

CORAL REEF NEWS
Coral Reef Conservation Program
National Oceanic and Atmospheric Administration
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NOAA Coral Reef News is a monthly e-newsletter established to provide current information on the activities of the National Oceanic and Atmospheric Administration's (NOAA) Coral Reef Conservation Program (CRCP) and other relevant NOAA programs. The CRCP supports effective management and sound science to preserve, sustain and restore valuable coral reef ecosystems. Back issues are available at <http://www.coralreef.noaa.gov>.

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OF SPECIAL NOTE

NOAA Co-Chairs Successful U.S. Coral Reef Task Force Meeting, Receives White House Endorsement. NOAA Deputy Assistant Secretary Tim Keeney co-chaired the 12th biannual public meeting of the U.S. Coral Reef Task Force (Task Force) December 2-3, 2004, in Miami, Florida. Over 400 people attended the meeting and associated workshops organized by NOAA, the State of Florida and the Department of the Interior. The Task Force took a number of important actions to help conserve coral reefs including adoption of two resolutions to (1) increase forecasts of coral spawning events to help avoid human impacts to vulnerable stages of coral reproduction, and (2) improve practices for mitigating impacts of projects in coral reef areas. The Task Force also launched implementation of “Three-Year Local Action Strategies” to reduce five key threats to reefs in each of the seven states/territories on the Task Force. The Strategies bring together federal, state, territory and non-governmental partners to leverage resources and translate national priorities into measurable local projects. At the meeting, White House Council of Environmental Quality chairman, James L. Connaughton, praised the Task Force efforts and announced that President Bush will request \$2.7 million for Strategy implementation. To read the full December 3, 2004 press release, which includes details on the workshops associated with the meeting and Task Force award recipients, visit <http://www.publicaffairs.noaa.gov/releases2004/dec04/noaa04-119.html>.

Send potential items of Special Note (new discoveries, key events, notable facts, etc.) for future issues to coralreef@noaa.gov.

ANNOUNCEMENTS

Request for Review of the NOAA Coral Ecosystem Research Plan, Part I: National Priorities. In an effort to provide coastal and ocean managers with high priority scientific information to help conserve, protect, restore, and sustain coral reef ecosystems, the NOAA CRCP is developing a research plan to guide NOAA-supported coral ecosystem research for FY 2005 through FY 2010. The NOAA Coral Ecosystem Research Plan is presented in two sections: (1) Part I: National Research Priorities; and (2) Part II: Regional Research Priorities. At this time, the CRCP is requesting comments on Part I: National Priorities (version 12/9/04), which can be found at http://www.nurp.noaa.gov/Attachments/NOAA_Coral_Research_Plan_Part_I_National_120904.pdf. Comments are due by January 15, 2005, and must be submitted using a template, available for download at http://www.nurp.noaa.gov/Attachments/NOAA_Coral_Research_Plan_Comments_template_120904.doc. Please send all comments to coral.researchplan@noaa.gov.

Perry Institute for Marine Science to Host Workshop on the Importance of Backreef Habitats to the Sustainability of Coral Reef Ecosystems. In 2001, NOAA’s Undersea Research Center for the Caribbean hosted a workshop at Lee Stocking Island, Bahamas, to discuss issues related to backreef ecosystems. Participants described the importance of back reef systems, reviewed various threats, and discussed tools and techniques available for research and monitoring. A special issue of the Bulletin of Marine Science was produced containing technical papers summarizing presentations and priorities identified for research, monitoring and management. Building upon the 2001 workshop, the Perry Institute for Marine Science will host “BackReef II Workshop: Developing a Statement on the Importance of Backreef

Habitats to the Sustainability of Coral Reef Ecosystems,” from January 24-28, 2005, at Lee Stocking Island, Bahamas. This workshop will focus on preparing a synthesis document that summarizes the function of backreef habitats within the overall coral reef ecosystem. A small team of experts is being assembled for each of the topic areas to prepare synthesis papers on the state of knowledge for each topic as it relates to backreef habitats within coral reef ecosystems. For more information on the workshop, visit <http://www.perryinstitute.org/backreef.htm#>.

