the sand to ride the waves of each other's bodies into the darkening waters to mate.



Eyed Flounder



Peacock Flounder



Bonaire Dive Festival 1998
Divers participate in underwater clean-up

3rd Annual Bonaire Dive Festival

Deena Feeley, REEF's Director of Operations, will once again join other non-profit groups at the 3rd Annual Bonaire Dive Festival, November 6 - 13, 1999. Sponsored by CORAL (Coral Reef Alliance), Rodale's Scuba Diving Magazine, Bonaire Marine Park and Tourism Corporation Bonaire, the festival engages divers for a week of world class seminars, activities and, of course, great diving! Key speakers for the event have included Dr. Sylvia Earle, local celebrity Dee Scarr, and photographers Charles and Nora Seaborn, Burt Jones, Maureen Shimlock and Mike Hurley. This year REEF Advisory Board member and world-renowned photographer Stephen Frink will join the list of featured speakers. Activities and talks will range from underwater clean-ups to underwater photography and fish surveys to coral surveys with plenty of contests and prizes up for grabs. For more information, visit the CORAL website at www.coral.org or call 1-800-BONAIRE for reservations.



IS VOLUNTEERS



Thank you...

The Following members and corporations have generously donated \$100 or more in 1999. Space does not allow the listing of all gifts to REEF but each contribution made plays a crucial role in the continuance and expansion of our work.
Thank you all for your support.

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Wishes Granted

We gratefully acknowledge the following for their donations of equipment and merchandise to REEF headquarters:
Tom Isgar (Copy machine, laser printer, fax machine, scanner, file cabinets)

Gifts In Kind

Many thanks to the following people who have so kindly donated their time and talent to REEF. We are eternally grateful:
Barbara Doernbach for the layout and design of REEF productions; Ken Marks for the design and maintenance of the REEF web site, the design of REEFbase and all things relating to data programming; Laurie Wilson for press relations; Barbara Schaefer and Plato's Pause for the REEF booth display; Ed Steiner for the design of the REEF waterproof survey form; Hillary Harder for all the hours of help at REEF HQ; Konnie Andrews, Patricia Ayers, James Brooke, Susan Kruck, Jeane New, Jo Ann Nuciform, Robyn Osborn, Kitty Philips, Dennis Schneider and Ed Steiner for their help with REEFnotes.

Wish List

REEF desperately needs technology enhancement. If you can help us contact REEF HQ. Most needed: Speedy laptops, Computer systems and Scanner.

We regret any mistakes or omissions and hope you will bring them to our attention

If you have any talents you would like to donate to a worthy cause, contact Deena (904) 454-7809 or reef052@aol.com.

Reef rankings

REEF Volunteers top the 15,000 survey mark

	Florida, Caribbean	Pacific
SURVEYS RETURNED:	15,582	657
SITES SURVEYED :	1,527	138
# SPECIES SEEN :	500	160

The following members have completed at least 30 surveys to make the REEF Rankings:

Over 500 Surveys

LADDIE AKINS 560

Over 300 Surveys

DEENA FEELEY 428
JOE THOMAS 340
LINDA SCHILLINGER 316

Over 250 Surveys

JOHN PITCAIRN 291
EMILY SCHMITT-LAVIN 281
CLIVE PETROVIC 234
JEAN KIRKPATRICK 215

Over 100 Surveys

ANN KNOLLENBERG 190
CATHY COUGHLIN 176
JULIE OVERING 149
ELAINE MORDEN 148
SHERYL SHEA 136
EDWIN STEINER 136
KEN MARKS 114
KEN DEAVER 106
CINDY HELM 105

