

REEF**notes**

REEF ENVIRONMENTAL EDUCATION FOUNDATION

PROTECTING MARINE LIFE THROUGH EDUCATION, SERVICE AND RESEARCH

B.V.I. Dive Operators Join Together as REEF Field Stations



TORTOLA, BVI with Baskin-In-the-Sun:

LADDIE AKINS,
JULIE OVERING,
MARY HERON,
SAM SNELL,
SALLY THOMAS,
LISA MITCHELL,
DON GRAHAM,
TREV THOMAS,
DEENA WELLS,
PENNY MACKAY,
COLIN JENNER,
PETER RENNEMANN.

The BVI Dive Operators Association made a grand step this spring in deciding to become the first destination where operators all became REEF Field Stations. Prompted by Baskin-in-the-Sun's Lisa Mitchell, all six dive operators agreed that REEF's program would afford their divers a great new way to experience the diversity of the BVI and at the same time provide much needed information on the status of the reef areas around the islands.

The BVI are composed of numerous small islands, each with its own small coves and harbors, and of course a multitude of great diving sites. Many of these sites are now protected as part of a marine park system utilizing state of the art mooring buoys and conservation techniques. The park personnel and the framework of the system are first class and there is a great work-

ing relationship between the Dive Operators and the park. One of the common themes running through all marine parks, however, is the lack of funding and manpower to enable large scale monitoring projects. The involvement of the BVI Dive Operators in teaching identification courses and encouraging divers to conduct fish surveys will help to provide some much needed information.

During REEF's week-long Field Survey in May, many dive operators and locals took part in seminars and surveys around the islands to help gather beginning baseline data on marine park sites. Don Graham, Randy Keil, Lisa Mitchell and Peter Rennemann, all local instructors, added greatly through their years of diving experience and knowledge of local fish. Over 130 surveys were completed with over 160 species recorded for the week and the 1996 Field Survey will

provide even more information on additional sites. Valuable information is already flowing in, as well, from individual divers visiting the BVI and conducting their own surveys.

A great convenience for REEF members diving in the BVI is that with all of the Dive Operators as REEF Field Stations, survey forms and identification courses are available everywhere throughout the islands. The involvement of the BVI Dive Operators makes it easy for you and great for the environment. For a listing of Field Stations in the BVI, see the Field Station listing on the back page. 📌

REEF**1995 SPONSORS****American Express****Atlantis Dive Center****DEMA****The Elizabeth Ordway Dunn Foundation****Florida Association of Dive Operators****The Henry Foundation****The Curtis & Edith Munson Foundation****The Nature Conservancy****The Norcross Wildlife Foundation****Sea Frontiers**

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Environmental
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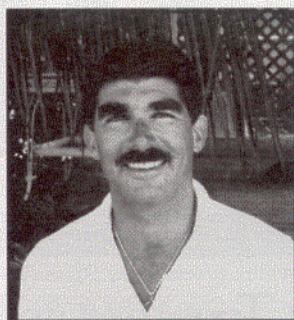


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Where Are The Fairy Basslets?

Quite often while teaching reef fish identification within Florida we are faced with the question "Where are the Fairy Basslets?" Well, the answer is we just don't know. Although one of the most common reef fish in the Bahamas and Caribbean it has yet to be reported in Florida. If you believe you've seen a Fairy Basslet in Florida, the chances are you've misidentified your fish. So, what was it you saw?

Next time you're tempted to bubble in Fairy Basslet on your survey form take a minute to look at the Spotfin Hogfish. As a juvenile it can closely resemble the Fairy Basslet both in size and color and with the characteristic dorsal fin spot. The easiest way to tell these fellows apart is to look closely at their behavior. You'll find the Fairy Basslet flitting with long fairy-like ventral fins cautiously in or near a dark reef recess. They may actually be seen swimming belly-up to the cave ceiling. Compare this then to the juvenile Spotfin Hogfish. This bright yellow fish is similar in size and markings but lacks the long ventral fins. The more extroverted and active spotfin hogfish swims constantly about the reef often schooling with juvenile wrasse of similar color. Unlike the fairy basslet, it often acts as a cleaner, picking undesirables from larger fish, a behavior not exhibited by the basslet. So next time you're diving in Florida and pass over that common "basslet," take a quick look to make sure. You may have a different species to add to your life list. 📌



Director's Note

Laddie Atkins

Executive Director of REEF

Things are on a roll! Membership is continually rising (up over the 6000 mark now), and the surveys keep coming in! We are just finishing our 24th Field Survey and looking forward to some new locations

for next year's surveys. The data analysis program is almost finished for compiling reports from the new scan sheets and work is starting on the development of personal reports for our membership (life lists, new sightings, etc.). Perhaps the most encouraging news is that from abroad, particularly the BVI.