UPDATES

Former NOAA Assistant Administrator Dr. Nancy Foster honored by Australia, U.S. Coral Reef Task Force. On Thursday, December 2, Australia’s Great Barrier Reef Marine Park Authority (GBRMPA) dedicated a reef to Dr. Nancy Foster (1941-2000), a former NOS Assistant Administrator, to honor her leadership in marine conservation. The dedication coincided with the U.S. Coral Reef Task Force meeting in Miami, FL, where Timothy Keeney, Deputy Assistant Secretary of NOAA, hosted a luncheon in honor of the event. Speakers included Jon Day, Director of Conservation, Biodiversity and World Heritage at GBRMPA, and Joseph Geraci, Dr. Foster’s widower and Director of Biological Programs at the National Aquarium in Baltimore, MD. Dr. Foster, who served in a variety of positions during a 23-year NOAA career, is only the second American to be recognized in this way; the other is famed ecologist and author Rachel Carson. The Nancy Foster Reef will be marked on all future charts and maps of the Great Barrier Reef, the most extensive coral reef system in the world. Read the full press release at <http://www.publicaffairs.noaa.gov/releases2004/dec04/noaa04-r499-03.html>.

NOAA Announces New Partnership With Australia To Protect Coral Reef Ecosystems. At the U.S. Coral Reef Task Force meeting December 2-3, NOAA announced a new partnership with the State of Florida and the Great Barrier Reef Marine Park Authority to exchange information and techniques to improve coral reef resilience. Resilience is the natural ability of corals to survive and recover from stresses in the natural environment. The partnership will increase sharing of the latest science and management practices to accelerate coral reef conservation efforts in U.S. and Australian coral reef ecosystems. Read the full press release at <http://www.publicaffairs.noaa.gov/releases2004/dec04/noaa04-r499-05.html>.

Vice Admiral Conrad C. Lautenbacher, Jr. Speaks at Press Conference to Release *Status of Coral Reefs of the World: 2004*. At a December 6 press conference at the World Wildlife Fund headquarters in Washington, DC, Vice Admiral Conrad C. Lautenbacher, Jr., undersecretary of commerce for oceans and atmosphere and NOAA administrator, commented on the findings of the newly released *Status of Coral Reefs of the World: 2004*. This biennial publication, a product of the Global Coral Reef Monitoring Network, indicated that 70% of the world’s coral reefs are threatened or destroyed, compared with 59% four years ago, and that about 20% of the world’s reefs are effectively damaged beyond repair. On a positive note, the report showed that the percentage of recovering reefs has increased compared to the last global assessment, largely due to management efforts. Vice Admiral Lautenbacher commented on the importance of monitoring and assessing the condition of resources and the effectiveness of management actions in order to provide resource managers with the information they need. He emphasized NOAA’s on-going commitment to the development of an integrated global ocean observing system

involving international, federal, state, academic and private sector partners. Visit <http://www.aims.gov.au/pages/research/coral-bleaching/scr2004/> to download *Status of Coral Reefs of the World: 2004* and <http://releases.usnewswire.com/GetRelease.asp?id=40362> to read a press release on the publication.

National Aeronautic and Space Administration Announces Large Collection of Satellite Images of Coral Reefs. The International Space Station of the National Aeronautic and Space Administration (NASA) announced the availability of 1,490 satellite (Landsat 7) images of coral reefs in an Internet-based library for the Millennium Coral Reef Mapping Project. The collection was created in a partnership including NASA, NOAA, international agencies, universities and other organizations to provide natural resource managers a comprehensive world data resource on coral reefs and adjacent land areas. To access the Millennium Coral Reefs Landsat archive, visit <http://seawifs.gsfc.nasa.gov/cgi/landsat.pl>. For more information on the Institute for Marine Remote Sensing Millennium Coral Reef Mapping Project at the University of South Florida, visit <http://imars.usf.edu/corals/index.html>.

Expedition to Explore the Status and Exploitation of Reef Resources on Navassa Island Recently Completed. NOAA's 2004 expedition to Navassa Island, a small, uninhabited Caribbean island that is part of the National Wildlife Refuge system, was recently completed. The goal of this trip was to follow-up on assessments recorded during a November 2002 expedition. A diverse set of project objectives was accomplished, including acoustic mapping of the Navassa shelf; visual reef fish assessment; benthic community assessment including explicit treatment of sponges, survey and sampling of coral disease

outbreak conditions; and interaction with Haitian fishers to lay the groundwork for future socio-cultural study of the Navassa fishery, to be conducted from December 2004 to January 2005. The trip was funded by the NOAA CRCP and the U.S. Fish and Wildlife Service (USFWS), and coordinated by NOAA's Southeast Fisheries Science Center. These accomplishments resulted from participation by several federal, academic and non-governmental partners including the USFWS, the University of Miami Rosenstiel School of Marine and Atmospheric Science, the Fondation pour la Protection de la Biodiversité Marine, Florida State University, and the John G. Shedd Aquarium. For more information, contact Margaret.W.Miller@noaa.gov.

