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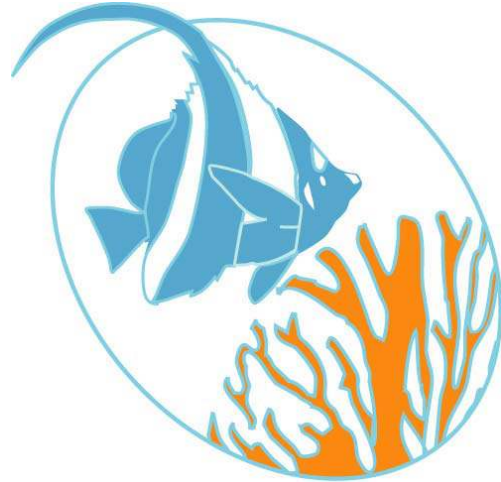
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Saving Reefs Worldwide

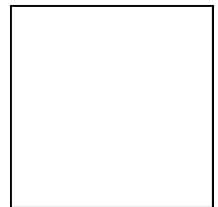
Research

Education

Conservation



**REEF
CHECK**





Reef Check Teams in Action

Issue 5, Volume 2
July 2005

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Check out our website
www.ReefCheck.org



COCOS (KEELING): Data Analysis Looks at Nine Years of Surveys

Submitted by Robert Thorn

Robert Thorn, Senior Ranger for Parks Australia and RC Coordinator, has been conducting Reef Check surveys in Cocos (Keeling) since 1997. He recently sent in this analysis on the data that has been collected since then. The following is an excerpt from the Executive Summary. Visit the Reef Check website to read the full report.

“Based on the underwater surveys at 11 sites from 1997 to 2005 it appears that the coral reef community at Cocos (Keeling) Islands is very healthy and in a stable period with little anthropogenic impacts. Live coral cover is high and there is minimal impact from coral damage, bleaching, and disease. Crown-of-thorns starfish were found at high



Cabbage Patch Reef Check site
Photo by Robert Thorn

densities at some sites and further monitoring is required to determine the impact of these starfish on the coral community. Overall, fish and invertebrate abundance were found to have similar abundance levels throughout the survey period at all sites. A small number of significant changes occurred in the abundances of some study taxa, however these changes were usually the exception and represented short-term fluctuations in abundance. Densities of fish and invertebrates calculated in this study were comparable with previous studies at Cocos (Keeling) Islands and similar to other coral reef locations. Two notable exceptions in the abundance data were a very high abundance of sea cucumbers and a relatively low abundance of snappers. Further monitoring will determine whether these exceptions are typical for Cocos (Keeling) Islands or just a short-term occurrence that was observed during the 1997-2005 survey period”. For more information, contact Robert Thorn: Robert.thorn@ea.gov.au

DOMINICAN REPUBLIC: 7th Grade Class Discovers Reefs

Submitted by Kerri Fox and Ruben Torres

From May 31 to June 2, the 7th grade class from Doulos Discovery School, Jarabacoa, Dominican Republic, had the opportunity to learn what “experiential education” really means. After several weeks of studying about the ocean’s ecosystem and the various life forms that it contains, the kids traveled to the extreme northeastern coast of the island for an up-close encounter with the ocean and, more specifically, with coral reefs. Though students learn and understand many concepts based on their classroom studies, nothing compares to the experience of seeing with their own eyes and touching with their own hands the organisms and objects that they have only previously seen in text books or on the internet.

Under the guidance of Dr. Rubén Torres, Reef Check Coordinator in the Dominican Republic, and with the help of Tasha Gough and Rebecca Albright, the 7th graders spent three days at Playa Frontón, on the very tip of the Samaná peninsula, studying and observing the



Left to right: Yelida Araujo; Michelle Bordas; Jenssy Rodriguez; science teacher, Chad Wallace; Eliezer Almonte; Oswaldy de la Rosa; Sharlin Grullon
Photo: Ruben Torres

coral reef and its inhabitants. After a couple of snorkel lessons on the beach, the kids hit the water to explore the reef. They saw the different kinds of coral, learned about the various fish and marine life that take their refuge among the coral, and collected 13 varieties of marine algae!

Thanks to the help of such able instructors and the Reef Check program, the students had an experience that they will never forget! Besides being able to see, touch, smell and taste the things they had been studying in the classroom, the kids came away from this experience with a greater appreciation and a better understanding of the importance of coral reefs to the environment and, thus, the necessity of working to conserve them.

For more information, please contact Rubén Torres: ruben@reefcheck.org.