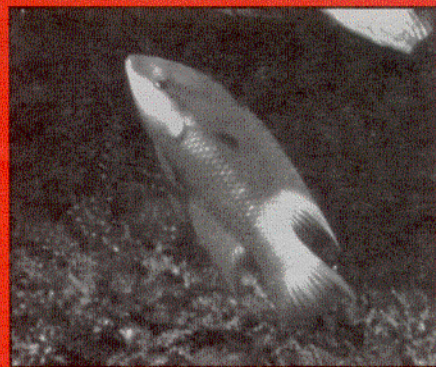
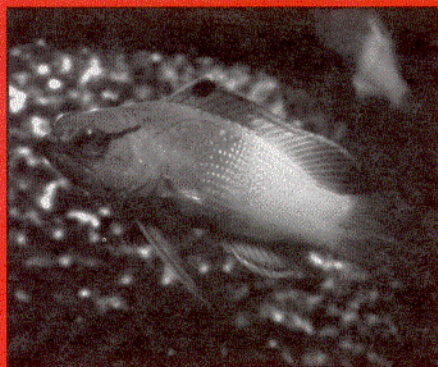
Just prior to our May Field Survey in the BVI, Lisa Mitchell, of Baskin-in-the-Sun, called me to let me know that all of the dive operators in the BVI had decided to become REEF Field Stations. To the BVI: we're sure glad to have you involved!

Another key development has been the addition of two "Survey Only" Field Surveys to the calendar for next year. Many of you have been through two or more Field Surveys and are becoming very familiar with the topics covered, so we decided that its about time to offer you the chance to survey your brains out without sitting in on program topics you've already heard. As participation in our regular Field Surveys grows, we'll be offering more and more survey only projects.

Director of Finance and Administration, John Pitcairn, has been working on some great new projects including funding raising options to keep membership in REEF free. Look for an upcoming letter outlining a donation program that is encouraged, but not required. We do need help in meeting our expenses, but we're doing everything in our power to keep membership dues at zero for those who don't feel obliged to contribute. John has also been working on a new specialty program we hope to see in place by the end of the year. If things go as planned, we'll unveil it in our next newsletter!

We've been forwarding all of your questions from the field to the REEF Croaker and this section of the newsletter is proving to be one of the most popular. If you find something unusual on your next dive that you can't figure out, chances are there are other people trying to figure out the same thing, so send us your questions.

Don't be surprised if you've been on a Field Survey and see your picture pop up somewhere in a news briefing. Laurie Wilson has taken on the media relations title and will be sending out releases regarding upcoming Field Surveys as well as post-survey results and photos. Not everyone is able to participate in a REEF Field Survey, but everyone sure wants to know what the results are from our dives. Laurie is a big supporter of what we're doing and it's exciting to have her helping us out. 📌



Look carefully! On the left is the Fairy Basslet, and on the right is the Spotfin Hogfish.

FISHWATCHING IN PARADISE

1996 Field Surveys continue the tradition of fun, learning and active involvement in the preservation of marine life. Each five day Field Survey is hosted by a highly regarded local resort/dive operator and typically runs from Sunday through Friday. Wednesday is scheduled as a free day for personal exploration of the survey location. Mornings are devoted to program time including colorful slide presentations and interactive discussions on reef fish identification, fish behavior and surveying techniques. Participants undertake two survey dives each afternoon with two optional night dives during the course of the week (for a minimum of twelve dives). 1996 welcomes the introduction of two 'Survey Only' Field Surveys specifically designed for prior Field Survey participants and those experienced in fish identification. Survey space is limited so please reserve early.

Join a REEF Field Survey and take a dive vacation that counts.