New Software Improves Coral Reef Mapping Process. National Centers for Coastal Ocean Science scientists and affiliates have developed new computer software to meet the needs of coastal resource managers to organize spatial data, design coral reef monitoring programs, and assess reef ecosystems using benthic maps. The novel software can delineate benthic features directly into a geographic information system, thereby expediting the mapping process relative to common techniques while maintaining thematic and spatial accuracies. Studies indicate that analysis of fish census data in concert with such benthic maps can improve the evaluation of fish distributions. The software identifies major bottom types (i.e., unconsolidated sediment, coral reef and hard bottom, and submerged vegetation) and assigns a location attribute to mapped features according to their position relative to the shoreline and lagoon-forming reefs. Accuracy of the maps produced using the new approach was measured by comparing ground survey data to map attributes, with results similar to the accuracy of maps produced with an analytical stereo plotter. The results of this effort were recently published in the *Bulletin of Marine Science* (75(2):225-237).

For more information, contact
Matt.Kendall@noaa.gov.

New Software Helps Increase Efficiency of Coral Reef Restoration Efforts. The National Centers for Coastal Ocean Science-sponsored National Coral Reef Institute has developed software that integrates an existing method for determining economic and environmental values of natural resources with an intuitive graphical interface in which the user can modify input parameters and quickly evaluate multiple restoration strategies. The Habitat Equivalency Analysis (HEA) method is used to determine the amount of restoration necessary to compensate for the interim loss of habitat and other services following natural resource injuries. The new Visual HEA software is available free-of-charge for non-commercial use to governmental and academic researchers. The software was recently presented at the U.S. Coral Reef Task Force meeting in Miami, Florida and the first National Conference on Ecosystem Restoration in Orlando, Florida. For more information, visit http://www.nova.edu/ocean/visual_he/index.html.

National Centers for Coastal Ocean Science Model Applied to Restoration Plans and Court Cases on Coral Reef Damages. In collaboration with National Marine Sanctuary and National Park Service staff, National Centers for Coastal Ocean Science scientists recently calibrated a coral injury recovery model in the Florida Keys National Marine Sanctuary (FKNMS). The scientists located historical boat groundings on coral reefs that occurred within the FKNMS to assess the natural recovery process. The model will be used to develop recovery estimates for use in damage assessments, restoration plans, and federal court cases regarding injuries to coral reefs that NOAA protects and restores on behalf of the public. For more information, contact Shay.Viehman@noaa.gov.

National Centers for Coastal Ocean Science Utilizes New Instrumentation to Broaden Scale, Location, and Efficiency of Ocean Observations. A new “Get Wet” toolbox of off-the-shelf instruments supports cost-effective ocean observations at scales, locations, and efficiencies not possible with large research vessels, airborne or satellite observation platforms, or historical field approaches. The underwater instruments, deployed from small boats by NOAA’s National Centers for Coastal Ocean Science and its partners in Hawai’i, are being used to map and assess coral reefs, seagrass beds, illegal dump sites, injured natural resources, and water column habitats from the Caribbean to the Pacific Northwest. The toolbox includes a remote-controlled instrument that is towed underwater to collect spatially-referenced live underwater video and water chemistry data, and a side-scan sonar interfaced with a high resolution global positioning system and geographic information system. For more information, contact Mark.Fonseca@noaa.gov.

National Centers for Coastal Ocean Science Develops Method for Identifying Coral Pollutants. National Centers for Coastal Ocean Science (NCCOS) is helping coastal managers and policy makers protect and restore coral reefs by developing techniques to identify specific pollutants that stress and kill corals. NCCOS-sponsored researchers recently identified indicators, or biomarkers, of specific pollutants using enzymes and proteins produced by corals in response to stress from these pollutants. The researchers, from the University of Hawai’i and a private biotechnology firm, used biomarkers from coral samples around Guam that were affected by pollutants including sediment, oil, pesticides, PCBs, sewage, and anti-fouling paints to distinguish the responses to the stressors individually and in combination. These techniques allow coastal managers and policy

makers to identify stressors in time to intervene, and then monitor and measure the success of mitigation efforts. For example, the biomarker technique was recently applied in an oil spill case in the Federated States of Micronesia, where clear evidence of oil exposure was found in coral samples from the exposed areas. For more information, contact Michael.Dowgiallo@noaa.gov.