HONDURAS: Fishermen and Locals Trained In Cayos Cochinos

Submitted by Adrian Oviedo

On April 9, with the financial support of the ICRAN-MAR project, a Reef Check training course was conducted by the Honduras Coral Reef Fund for 23 fishermen from the communities living inside the Cayos Cochinos Natural Monument. The training was conducted at the Scientific Station at Cayo Menor, Honduras and biologist Adoni Cubas was in charge of the training course.

These experiences help the fishermen and locals to have a better understanding of the reef condition and its relationship with their fishing activities inside the protected area, empowering them with the needed tools for a more sustainable use of resources. The level of participation and enthusiasm of the fishermen and locals demonstrate the importance of their involvement in the data collection and analysis process, and thus, being part of the solution in coral reef conservation. Some of the trained fishermen also participated in a Reef Check monitoring session conducted on sites of Cayos Cochinos.

Another course will be conducted soon with the participation of other communities, including Utila. For more information on RC Honduras, contact coordinator Adrian Oviedo: aeoviedo@caribe.hn

MEXICO: Cozumel Fishermen's Society Receives Reef Check Training

Submitted by Gaby Nava

From May 30th to June 3rd, 11 fishermen from the Cozumel fishermen's society "Sociedad Cooperativa de Producción Pesquera Cozumel, S.C. de R.L." were trained in the Reef Check monitoring protocol. Gaby Nava, from Parque Nacional Arrecifes de Cozumel, led the training and also gave additional talks related to the national park and environmental education. Field practice was held at Paraiso Reef.

Following the training, the fishermen were eager to get fellow fishermen trained- they would like to go to Sian Kaan to show fishermen there how to monitor their reefs. Thank you to the following for their participation: Jose Luis Castillo Lopez, Jose Angel de la Cruz canto Noh, Juan Bautista Uh Ku, Pedro May Chulin, Juan Secundino Pech Peraza, Marcial Pech Irabien, Tomas Edwar Nahuat Dzul, Alberto Cervera Uc, Juan Manuel Tec Chan, Jose Eduardo Uitz Rios, and Teodocio Tec Celis. For more information on RC Cozumel, contact Gaby Nava: gnavam@yahoo.com.



Cozumel fishermen complete their RC training
Photo: Gaby Nava

ST VINCENT AND THE GRENADINES: Amadis Project Report

Submitted by Kim Baldwin

From January – April 2005, The Amadis Project trained and assisted the country of St. Vincent and the Grenadines in implementing Reef Check, the country's first standardized community-based marine monitoring program. Marine Coordinator Kim Baldwin trained teams on St Vincent, Bequia, Mustique, and Tobago Cays (Union Island). Kim recently put together a report detailing the efforts of The Amadis Project in St Vincent and the Grenadines. Visit the Reef Check website to read her report.

SUDAN: Second Set of Surveys Completed

Submitted by Mohamed Eltayeb

Reef Check Sudan Team Leader and Scientist, Mohamed Eltayeb sent in this picture of a parrotfish taken during his team's last set of surveys. Surveys were completed at three sites near Port Sudan- Flamingo Reef, Winget Reef and Dama Dama Reef. These were the second set of surveys at these reefs; the team first surveyed them in 2004. If you would like more information on RC Sudan, please contact Mohamed Eltayeb: hapora@sudanmail.net



A parrotfish takes a bite out of coral in Sudan
Photo by Mohamed Eltayeb

INDONESIA: New Coordinator Elected At National Meeting

Submitted by Naneng Setiasih



RC Indonesia members at the National Meeting

In March, Reef Check Indonesia Network (RCIN) held its second National Meeting to discuss the organization and its future management. RC Indonesia was hosted by WWF Indonesia from 1997 until 2003, with a phasing out process from 2003-2005. With the phasing out and the rapid development of RCIN, there was a need for a comprehensive discussion. The meeting was attended by at least 44 Reef Checkers from all over Indonesia, representing 28 organizations. The meeting also saw the election of Risfandi from the Yari Foundation as the new coordinator until 2008. For more information, contact Risfandi: yari@telkom.net

Site Spotlight - Vanuatu

Participants doing a dry run with fish cut outs
Photo: Mike Lameier

Last month, Vanuatu hosted its first RC training course. Reef Check Vanuatu coordinator Mike Lameier, along with the support of a great team of local trainers, ran the course in Pango village on the island of Efate from May 16-20. The participants were made up of American Peace Corps volunteers, volunteers from the Japanese International Cooperation Agency and local scuba shop personnel.