For additional information and reservations contact REEF HQ (305) 451-0312 unless otherwise indicated.

May 4 - 11 Sat. - Sat.

BRITISH VIRGIN ISLANDS

\$890.00

Price includes 7 nights accommodation, continental breakfast, transfers, diving and seminars.



May 18 - 25 Sat. - Sat.

GRAND CAYMAN

\$850.00

Price includes 7 nights accommodation, transfers, unlimited diving and seminars.



May 25 - June 1 Sat.- Sat.

ST CROIX, USVI

\$750.00

Price includes 7 nights accommodation, continental breakfast, transfers, diving and seminars.



June 1 - 8 Sat. - Sat.

BONAIRE SURVEY ONLY

\$700.00

Price includes 7 nights accom. (quad occ.), transfers and unlimited diving.

June 15 - 22 Sat. - Sat.

KEY LARGO

\$460.00

Price includes diving & seminars.



June 29 - July 6 Sat.- Sat.

TURKS & CAICOS

\$750.00

Price includes 7 nights accommodation, transfers, diving and seminars.



July 13- 20 Sat. - Sat.

DOMINICAN REPUBLIC

\$795.00

Price includes 7 nights accommodation, transfers, diving & seminars.



July 20 -27 Sat.- Sat.

KEY WEST

\$460.00

Price includes diving & seminars.



August 3 -10 Sat.- Sat.

ISLAMORADA

\$460.00

Price includes diving & seminars.



August 17 - 24 Sat.- Sat.

MARATHON

\$460.00

Price includes diving & seminars.

August 25 - 31 Sat.- Sat.

TEXAS FLOWER GARDENS

\$590.00

Liveaboard Spree

Price includes accommodations on board, meals, diving & seminars.



August 31- Sept. 7 Sat.- Sat.

BELIZE

\$TBA

Liveaboard Wave Dancer

Price includes accommodations on board, meals, diving and seminars.

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



Sept. 14 - 21 Sat. - Sat.

KEY LARGO SURVEY ONLY

\$510.00

Price includes all diving.



October 12- 19 Sat. - Sat.

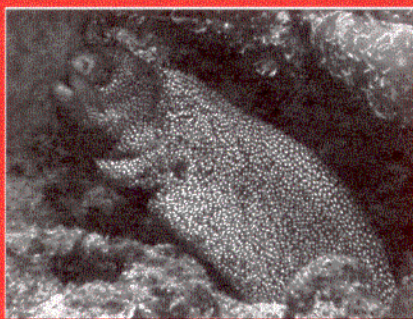
BIMINI

\$800.00

Price includes 7 nights accommodation, airfare from Ft. Lauderdale, diving and seminars.

Contact Scuba Bimini
(800) 848-4073.

Goldentail Moray



"How in the world can you call that a Goldentail? Why not a Goldenfleck or Goldenspeckled or something else, but not Goldentail!" I'd heard these arguments before, but this time we were lucky enough to see why. The normally shy Goldentail Moray is smaller than its cousin, the spotted Moray and slightly different in body coloration, mostly a chocolate brown with tiny gold flecks over its body. Typically found in a high profile reef area with just its head and a few body inches visible from its hole, we were about to see its rare namesake tail. It moved quickly from its spot in the reef around a piece of fire coral on the reef crest and disappeared into another nearby hiding spot. One quick look was all it took though to see the golden flecks of the body getting increasingly closer together before uniting in a brilliant gold/yellow margin around the end of its tail. Not a long observation, but certainly enough for an explanation of its name. 📌

THE REEF CROAKER

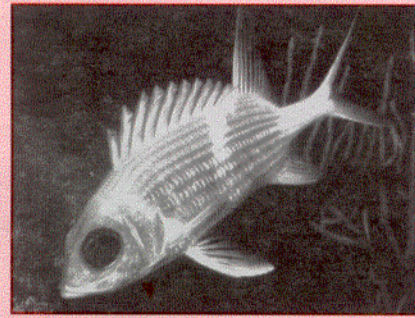
More questions from the field.....

Q: "Help....please! I'm confused about squirrelfish. I shot a photograph of what I thought was an ordinary squirrelfish but after consulting the Humann book and others I became very confused. There seems to be some confusion on the common names of certain squirrelfish such as the Longspine, Longjaw and Squirrelfish. Do you have any suggestions for the "preferred" common names for these three species.