Research and Community Outreach Improves Mangrove and Coral Reef Protection in Palau. By combining sponsored research and community outreach, National Centers for Coastal Ocean Science (NCCOS) is protecting mangrove and coral reef ecosystems in the Palau Islands, an area considered to be one of the "Seven Underwater Wonders of the World" by marine scientists. The NCCOS-funded project at the Palau International Coral Reef Center (PICRC) in Micronesia progressed within a matter of weeks from data collection to implementation of sound management policies by developing and supporting local experts, and sharing research results with the local community. Aided by a local congressional delegate, the researchers explained the effects of poor land-use practices within the watershed – including sedimentation and pollution impacts on mangrove forests, coral reefs, and fisheries – to local leaders, chiefs, and fishermen in their native language and traditional meeting house. Supported by the data, village leaders then convinced the state government to halt the clearing and filling of the mangrove forest, and to develop a watershed protection plan in cooperation with the researchers, managers, and community leaders. This development and support of local expertise reflects a cornerstone of NCCOS' Coral Reef Ecosystem Studies (CRES) Program in Micronesia. Learn more about PICRC at <http://www.picrc.org/> and CRES at http://www.cop.noaa.gov/Fact_Sheets/CRESmicronesia.html.

NOAA Hydrodynamic Model to be Used in the Development of Palau Protected Areas Network. Over the past year, scientists from NOAA's National Environmental Satellite, Data and Information Service (NESDIS) have been developing a hydrodynamic model for the purpose of describing the spatial patterns of sea surface temperature during a coral bleaching event. One of the uses of this model is in the design of the Palau Protected Areas Network (PAN), where, for the first time, bleaching resilience will be imbedded within the network design. To begin the PAN design process, NESDIS scientists recently conducted a Hydrodynamic Modeling Workshop that was attended by most of the relevant scientific agencies and Government Departments of Palau. For more information, contact Alan.E.Strong@noaa.gov.

Hawai'i Coastal Zone Management Program Completes Wai'anae Ecological Characterization. The Hawai'i Coastal Zone Management Program (CZM Hawai'i), with financial assistance from the NOAA CRCP and technical assistance from the NOAA Coastal Services Center, NOAA Pacific Services Center, and various state and community partners, has developed the Wai'anae Ecological Characterization (WEC). The WEC will be used to help CZM Hawai'i, the Wai'anae community, and other partners develop a management framework that incorporates ahupua'a (traditional land divisions) values and practices. The Nonpoint-Source Pollution and Erosion Comparison Tool (N-SPECT), a GIS-based decision support tool, is packaged with the WEC. N-SPECT helps managers examine relationships between land cover, soil characteristics, topography, and precipitation in order to assess spatial patterns of surface water runoff, nonpoint source pollution, and erosion. The WEC also includes benthic habitat maps developed by the NOAA National Centers for Coastal Ocean Science Biogeography Program. The WEC will be available on a CD-ROM in early 2005, and it

can currently be previewed at
<http://www3.csc.noaa.gov/waianae/>.

Coral Disease Researchers Share Findings at Hawai'i Workshop. On December 6, researchers shared findings and investigative techniques developed in the main and Northwestern Hawaiian Islands (NWHI) at an all-day Coral Disease Workshop. Hosted by the Hawai'i Institute of Marine Biology (HIMB), the workshop was organized by Dr. Greta Aeby, whose efforts surveying the health of NWHI reefs over the last three years have been supported by the NWHI Coral Reef Ecosystem Reserve in collaboration with the State of Hawai'i Division of Aquatic Resources. Presentations by Dr. Aeby and several other experts including Dr. Thierry Work (United States Geological Survey), Dr. Steve Coles (Bishop Museum) and Dr. Teresa Lewis (HIMB) focused on fish and coral disease investigation, field techniques, histopathology, and molecular and microbiological techniques. During an afternoon field session, participants practiced coral disease survey skills underwater at the workshop site, Coconut Island in Kane'ohe Bay. Learn more about the HIMB at <http://www.hawaii.edu/HIMB/>.

Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve and Hawai'i Institute of Marine Biology Receive Funding for Collaborative Research. Collaborative research efforts between the Northwestern Hawaiian Islands (NWHI) Coral Reef Ecosystem Reserve and the Hawai'i Institute of Marine Biology (HIMB) have become formalized with recent news that Congress has earmarked \$1.5 million in funding to support the partners' coordinated research in the NWHI. The goal of the partnership is to utilize existing scientific expertise at HIMB to address research and information needs related to coral reef protection and conservation issues for the proposed NWHI sanctuary. Shared research interests include monitoring and research

activities that focus primarily on alien species, population structure of commercially exploited species like lobster and bottom fish, and identification of species markers that help to determine the health of the ecosystem in the NWHI. The funds will also continue public education and awareness activities that strengthen capacity to better manage the main Hawaiian Islands' coral reef ecosystems. Learn more about the NWHI Coral Reef Ecosystem Reserve at

<http://www.hawaiiireef.noaa.gov/welcome.html>.