Participants were provided with the necessary surveying and training materials: slates, paper, pencils, field guides, tape measures, sinkers, training manuals and presentations. They will be expected to return to their working sites to train a local counterpart and conduct surveying and reporting at least tri-annually. Reef Check Vanuatu will collect data, transfer it to a Peace Corps' coral reef monitoring database and then send it back to the communities and the national coral reef monitoring network database at the Department of Fisheries. From there the information will be used locally and will be for-

warded to the Global Coral Reef Monitoring Network in order to help improve knowledge, education, awareness and management of coral reefs at the local, national and international levels. One afternoon was set aside to have a round table discussion with local coral reef stakeholders from various sectors. The discussion's theme was: "How coral reef stakeholders can collaborate to advance management of Vanuatu's coral reefs and related activities." The discussion was very successful and resulted in the creation of a newsletter for the Vanuatu Coral Reef Monitoring Network: "Vanuatu Reef

Times”, which is improving communications between coral reef stakeholders. Visit the Reef Check website to read the “Vanuatu Reef Times”. Another training course for communities with marine conservation areas and scuba shop personnel is already being planned for early August.

Mike would like to extend a special thanks to Gregor Hodgson, Jos Hill, Helen Sykes, Jeana Gooddard, Chris Bartlett, Dore Tamara and Kalmet Kolau for their assistance with the course.

By Mike Lameier (mike.lameier@gmail.com)



Jason Raubani (left) of the Vanuatu Fisheries Department with local coral reef stakeholders during the round table discussion.
Photo: Mike Lameier

Mark Your Calendars

QUIKSILVER CROSSING COMES TO CALIFORNIA: SUMMER 2005.

For over 6 years and 90,000 nautical miles, Reef Check scientists have sailed around the world with the Quiksilver Crossing studying the health of remote reef eco-systems. For the first time, the Crossing’s unique 75-foot ship, *Indies Trader*, is touring the West Coast of North America to promote the spirit and mission of the Crossing. The boat is making several stops in California before heading up the West Coast to British Columbia.

The long-awaited arrival of the Crossing in the Golden State also marks the launch of Reef Check’s California Rocky Reef Program this summer. Reef Check California will become the state’s

largest volunteer reef monitoring system with the goal of providing vital data to state and federal agencies. A private celebration with Crossing and Reef Check supporters, including surfing and Hollywood stars, was held on the evening of July 8 in Malibu.

Reef Check scientist Bob Foster has been on the boat since February and will be on hand at all the stops to inform people about Reef Check. Be sure to check the Reef Check and Crossing websites for more details, as well as updated port stops.

Crossing website: thecrossing.quiksilver.com

Ventura: July 13 - July 18

San Francisco: August 17 - August 22

Santa Cruz: August 24 - August 29

All dates and stops are tentative and subject to change.

Reef Check Champion - Bruce Raymond

In this issue we feature Bruce Raymond, President of Quiksilver International. Bruce was a professional Top 16 surfer who after helping pioneer the International Professional Surfing (IPS) joined Quiksilver as a sponsored athlete in 1975. He managed the promotions and advertising at Quiksilver Inc from 1978 – 1980 before returning to Australia as the CEO of Quiksilver Garments in 1981. In this capacity Bruce managed the Quiksilver Trade Marks, Copyright, Licensing structure worldwide and the International Promotional Fund. In 2003 he became the President of Quiksilver International and continues to be the driving force behind many Quiksilver initiatives, including Athlete management, Global projects and Events.



Bruce Raymond with RC's Gregor Hodgson

In 1999 Bruce launched the "Quiksilver Crossing", a voyage of surf exploration, empathy for local culture and customs while giving something back to the environment. This started his relationship with Reef Check. Since the boat left Australia in 1999, he has invited and funded a Reef Check scientist to accompany the *Indies Trader* on its search for undiscovered surf breaks so Reef Check could monitor remote reefs in the process. This work has provided data that was otherwise unattainable and has educated thousands of surfers about the value of coral reefs and problems facing them.

In 2004, Bruce provided a substantial donation for RC Fiji coordinator Helen Sykes to cover more than half the cost of the construction and delivery of a boat for the Waitabu Reef Check team. The villagers were so overjoyed that they

awarded Bruce and fellow supporter Fiji Water with a whale's tooth, a traditional "tabua." In 2005, Raymond also made another generous donation to support RC Australia.