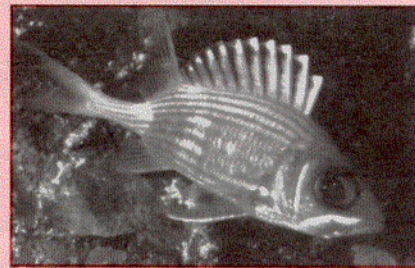
Ken Deaver #1092

A: If you weren't confused out in the field, you certainly were after consulting the texts. A few Field Guides have certain Squirrelfish mislabelled and, in some cases, misidentified. The three squirrelfish you mentioned are very similar in appearance and behavior and can be quite difficult to distinguish. The Squirrelfish

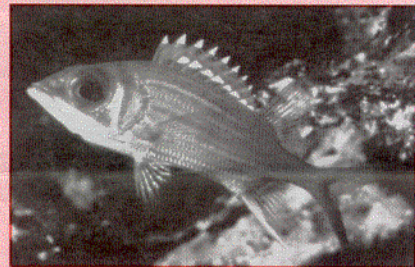
(*Holocentrus adencionis*) is the largest in the family (Holocentridae) and the key to its identification is its yellow front dorsal fin. The Longspine Squirrelfish (*H. rufus*) is most similar in body coloration to the Squirrelfish but their dorsal fins are different. The dorsal fin spines of the Longspine are all tipped in white making them appear longer and hence the name. Of course these fish don't make things easy for you out there on the reef since they tend to lay their dorsal fins down during the day. The Longjaw Squirrelfish (*H. marianus* or *Flammeo* according to many ichthyologists) is much smaller in size (max. 6") and has gold stripes on its red body compared to the silvery stripes of the two previously mentioned. Like the Longspine it also has white tips to its dorsal spines but differs with a series of white spots along the base of the dorsal. For a closer look at the Squirrelfish Family consult Paul Humann's *Reef Fish Identification*, but make sure its the Second Edition!



Squirrelfish (*Holocentrus adencionis*)



Longspine Squirrelfish (*H. rufus*)



Longjaw Squirrelfish (*H. marianus* or *Flammeo*)

If you have any questions or comments for the Reef Croaker, please drop a line to:

REEF CROAKER
P.O. Box 246 • Key Largo, FL
33037

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
Belmont Kunichi Divers
Danville The Marine Conservation Network

COLORADO
Boulder Rocky Mountain Diving Center

FLORIDA
Ft. Lauderdale Nekton Cruises, Inc.
Islamorada Lady Cyana Divers
Juno Beach Marinelife Center of Juno Beach

Key Largo Atlantis Dive Center
Lake Worth Splashdown Divers
Michael Dougherty, Instructor

Lantana Dive Locker
Marathon Florida Keys National Marine Sanctuary

Miami Austins Diving Center Inc.
Gary Hughes Dive Charters
Miami Beach Team Divers South Beach
Miami Spring Blackbeard's Cruises
Riviera Beach Dive USA

GEORGIA
Atlanta Divers Connection
Stockbridge Wet Set Scuba

ILLINOIS
Arlington Hgts Glen E. Thiel, Survey Volunteer
Chicago Underwater Safaris
John G. Shedd Aquarium
Lake Zurich Lake Michigan Scuba Center

LOUISIANA
Shreveport Scuba Ventures

MINNESOTA
Rochester Minnesota Dive Center

NEBRASKA
Omaha Midcoast Scuba Center, Inc.

NEW JERSEY
Lawrenceville The Lawrenceville School

NEW YORK
Williamsville Aquarius Diving Systems

OHIO
Akron Deep Six Specialists, Inc.