Invasive Lionfish Larvae Absent in the Atlantic Ocean. As part of its research on and monitoring of lionfish, National Centers for Coastal Ocean Science (NCCOS) examined plankton collections taken off the South Carolina coast during the winters of 2000, 2001, and 2002, and determined that no lionfish larvae were present. Larvae of many other scorpion fishes were found, however, indicating that these fishes do spawn during the winter in the western Atlantic Ocean. In addition to monitoring this invasive species likely originating from the Indo-Pacific, NCCOS is attempting to spawn lionfish in the laboratory to build larval collections. These collections will be used to more easily identify lionfish and help quantify abundance, spawning seasonality, and propagation potential of lionfish in the Atlantic. Learn more about lionfish at

<http://shrimp.ccfhrb.noaa.gov/lionfish/>.

Final Draft of the Florida Keys National Marine Sanctuary Revised Management Plan Completed. Working with citizens, businesses, and government partners, the Florida Keys National Marine Sanctuary (FKNMS) has just completed the final draft of its revised management plan. The plan is currently being reproduced, and a public comment period is planned for February 1 to March 31, 2005. The management plan is revised every five years in response to both

federal and state requirements. The updated plan consists of 14 action plans grouped under five management divisions: Sanctuary Science; Education, Outreach and Stewardship; Enforcement and Resource Protection; Resource Threat Reduction; and Administration, Community Relations, and Policy Coordination. The revised document provides a comprehensive framework for managing the FKNMS, and outlines changes in policy, permitting, and regulations that will be implemented in the coming years. The document will be available on the FKNMS website (<http://floridakeys.noaa.gov/>), on CD, and in hard-copy format. If you would like to receive a copy of the draft, e-mail your mailing address and preference for a CD or printed copy to floridakeys@noaa.gov.

Coral Reef Watch Monitors Unprecedented Coral Bleaching Event in Progress in Mid-Pacific. NOAA's Coral Reef Watch (CRW) has been working with local authorities in the Island Nation of Kiribati, where significant coral bleaching has recently been reported. Kiribati, formerly known as the Gilbert Islands, is composed of 33 atolls straddling the Equator along 175E. CRW is providing environmental monitoring support via remote sensing satellites. This information is currently being used to better understand the extent and degree of thermal stress affecting coral reefs in the area. Over the past few weeks, timely collaborations between NOAA and Australian scientists have assisted in the production of a report to the Kiribati Government. This report is aimed at presenting the authorities with the best available information for the management of the affected coral reefs. Coral bleaching events of the magnitudes being reported at Kiribati are unprecedented for this region of the world, although a similar event occurred in 2002 in the Howland and Baker Atolls, several hundred miles east of Kiribati. Learn more about CRW at <http://coralreefwatch.noaa.gov/>.

Coral Reef Watch Develops Automated Coral Bleaching E-mail Alert System.

Deterioration of coral reef ecosystems has been reported worldwide, and both national and international efforts are ongoing to study and reduce adverse impacts on coral reef systems. As an integral part of NOAA's Coral Reef Watch (CRW) program to study the impact of thermal stress on coral reef bleaching, scientists in NOAA's Office of Satellite Data Processing and Distribution and Office of Research and Applications have developed a series of satellite-derived coral reef bleaching monitoring products, which include Sea Surface Temperature anomaly, HotSpots, Degree Heating Weeks, and the Tropical Ocean Coral Bleaching Indices page. These near real-time, web-accessible, satellite-derived coral bleaching monitoring products are useful as predictors for the coral reef community in monitoring potential coral bleaching episodes. To enhance the current Indices pages, CRW has developed the operational prototype of an automated coral bleaching E-mail Alert System to automatically monitor the bleaching status of coral reefs around the world using the NOAA Satellites and Information operational HotSpot and Degree Heating Weeks products. An automated alert message will be sent to subscribers of each reef site when the status level of thermal stress changes. For more information, contact Limin.Zhao@noaa.gov.

Additional 42 Data Sets Available from NOAA's Coral Reef Information System.

Recent data sets added to NOAA's Coral Reef Information System include new coral bleaching reports from NOAA Satellites and Information/NOAA Research, advanced very high resolution radiometer (AVHRR) sea surface temperature (SST) Degree Heating Week data for the Caribbean, and current AVHRR SST Time Series for selected coral reefs products. Two historical biological data sets from the NOAA Satellites and Information National Oceanographic Data Center were also

added. These are the 1996 Inventory of Endangered Species and Wildlife Resources for the U.S. Army Kwajalein Atoll, Republic of the Marshall Islands (NODC 0000251) and the Bahia Las Minas, Panama Oil Spill Assessment, 1986-1991 (NODC 9400033). Visit CoRIS at <http://www.coris.noaa.gov/>.