Over 50 Surveys

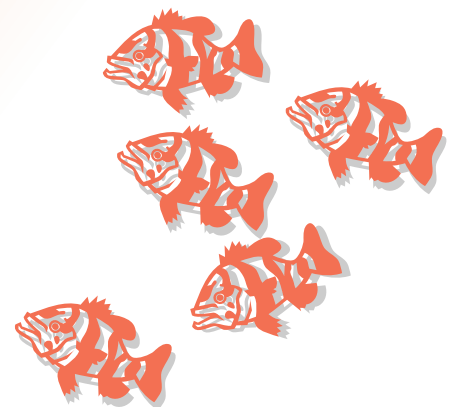
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BARBARA MODAFAR I 93
CHRISTY PATTENGILL 90
DOUG ROREX 88
BOB BISHOP 86
SHELLEY TYRE 85
LESLIE WHAYLEN 83
PAMELA CEFARATTI 80
JIM MODAFARI 79
KIRSTEN BASSION 78
JEAN GASEN 76
BETSY SAUNDERS 76
BRICE SEMMENS 76
CAROL LORENZ 75
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JONATHON TROMM 51

Over 30 Surveys

TOM ISGAR 49
EDGAR TOMEI 49
JONATHAN EDWARDS 48
GAIL TOMEI 48
JAMES BROOKE 48
KAREN GARCIA 46
GLEN THIEL 46
TODD AIKINS 46
CRISTI KORBEC 44
RICHARD HITT 43
WALTER BRINEY 43
PETER RENNEMANN 43
BRENDA HITT 41
CHERI ARNOLD 41
ANNA DELOACH 41
DARLENE GEHRINGER 39
SHAWN EDWARDS 38
ROBYN OSBORN 38
DENNY LUTZ 37
DONNA GERRARD 37

JOHN KELLY 37
JANE ROREX 36
DOUGLASS RANKIN 36
WILL RUGGLES 36
JOYCE SCHULKE 36
ED GERRARD 36
ROBERT DRAPER 36
HILARY HARDER 35
LYNN HUBERT 34
SARA THOMAS 34
ERIC RIESCH 32
EDDIE GERRARD 32
ROBERT SCHAUER 31
EMMA HICKERSON 31
JOSEPH FROELICH 31
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STEVE GANON 30
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ARNOLD WALKER 30



REEF Field Stations

The dive centers, resorts, boat operators and instructors listed below have demonstrated their support for REEF by becoming corporate sponsors and volunteering as REEF Field Stations. Each serves as a distribution point for survey forms and actively recruits new members. Most offer fish identification courses, organize survey dives and sell related fishwatching materials.