Fijian kids in front of the new boat for Waitabu
Photo by Helen Sykes

If you know a Reef Check Champion you feel should be highlighted, please email a brief description of his/her contribution as well as a photo to Reef Check Head Quarters: rcinfo@reefcheck.org.

Methods Check

We often get questions on the Reef Check substrate categories. Here is a quick rundown on each category and what should be recorded:

Hard Coral (HC)- all living hard coral species, including fire coral (*Millepora*), and in the Pacific blue coral (*Heliopora*), organ pipe coral (*Tubipora*), *Fungia*, and *Dendrophyllia*.

Soft Coral (SC)- All soft coral species, plus zoanthids. Zoanthids are classified with soft coral because they are not reef builders

Recently Killed Coral (RKC)- Bare skeleton with tissue gone and corallite structures still recognizable

Nutrient Indicator Algae (NIA)- All macro-algae except turf and coralline algae

Sponge (SP)- All erect and encrusting sponge species

Rock (RC)- Any hard substrate. May be covered by turf or encrusting coralline algae, barnacles, oysters, etc.

Rubble (RB)- Reef rocks between 0.5 and 15 centimeters in diameter

Sand (SD)- Sediment less than 0.5cm in diameter. In the water, sand falls quickly to the bottom when dropped.

Silt/Clay (SI)- Sediment that remains in suspension if disturbed. SI is recorded if the color of the underlying substrate surface is obscured by silt.

Other (OT)- Any other attached organism (sea anemones, tunicates, gorgonians) and non-living objects (e.g. tires, log, etc.). Gorgonians are classified here rather than soft coral because gorgonians are recorded in the invertebrate section of the Atlantic belt survey. Black corals are also recorded as Other.

Reef Check News

BODY GLOVE SPONSORS REEF CHECK AT THE KONA CLASSIC



Russ Lesser and Jim Miller on an RC survey

A couple dozen amateur photographers spent a week practicing their craft with five professionals during the Body Glove Kona Classic 2005 on the Big Island of Hawaii, held May 14-21. This year, Reef Check invited the photographers to take aim at Reef Check indicator species in Hawaii and to shoot participants carrying out a Reef Check survey. There were four winners -- Marcia Arita for Best Invertebrate, Jeff Laity for Best RC Action Shot and a double winner for Best Fish -- Jan McLaughlin and Rob Clayton. A silent auction during the final award ceremony raised funds in support of Reef Check. During "Kids Day," about 100 children, ages 6-17, were taught some basic do's and don'ts about coral reefs and then quizzed. Successful answers were rewarded with a snorkeling set, rash guard or other item donated by Body Glove. Special thanks to Body Glove and its President and RC Board Member Russ Lesser for making our presence at this year's Kona Classic a huge success!



From left: The winning photos from Jeff Laity, Jan McLaughlin, Rob Clayton (top) and Marcia Arita (bottom)

REEF RESCUE HAWAII—A HONOLULU BOARD-RAISING PARTY

The first Reef Check in the world was carried out in Kauai in 1997. Since then Reef Check Hawaii has been an entirely volunteer operation, currently led by coordinator Melissa Mac Garrett. In 2004, a start-up Board committee was formed and it was agreed to establish an independent Reef Check Hawaii organization. As a first step, on May 22nd, a party was held at the lovely home of RC member Catherine Landa. The party honored two celebrities- two-time Academy Award nominated songwriter Carol Connors and singer/actress Barbi Benton. Barbi and Carol had just completed a week of scuba diving and photography in Kona for the Body Glove Kona Classic. Partygoers listened to the music of Makana as they browsed the items featured in the silent auction. In the end, significant funds were raised as seed money for the new RC Hawaii and several key members of Oahu's ocean loving community

were enticed to help out. The young actor Ryan Carnes, fresh from filming *Surf School* in Costa Rica was also on hand -- enjoying his simultaneous appearance at the party and on the *Desperate Housewives* season finale that night. For more information on RC Hawaii please contact coordinator Melissa Mac Garrett: reefcheckhawaii.coordinator@yahoo.com



Ryan Carnes addresses partygoers
Photo by Johanna Ahlberg



Left: Cheryl Post, Carol Connors, Gregor Hodgson, Mara New, Barbi Benton and Melissa Mac Garrett.
Right: Carol and Barbi share a few tunes
Photos by Johanna Ahlberg



REEF CHECK CALIFORNIA LAUNCH

Reef Check will be launching its new California program later this summer. Monitoring will initially focus on the Central Coast from Santa Barbara to Monterey and will later expand statewide. Trainings will be held this fall. Dr. Craig Shuman is once again joining Reef Check to act as Director of the California program. If you are interested in becoming an RC California volunteer, please send an email with the following information to california@reefcheck.org: Name, Address, Phone Number, Email, Dive Experience and Special Interests (boat owner, dive shop etc.). Non-divers who care about ocean health are also being sought to fill support roles.