Coral Reef Information System Collaborates With the Reef Environmental Education Foundation.

NOAA's Coral Reef Information System (CoRIS) recently established a partnership with the Reef Environmental Education Foundation (REEF), a non-profit organization that maintains a large database of fish species and abundance data that have been collected by volunteer expert and novice divers near many U.S. coral reefs. This database has been accomplished through REEF's Fish Survey Project, which began in 1990 as a commitment to the conservation of marine habitats. The data are currently available at <http://www.reef.org/data/data.htm>, but the REEF Scientific Coordinator wishes to make these data also available through CoRIS.

Coral Reef Information System Representative Conducts Data Outreach Workshops in Puerto Rico and the U.S. Virgin Islands.

A CoRIS representative has recently conducted a series of eight workshops attended by over eighty members of the Puerto Rican and U.S. Virgin Island coral reef communities. The purpose of the meetings was to provide an overview of the development of NOAA's Coral Reef Information System (CoRIS), demonstrate its current resources, discuss plans for future development, and engage the participants in order to determine constraints and opportunities for the effective communication of coral reef science data and information, and related policy and education concerns. Participants represented a wide range of communities including academia, government agencies, non-governmental organizations, small businesses and the general

public. While a few participants had previously made practical use of CoRIS, most of the participants were unfamiliar with CoRIS and indicated that they intended to make use of the resource in the future. Feedback from the meetings is currently being analyzed and compiled for submission to CoRIS management and the NOAA CRCP. For more information, contact Mark.Mccaffrey@colorado.edu.

CORAL REEFS IN THE NEWS

“US, Australia Team Up to Protect Vulnerable Reefs” – December 2, 2004

(Reuters). “MIAMI – Guardians of two of the world's most popular coral reefs joined forces on Thursday to protect their fragile charges from the ravages of water pollution, coral disease and people.”

<http://www.reuters.com/newsArticle.jhtml?type=scienceNews&storyID=6981255>

“U.S. Coral Reef Task Force Calls for Coordinated Efforts to Avoid Adverse Impacts on Reefs; Launches Local Strategy Implementation” – December 3, 2004

(NOAA Press Release). “MIAMI – The U.S. Coral Reef Task Force called for improved interagency coordination to avoid adverse coral reef impacts during spawning season, and for the establishment of interagency working groups to develop standard mitigation protocols and best management practices, as they wrapped up a two-day meeting today in Miami.”

http://biz.yahoo.com/prnews/041203/dcf041_1.html

“Most Coral Reefs Under Threat, Some Resilient” – December 5, 2004

(Reuters). “OSLO – About 70 percent of the world's coral reefs have been wrecked or are at risk from human activities but some are showing surprising resilience to global warming, a report said on Monday.”

<http://olympics.reuters.com/newsArticle.jhtml?type=scienceNews&storyID=6999240>

“Coral Reef Damage Rising Worldwide” – December 6, 2004

(Associated Press). “WASHINGTON - Only about 30 percent of the world's coral reefs are healthy, down from 41 percent two years ago, according to a study released Monday that lists global warming as the top threat.”

http://story.news.yahoo.com/news?tmpl=story&cid=624&ncid=753&e=10&u=/ap/20041206/ap_on_sc/coral_reefs

“Jean-Michel Cousteau, the United Nations Environment Programme and 3D Entertainment Join Forces to Protect Sharks with New 3D IMAX Theatre Film” – December 6, 2004

(PRNewswire, Press Release). “LOS ANGELES, Dec. 6 /PRNewswire/ -- Jean-Michel Cousteau, the United Nations Environment Programme (UNEP), and 3D Entertainment today announced the upcoming release of SHARKS 3D, a breathtaking three-dimensional underwater adventure.”

<http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=109&STORY=/www/story/12-10-2004/0002594616&EDATE=>

“Medicines from coral reefs” – December 9, 2004

(Sun Star, Philippines). “CORAL reefs could be the sources of many new medicines in the 21st century. "Marine sources could be the major source of drugs for the next decade," says Dr. William Fenical, a natural products chemist at the Scripps Institution of Oceanography in La Jolla, California.”