USA Field Stations

ALABAMA

Montgomery Breakaway Scuba 334-281-9208

CALIFORNIA

San Carlos Kinichi Au Chau Divers 415
591-9489

San Ramon Undersea Adventures 510 838-2348

COLORADO

Boulder Rocky Mountain Dive Center 303 449-8606

FLORIDA

Ft. Lauderdale Glen E. Thiel, Volunteer
Nekton Diving Cruises 800-UW-WORLD

Islamorada Capt. Scuba Charters (305) 664-DIVE

Lady Cyana Divers (800) 221-8717

Jacksonville Meridian Divers Inc. (904) 262-1606

Mermaid Dive Guides (904) 268-2417

Jacksonville Reef Research Team (904) 751-4513

Juno Beach Marinelife Center of Juno Beach (407) 627-8280

Largo Sea-J's Scuba & Travel (813) 585-DIVE

Tanks-a-Lot Dive Charters (813) 531-9101

Marathon Florida Keys National Marine Sanctuary (305) 743-2437

Miami Dalliance (954) 684-8678

Miami Springs Blackbeard's Cruises (800) 327-9600

Orlando Orlando Reef Divers (407) 365-2410

Pensacola REEF Field Station of Northwest Florida (850) 456-9793

Tallahassee Organization For Artificial Reefs (904) 656-2114

Tampa Depth Perception Dive Center (813) 689-3483

Winter Park Great American Dive Center (407) 673-4777

ILLINOIS

Chicago John G. Shedd Aquarium (312) 939-8069

LOUISIANA

Shreveport Scuba Ventures (313) 222-DIVE

MINNESOTA

Rochester Minnesota Dive Center (507) 288-8802

NEW YORK

Buffalo Dip ni Dive (716) 837-DIVE

Henritta Aquatic Center of Rochester, Inc. (716) 334-1670

RHODE ISLAND

Jamestown Ocean State Scuba (800) 933-DIVE

TEXAS

Colleyville Aqua World (817) 788-8956



Caribbean Field Stations

BAHAMAS

Andros Island Small Hope Bay Lodge (809) 368-2618

Bimini Scuba Bimini (954) 359-2705

Nassau Custom Aquatics (242) 362-1492

Walker's Cay Walker's Cay

Undersea Adventure (809) 352-5252

BELIZE

Placencia Rum Point Divers 011-501-6-23239

Second Nature Divers 011-501-5-37038

Soulshine Resort (800) 890-6082

BRITISH VIRGIN ISLANDS

Tortola Baskin-In-The-Sun (800) 233-7938

Blue Water Divers (284) 494-2847

Virgin Gorda Dive BVI (800) 848-7078

CAYMAN ISLANDS

Cayman Brac Brac Reef Beach Resort (800) 327-3835

Grand Cayman Ocean Frontiers (800) 544-6576

Little Cayman Little Cayman Beach Resort (800) 327-3835

Southern Cross Club (345) 948-1099

DOMINICAN REPUBLIC

Punta Cana Punta Cana Dive Center (809) 221-2262

HONDURAS

Roatan M/V Isla Mia (800) 874-7636

Utila Salty Dog Productions 011-504-425-3363

Utila Lodge Resort 011-504-425-3143

JAMAICA

Reading St. James Poseidon Divers (809) 952-3624

Runaway Bay Superclubs Breezes

Golf and Beach Resort (876) 973-2436

LEEWARD ISLANDS

St. Eustatius Golden Rock Dive Center (800) 311-6658

NETHERLAND ANTILLES

Bonaire Sand Dollar Dive & Photo (800) 288-4773

Curacao Habitat Curacao 011-599-9-864-8800

PUERTO RICO

Culebra Reeflink Divers (787) 742-0581

TURKS & CAICOS

Providenciales Dive Provo (649) 946-5029

Fish Frames (649) 946-5719

Provo Turtle Divers (649) 946-4232

U.S. VIRGIN ISLANDS

St. Croix St Croix Ultimate Bluewater Adventure (340) 773-5994

WINDWARD ISLANDS

Dominica Dive Castaways (767) 449-6244

St. Lucia Anse Chastanet Hotel/

Scuba St. Lucia (758) 459-7000

Visit the REEF website at www.reef.org for direct links to REEF Field Stations.

REEF Gear

REEF SHIRTS: Back of each 100% cotton T-shirt displays the REEF logo underscored by the "We Speak Fish" banner. Sizes: M, L, XL \$15. Navy collared golf shirts with embroidered logo now available. Sizes L, XL, XXL \$35

REEF DELUXE SURVEY KIT: Contains everything you need to conduct and record fish surveys: three ring logbook, REEF underwater slate, waterproof fish I.D. card, 12 waterproof log sheets, and 24 REEF data sheets. \$30. Refill contains 12 waterproof log sheets and 24 data sheets. \$8.50

REEF CAP: REEF logo embroidered on black baseball cap. One size fits all. \$15

REEF EMBOSSED LICENSE PLATE: High quality aluminum embossed custom license plate displaying REEF logo. \$10

REEF/TNC Survey Manual:
"Surveying Coral Reef Fishes: A Manual for Data Collection, Processing and interpretation of Fish Survey Information for the Tropical Northwest Atlantic" \$12

Reef Fish Identification CD-ROM: The ultimate fish identification tool with over 1600 images, fish quizzes, fish finder, virtual dives and more. \$40

Coral and Creature Identification CD-ROM: Learn about more than 500 critters, corals and plants, includes more than 2300 images. \$40

"In-A-Pocket" Guides: New waterproof identification guides for the Caribbean with over 100 color photos, fit right into your BCD pocket. "Fish-in-a-Pocket" and "Creature-in-a-Pocket" available. \$10



----- Order Information -----

- ___ REEF T-shirt (specify size) \$ _____
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- ___ REEF Cap \$ _____
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