REEF CHECK AUSTRALIA LOOKING FOR VOLUNTEER INTERN

Reef Check Australia is looking for a motivated and independent person to assist with the coordination of the 2006 survey season for their Great Barrier Reef Project. If you want to gain experience in coral reef monitoring and team management this is an outstanding opportunity!

This volunteer position will run from January to June 2006 and will involve the planning, coordination and leadership of Reef Check research teams to survey up to 30 sites on the Great Barrier Reef and in the Coral Sea. You will also be responsible for data management, analysis and the creation of a scientific report.

Reef Check Australia has 30 trained volunteers and works with 15 dive operators on the Great Barrier Reef Project. Good communication, motivation, delegation and social skills are therefore essential. Minimum Rescue Diver required, however an insured instructor is preferred.

Applicants should send their resume to Jos Hill at jos@reefcheck.org

TWO NEW REPORTS USING REEF CHECK DATA

RC Headquarters recently received two reports based on Reef Check data collected by Coral Cay Conservation in the Mamanucas, Fiji.

Gabriel Grimsditch's MSc dissertation used statistical analyses to come up with bioindicators for the Mamanucas region. He found that parrotfish (*Scaridae*) were good indicators of high coral, low macroalgae habitats, and therefore healthy reefs in the Mamanucas. His conclusion is supported by the fact that these fish can be corallivorous (excreting coral as sand) as well as herbivorous. Moreover they are crucial to the reef ecosystem because they are the largest herbivorous reef fish, scraping large quantities of algae off corals. They are also diurnal and abundant (making them easy to monitor) as well as mobile (so they could move if the reef became unhealthy), making them ideal bioindicators.

To read Gabriel's full dissertation, visit the Reef Check website.

Coral Cay scientist Ryan Walker sent in his paper, published in the *Silliman Journal*, entitled "Reef Check Data Reveals Rapid Recovery From Coral Bleaching In the Mamanucas, Fiji" coauthored with Simon P. Harding, Jean-Luc Solandt, Diane Walker, Jessica Taylor, Simon Haycock, Melanie T. Davis, and Peter S. Raines. The following is the abstract:

Twenty two fringing reef sites within the Mamanuca Islands, western Fiji were surveyed during 2001 and 2002, using Reef Check methods. A mean increase of 14.3% in hard coral cover was recorded over the 12-month period. This increase in hard coral cover suggests a significant recovery of scleractinian coral colonies that were originally impacted by the 2000 mass bleaching episode in the South Pacific. The event was reported to have caused >80% coral mortality in the southern and eastern regions of Fiji. Between 2001 and 2002 the coral reefs of the Mamanucas progressed from "poor" to "fair" in accordance with the Association of South East Asian Nations (ASEAN) system for describing the health of coral reefs. Our results also show that trained non-specialist volunteers undertaking marine surveys such as Reef Check can competently collect simple, yet important quantitative data regarding the physical health of coral reefs.

Visit the Reef Check website to read the full report.

RC FIELD GUIDES AVAILABLE

This easy-to-use 8-page underwater guide, featuring full-color photos of key indicator species and survey techniques, is made of professionally-bound, waterproof plastic for durability. Available individually or in bundles of five and ten, these guides are ready to ship today. Order yours now for the Atlantic or Indo-Pacific. Visit the Reef Check website to order.

SEND US YOUR UPDATES

If you would like to submit a story or photographs for the next issue, please contact Jenny: rcinfo@reefcheck.org.

Coral Reefs in the News

10TH ANNIVERSARY ICRI MEETING HELD IN THE SEYCHELLES

The 10th anniversary meeting of the International Coral Reef Initiative was held from April 25–27, 2005 in Mahé, The Seychelles. The meeting was co-chaired by Rolph Payet of the Seychelles and John Roberts of the United Kingdom. Seventy-five participants, including three new members, attended the meeting. RC Executive Director, Gregor Hodgson, represented Reef Check. The meeting produced a number of decisions, including one to have GCRMN do a post-tsunami follow-up to their Status of Coral Reefs of the World report. A draft resolution on reef rehabilitation was also proposed (see below). To view a summary of the meeting, visit www.reefcheck.org.