<http://www.sunstar.com.ph/static/dav/2004/12/09/feat/medicines.from.coral.reefs.html>

“Kane'ohe Bay coral relocated” – December 9, 2004 (*Honolulu Advertiser*). “KANE'OHE BAY — Army divers are relocating the equivalent of a quarter of an acre of coral heads blocking the channel to Coconut Island and giving new life to a dead reef sheared off more than 60 years ago.”

<http://the.honoluluadvertiser.com/article/2004/Dec/09/lh/lh42p.html>

“Red tide in Gulf of Mexico puts Florida Keys at risk” – December 12, 2004 (*The Boston Globe*). “KEY LARGO, Fla. --

Scientists are tracking a 400-square-mile red tide that is drifting through the Gulf of Mexico and threatening to wash ashore on the Florida Keys. ‘It's huge,’ said Billy Causey, superintendent of the Florida Keys National Marine Sanctuary, adding that the toxic tide poses ‘a major threat to coral and coral reefs.’”

http://www.boston.com/news/nation/articles/2004/12/12/red_tide_in_gulf_of_mexico_puts_florida_keys_at_risk/

“Coral reefs may grow with global warming” – December 13, 2004 (*New Scientist*, UK). “Rising levels of greenhouse gases may not be quite as bad for coral reefs as was previously thought. A team of Australian scientists say that the damage done by increasing amounts of carbon dioxide in the oceans will be offset by warmer waters, which will make coral grow faster. But other researchers counter that warming will do more harm than good.”

<http://www.newscientist.com/article.ns?id=dn6763>

“Tourists monitor reef's health” – December 14, 2004 (*Travel Press*, New Zealand).

“Tourists are playing an important role in a project aimed at monitoring the health of Australia's Great Barrier Reef. The program, which is also monitoring the health of other coral reefs around the world, involves the use of Coral Watch colour charts by untrained

tourists, school students, divers and anglers.”
<http://au.travel.yahoo.com/041214/3/k6s.html>

“Florida steps up initiative to safeguard oceans” – December 17, 2004 (*South Florida Sun-Sentinel*). “WASHINGTON - While the Bush administration prepares to unveil a revitalized national policy to safeguard the oceans, Florida is moving ahead with its own initiative to preserve coastal resources, starting with coral reefs that hug the South Florida shore.” <http://www.sun-sentinel.com/news/local/southflorida/sfl-ocean17dec17,0,5459342.story?coll=sfla-home-headlines>

“White House Creates Cabinet-Level Ocean Policy Panel” – December 17, 2004 (*Reuters*).

“WASHINGTON – The Bush administration created on Friday a cabinet-level committee to address rising pollution and overfishing in U.S. territorial ocean waters.... It will also address the declining health of coral reefs and seek to ratify a global sea treaty...”

<http://news.google.com/news?hl=en&ned=us&q=coral+reefs&ie=UTF-8&scoring=d&start=70&sa=N>

“Nature may hold next great cancer drug” – December 18, 2004 (*Associated Press*).

“FREDERICK, Md. – Somewhere within a vast, frozen storehouse of tree bark, fungi and marine creatures, a breakthrough cancer drug may be hiding.... ‘The coral reefs are the rain forests of the ocean,’ [David J. Newman] said. ‘If you take one square meter of a coral reef, you have over 1,000 different species on that square meter. That does not take into account the cryptic organisms which only come out at night and, I might add, does not take into account the world's greatest source of biodiversity, which is, in fact, the marine microbe.’” <http://msnbc.msn.com/id/6712602/>

“As the Seas Warm, Algae Help Some Coral Stand Up to the Heat” – December 21, 2004 (*The New York Times in News & Observer, NC*). “For some time, scientists have predicted that the world's coral reefs will be among the first ecosystems to suffer devastating damage from global warming. Some reefs, however, are proving surprisingly resilient, researchers say, not because of qualities of the corals themselves, but because of heat-tolerant algae that live with them.”

<http://newsobserver.com/news/story/1952493p-8317063c.html>

“Hurricanes Bring Temporary Relief to Florida Reefs Smothered by Invasive Seaweed” – December 21, 2004 (*E-Wire Press Release*). “FT. PIERCE, FLORIDA – In August, Harbor Branch scientists began a new survey of Florida coral reefs expecting to document the devastating spread of harmful seaweed that has been progressing now for several years, but hurricane havoc has instead led the team to a surprising find.”

http://www.ewire.com/display.cfm/Wire_ID/2418

“Recently Discovered Reef Is Deepest Known Off Continental U.S.” – December 24, 2004 (*USGS Press Release, AXcess News, NV*). “A team of scientists has determined that a coral reef discovered in 1999 is the deepest reef ever found off the continental U.S.”

http://www.axcessnews.com/national_122504.s.html

“Search to find operator of reef program founders” – December 26, 2004 (*South Florida Sun-Sentinel*). “St. Lucie County has created a position to coordinate future underwater activities and buoy its floundering artificial-reef program.” <http://www.sun-sentinel.com/news/local/palmbeach/sfl-preef26dec26.0.1167279.story?coll=sfla-news-palm>

“Coral reefs protect Guam from tsunamis” – December 27, 2004 (*Agana Pacific Daily News, Guam*). “Guam's coral reefs, and even the Marianas Trench, help protect the island from the flooding and destruction caused by tsunamis.”