PENNSYLVANIA
Birdsboro Forgotten Fin Scuba Center
Wexford Smiley's Dive Shop

RHODE ISLAND
Jamestown Ocean State Scuba

TEXAS
Conroe Golden Mermaid Scuba
Houston Houston U/W Club
Sea Sports Scuba
WW Diving Co. Scuba Center
Humble Tyler

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OVERSEAS

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Custom Aquatics
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Sunsriff Divers

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Placencia Rum Point Divers

BONAIRE
Bon Bini Diver
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Tortola Baskin in the Sun

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Trimarine

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Sueno Del Mar Dive Resort

JAMAICA
Poseidon Divers

PANAMA
Albrook AFS Balboa Dive Club

PUERTO RICO
San Juan Scuba World

ST. LUCIA
Anse Chastanel Dive St. Lucia

TURKS & CAICOS
Providenciales Dive Provo
Flamingo Divers

U.S. VIRGIN ISLANDS
St. Croix Melissa Keyes,
Indep. Instructor
V I Divers Ltd.

1995 REEF FIELD SURVEY VOLUNTEERS



TURKS AND CAICOS aboard *Sea Dancer*
PAM CEFARATTI, TAMARA HUNTER, CHERI ARNOLD, ANN AIKINS, JIM MODAFARI, ROBERT HUNTER, BARB MODAFARI, LEANN DUNCAN, JAMES BROOKE, VAN DUNCAN, LADDIE AIKINS.



KEY LARGO with *Atlantis Dive Center*
ED TOMEI, GAIL TOMEI, MEGAN TOMEI, CONNIE DOLAN, RITA JONES, ANN AIKINS, CLAUDIA CAMPOS, CANDY SHEPPARD, FRED GOEBBERT, DEENA WELLS, WOODY BROOKS, FRED KOLLMANN.



KEY WEST with *Southpoint Divers*
JEFFREY WHITE, DARREN BRODIE, ANGELA TOWNE, LADDIE AIKINS, JOHN PITCAIRN, LYNN BOUTILIER, SHARON WILSON, BEN & BETSY SAUNDERS, MICHAEL FITZGERALD, JOHN CHRYSAL, YOLANDA LEON, JONATHAN EDWARDS, SHAWN EDWARDS, STEPHEN GOLDEN, BRENDA SANCHEZ, EMILY SCHMITT.



ISLAMORADA with *Lady Cyana Divers*
DEENA WELLS, DONNA MARCHETTI, ROSALIE WEISS, ANN AIKINS, KEVIN FAGER, TODD AIKENS, ROBERT WINTERS, GUY WARDELL, EMILY SCHMITT, KEN WRIGHT.



FLOWER GARDENS, TEXAS aboard *M/V Spree*
LESLIE WHAYLEN, JEFF CHILDS, DR. STEPHEN GITTINGS, DR. DAVID OWENS, JOEL HICKERSON, GREG BUNCH, TONY SEBASTIAN, CHRIS OSTROM, HAROLD STONE, JASON HARVEY, NICOLE KRUNTORAD, THOMAS JORDAN, PHILIP ELDER, STEVE MYERS, CHARLES BOATWRIGHT, BRUCE & BUFFI ROBINSON, CHARLES GRAY, CHRISTA GOODGAME, STATIA SERVOS, MIKE SEMMENS, JIM HART, CHRIS DUMMIT, MATT & ANNIE CAMPBELL, KELLY TRAIL, DAVID ARMBRUSTER, MARK HEMSTEAD.



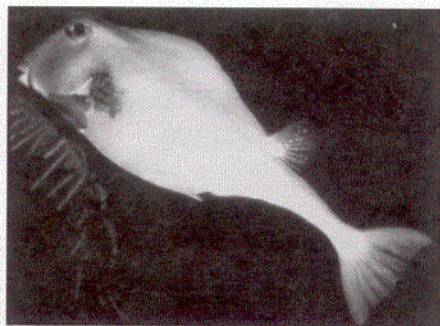
BELIZE aboard *Wave Dancer*
CATHY COUGHLIN, JERRY COLE, JACK SKINNER, LADDIE AIKINS, DANIEL RENAUD, LANA RENAUD, LINDA SCHILLINGER, DAVID STOLL, CONNIE CUMMINGS, ELAINE MORDEN, SHARON CIPOLLA, CHUCK GERLOVICH, SHERYL SHEA, HELEN MULLIN, CAROL ZIMMERMAN, JANET DIKE, KARIN BUTLER, GLENN BUTLER, JOHN BRENNAN, JAIS BRENNAN.