ICRI MEETING PROPOSES RESOLUTION ON ARTIFICIAL REEF RESTORATION AND REHABILITATION

One of the outcomes of the ICRI meeting was a draft resolution on reef restoration. Various commercial and non-commercial organizations have proposed a range of 'engineering' techniques as reef reconstruction or rehabilitation techniques, including:

- A mechanism using wire frames through which electricity is passed to accrete calcium carbonate and accelerate the growth of transplanted corals;
- Installation of artificial reefs, including concrete structures; and
- Mechanisms for re-cementing and re-gluing corals and other organisms to the substratum.

These techniques have recently been brought to the forefront due to reef damage from the 2004 tsunami. The following is an excerpt from the proposal, visit the Reef Check website to read the full resolution that was adopted by ICRI this month:

"The proponents of this Resolution, the ICRI Operational Units, CORDIO, GCRMN, ICRAN and Reef Check, while acknowledging that some innovative and new approaches to coral reef conservation and management may have limited applications, are concerned that there have been insufficient peer-reviewed, long-term scientific studies of reef rehabilitation using these and other techniques and that there have been few cost-benefit analyses to assess effectiveness of the methods over natural recovery processes. The available evidence suggests that some of these techniques may be useful in specialized cases, but have limited or no application and value for large-scale coral reef rehabilitation. In addition to effectiveness considerations, construction of any engineered structure on a coral reef must be evaluated against any potential environmental damage caused during construction or later degradation."

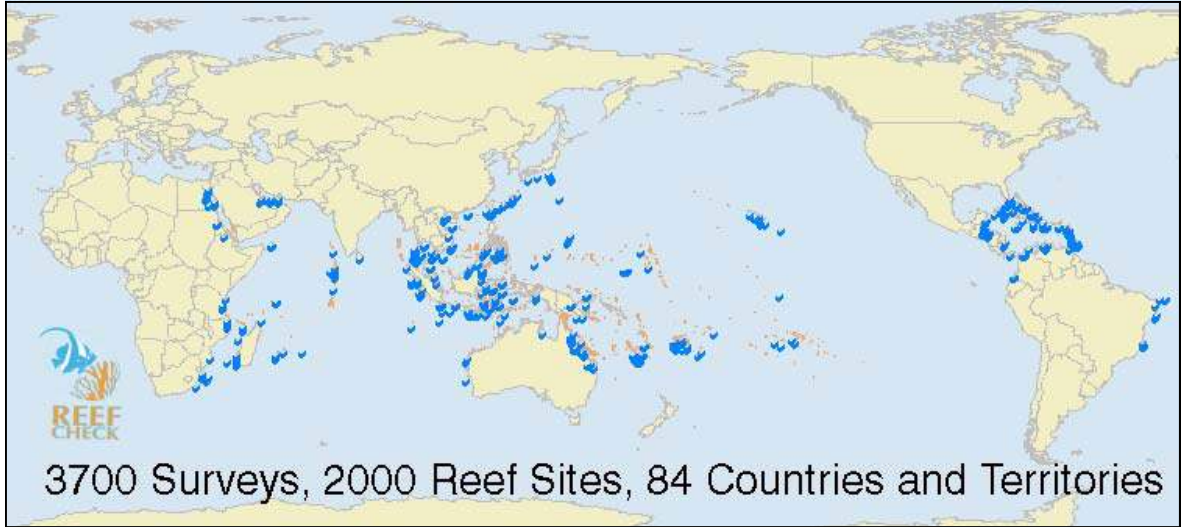
PEW FELLOWS RELEASE STATEMENT ON MARINE PROTECTED AREAS

On June 6, 2005, thirty-eight Pew Fellows in Marine Conservation, some of the world's foremost ocean experts, issued a joint statement urging "the nations of the world to fulfill their commitment to the future of the oceans" through active support of Marine Protected Areas. The statement calls for local involvement in planning, managing, and implementing Marine Protected Areas (MPAs); linking MPAs into networks; evaluating those networks; and taking global action to restore and maintain marine populations, habitats, and fisheries. Visit the Reef Check website to read the full statement.

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Membership

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A tax deductible gift of \$25 or more entitles you to all the benefits of a Reef Check Member, including:

- RC's quarterly newsletter, The Transect Line.
- RC's 85 page report, "The Global Coral Reef Crisis" in hard copy that will be shipped to you directly. Cost of shipping and handling will be paid for by Reef Check
- Invitations to trainings, special events and other RC activities

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