<http://www.guampdn.com/news/stories/20041228/localnews/1793631.html>

“Global Warming, Pollution Add to Coastal Threats” – December 27, 2004 (*Reuters*).

“OSLO - A creeping rise in sea levels tied to global warming, pollution and damage to coral reefs may make coastlines even more vulnerable to disasters like tsunamis or storms in future, experts said Monday.”

<http://olympics.reuters.com/newsArticle.jhtml?type=scienceNews&storyID=7185892>

“Tsunami may have killed Andaman Sea coral reefs” – December 28, 2004 (*Reuters*).

“BANGKOK – The tsunami which killed hundreds of people in southern Thailand may also have killed the coral reefs which attract large numbers of foreign tourists, a Thai marine scientist was quoted on Tuesday as saying.”

<http://www.alertnet.org/thenews/newsdesk/BK130733.htm>

“Coral reefs may take years to recover from tsunamis” OPINION – December 30, 2004 (*Reuters, in Manila Times, Philippines*).

“MELBOURNE—Precious coral reefs and mangrove areas would have been crushed by the huge tsunami waves that have devastated southern Asia, an environmental and economic setback that could take years to reverse, experts say.”

<http://www.manilatimes.net/national/2004/dec/30/yehey/opinion/20041230opi8.html>

UPCOMING EVENTS

If you have events you would like listed in future newsletters please contact coralreef@noaa.gov.

January 2005

8 – 14: **United Nations Small Island Developing States (SIDS) Meeting**. Mauritius.

<http://www.sidsmauritius2005.mu/program.htm>

12 – 14: **Fourth International Surfing Reef Symposium**. Manhattan Beach, CA.

<http://www.surfrider.org/reef4/>

25 – 28: **V Congress on Caribbean Biodiversity**. Abstracts due November 15, 2004. Santo Domingo, Dominican Republic. Contact carlos_riguez96@yahoo.com for details.

February 2005

15 – 17: **MPA Federal Advisory Committee Meeting**. Washington, DC.

http://mpa.gov/fac/fac_meetings.html.

20 – 25: **American Society of Limnology and Oceanography (ASLO) 2005 Aquatic Sciences Meeting**. Salt Lake City, UT. <http://www.aslo.org/meetings/slc2005/>

March 2005

1 – 2: **13th U.S. Coral Reef Task Force Meeting**. Washington, DC.

<http://www.ces.fau.edu/taskforce/>

2: **NOAA's Annual Stakeholder Forum**. Washington, DC.

<http://www.spo.noaa.gov/dcforum2005.htm>

April 2005

2 – 3: **Second International Coral Reefs Conference of Paris (CIRCoP)**. Paris, France.

http://www.circop.com/US_default.html

10 – 14: **Eighth International Conference on Artificial Reefs (and Related) Artificial Habitats**. Biloxi, MS. <http://www.cfi.lsu.edu/carah/>

June 2005

8 – 9: **Capitol Hill Oceans Week 2005**. Washington, DC. www.nmsfocean.org/

13 – 17: **32nd Scientific Meeting of the Association of Marine Laboratories of the Caribbean (AMLC)**. Abstracts due April 1, 2005. Curacao, Netherlands Antilles. http://www.amlc-carib.org/en/future_meetings/2005_scientific_meeting_curacao/about_the_meeting/

19 – 24: **American Society of Limnology and Oceanography (ASLO) Summer Meeting**. Abstracts due Feb. 1, 2005. Santiago de Compostela, Spain. <http://aslo.org/santiago2005/>

July 2005

17 – 21: **Coastal Zone 2005**. New Orleans, LA. <http://www.csc.noaa.gov/cz/>

October 2005

23 – 27: **The First International Congress on Marine Protected Areas.** Geelong, Australia.
www.impacongress.org

November 2005

28 – Dec. 2: **Third International Symposium on Deep-Sea Corals.** Miami, Florida.
<http://www.conference.ifas.ufl.edu/coral>

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Contact coralreef@noaa.gov, NOAA Coral Reef Conservation Program.

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