Trunkfish - Helicopters of the Reef

Just off the bottom, hovering like a slow motion helicopter, the Smooth Trunkfish may be the most unusual odd-shaped swimming fish in the Caribbean. Its relatives, the Spotted Trunkfish and plain Trunkfish are similar, but each has its own unique features.

One of the first things a diver will notice about the Trunkfish is their peculiar triangular body shape. Like other members of the boxfish group, its body is made up of bony plates joined to form a hard exoskeleton. Openings in this exoskeleton allow mouth, tail, eyes and fins to protrude, but the main body of the fish is as hard as a turtle shell. This hard shell, or box, makes swimming difficult, hence the slow hovering behavior and propulsion from alternating pectorals, dorsal and anal fins.

A quick glance at the smooth forehead of the Trunkfish will differentiate it from its cousin, the Cowfish, which has obvious cow-like horns above the eyes. A look toward the

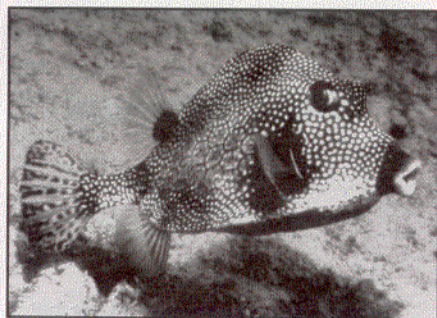


Trunkfish

rear of the exoskeleton will help to differentiate between Trunkfish species. Although both Smooth and Spotted Trunkfish have spots, the Smooth Trunkfish is identified by the lack of spines or protrusions from its exoskeleton... Smooth Trunkfish have smooth edges. Another easily recognized I.D. key, though not as mnemonic, is the black mouth of the Smooth Trunk. Four to six inches long, they are found around high profile reef areas, near the sandy bottom where they can be seen blowing jets of water into the bottom in an at-

tempt to stir up small worms and crustaceans.

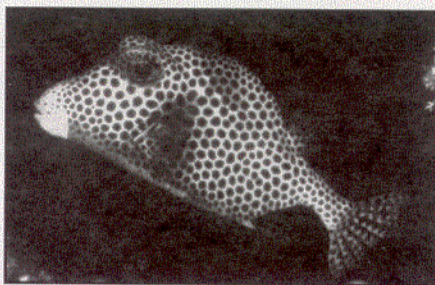
Spotted Trunkfish, on the other hand, have a white mouth on a similar shape and size exoskeleton. A particular difference from Smooth Trunkfish is the prominent rearward directed spine on either side of the base of the exoskeleton. Most likely a defensive deterrent, this spine is present on all boxfishes except the Smooth. So, white lips and spines will identify the Spotted Trunk.



Smooth Trunkfish

One other Caribbean Trunkfish is the plain Trunkfish. Typically found over grass or gorgonian (soft coral) flats away from the reef proper, the Trunkfish is infrequently sighted due to its shy and wary tendencies. The body shape of the Trunkfish is easily mistaken for a cowfish with a longer tail and larger size than the other Trunks. However, it lacks the telltale horns of cowfish and has no distinct color markings. Some texts refer to the Trunkfish as Buffalo Trunk for the high ridge of the exoskeleton along its back. And, of course, Buffalos would be found in the grass plains as well!

One more Trunkfish, unique to the flower gardens reef area off the Texas Coast, is referred to as the Golden Phase Smooth Trunkfish. Not



Spotted Trunkfish

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, P.O. Box 246, Key Largo, FL 33037.

AFRICA, DANA
ARCHIBALD, SKIP
BETTS, NANCY
BLANKFEIN, RICHARD
BRINEY, WALTER
CHRISTIANA, DAVID
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DOWNS, DAVE & NOREEN
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KITCHEN, ELIZABETH
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TAYLOR, MIKE
TROMM, JONATHON
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WHEATMAN, SAMUEL
WILLIAMSON, JODI

described as a distinct species yet, its body size and shape are the same as other Caribbean Smooth Trunkfish, but its colorations are drastically different. A bright, highly visible golden coloration over the entire body is consistent with its name. Its mouth is black like other Smooth Trunks, but so are its fins. Almost assuredly this will evolve into a distinct species in a few thousand or million years! 🐟