

CORAL REEF NEWS
Coral Reef Conservation Program
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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. On March 2-3, 2005, NOAA Deputy Assistant Secretary Tim Keeney co-chaired the 13th public meeting of the U.S. Coral Reef Task Force, held in Washington, DC. The focus of the meeting was to take stock of past actions of the CRTF in an effort to clarify and strengthen future CRTF activities. To this end, each CRTF member spoke about the work of his/her agency or jurisdiction regarding coral reef ecosystems, and a decision was made to examine and prioritize past Resolutions for future CRTF actions. Presentations were also made on the progress of two essential reports, the "State of the Coral Reefs of the US: 2004" and the CRTF "Report to Congress" on the two-year implementation of the National Action Strategy. Both of these reports, to be released in the upcoming year, serve as a measure of success for the work to protect and conserve coral ecosystems and the collaborative efforts of the CRTF. Meeting minutes will soon be posted at <http://www.coralreef.gov/meetings/minutes.html>.

In addition to the public meeting, a number of associated events were held throughout the week. On March 1, representatives from the CRTF member States and Territories briefed members of Congress on the importance of the "Three-Year Local Action Strategies" (LAS), and later testified at a hearing for reauthorization of the Coral Reef Conservation Act, along with Department of Interior Assistant Secretary Judge Manson and NOAA Deputy Assistant Secretary Tim Keeney. Two other events aimed at improving collaboration and communication between NOAA and the CRTF member States and Territories, including a roundtable with the Assistant Administrators of NOAA's Ocean Service and NOAA Fisheries on Feb. 28, and an all-day retreat at NOAA on March 4.

ANNOUNCEMENTS

Third Newsletter of the International Coral Reef Initiative Now Available. The third issue of the International Coral Reef Initiative (ICRI) Newsletter is now available at <http://www.icriforum.org/router.cfm?show=html/login.htm> (Click on "News," "The third ICRI Newsletter is available"). This January 2005 Newsletter contains information on the activities of ICRI since the last Newsletter, released in June 2004.

FY06 Request for Proposals on Management-Driven Coral Research Released for NURP, CCRI, and CRCP Research Grants Program. The NOAA National Undersea Research Program's Caribbean Marine Research Center has sent out a joint proposal announcing both NURP and CRCP FY06 funds for management-driven coral research in the U.S. Caribbean; and the Caribbean Coral Reef Institute's (CCRI) first announcement of research funding opportunities in Puerto Rico. Details on these opportunities can be found at http://www.perryinstitute.org/funding_opportunities.htm (click on "Request for Proposals – FY 2006").

Coral Reef Internship Opportunity for Undergraduate Students. The United States Coral Reef Task Force (USCRTF) is pleased to announce the 2nd Annual American Samoa Governor Tauese P.F. Sunia Memorial Coral Reef Conservation Summer Internship Award, in recognition of the late Governor's outstanding leadership in and contribution to U.S. coral reef conservation. This is a competitive award, in which two excellent students from Guam, the Commonwealth of the Northern Mariana Islands, Hawai'i, American Samoa, Puerto Rico, or the U.S. Virgin Islands will be selected to receive a three-month, expenses-paid summer internship working on coral reef conservation and management issues

with an agency/office of the Department of the Interior. The application deadline is April 15, 2005, and winners will start their internship in June. For details about the Internship Award, eligibility requirements, and necessary application materials, visit <http://www.coralreef.gov/meetings/announcements.html> (click on "Governor Sunia Award").

Graduate Assistantships Available for Research in Human Dimensions of Coastal and Marine Ecosystems. The National Centers for Coastal Ocean Science is funding two Ph.D. Graduate Research Assistant positions for the fall of 2005 to build NOAA capacity for human dimensions research. The positions will be with the University of Massachusetts-Amherst Human Dimensions Research Unit. One student will examine the extent to which the management of coral reef ecosystems is consistent with the basic goals, interests and wants of society (these goals will range from protection to consumptive use), and the second student will examine the extent to which an estuary/bay is providing society with social, economic and cultural benefits in relation to the ecological condition of that estuary/bay. For a full description of the positions including duties, qualifications, funding, and how to apply, contact Prof. Dave Loomis at Loomis@forwild.umass.edu or (413) 545-6641.

UPDATES

Atlantic

NOAA Fisheries Proposes Listing Two Coral Species Under the Endangered Species Act. On March 3, 2005, NOAA Fisheries determined that elkhorn (*Acropora palmata*) and staghorn (*Acropora cervicornis*) corals are warranted for listing as threatened under the Endangered Species Act (ESA). The notice of the determination was published in the *Federal Register* on March 18, 2005. This would be the first listing of any coral species as threatened or

endangered under the ESA. The determination was heavily based on the Atlantic *Acropora* Status Review, available at <http://sero.nmfs.noaa.gov/pr/protres.htm>. A "Frequently Asked Questions" document with more information on the determination is also available at this website. Currently, the NOAA Fisheries/Southeast Regional Office/Protected Resources Division is working on developing the listing rule and will subsequently begin preparing a special rule that will define specific prohibitions and exemptions (called a 4(d) rule).

Study Published on Microsatellite Genetic Markers for *Acropora palmata*. Developed in collaboration with the Southeast Fisheries Science Center, academic researchers have published a report describing microsatellite markers that allow the genotyping of individual colonies and assessment of connectivity in *Acropora palmata* populations. These markers will prove to be a valuable tool in researching population structure, disease, and other important questions relevant to *Acropora palmata* conservation. The paper appears as: Baums et al. (2005). Mendelian microsatellite loci for the Caribbean coral *Acropora palmata*. *Marine Ecology Progress Series* 288:115-127. It can be viewed at <http://www.int-res.com/abstracts/meps/v288/p115-127.html>.

Coral Disease and Health Consortium Responds to Potential White Plague Outbreak in the Flower Garden Banks National Marine Sanctuary. In response to a call for assistance by the Flower Garden Banks National Marine Sanctuary (FGBNMS), the Coral Disease and Health Consortium (CDHC) is launching an investigation of a potential white plague outbreak. During a recent visit to the FGBNMS on February 23rd, NMS divers observed white plague symptoms in multiple species of corals (*Diploria strigosa*, *Porites astreoides*, *Montastraea faveolata*, and *M.*

franksi). White plague is caused by a bacterial pathogen and can kill coral tissue at rates ranging from 3 mm to 10 cm a day. While white plague has been previously observed at FGBNMS, it had been limited to individual isolated colonies. This is the first documented occurrence at the FGBNMS of a coral disease affecting multiple colonies and multiple species over such a large area (~50 m diameter). Representatives from NMS, NOAA Fisheries, National Centers for Coastal Ocean Science, the Environmental Protection Agency, Florida International University, Mote Marine Lab and George Mason University plan to assist with the response through field sampling (April 4-8, 2005) and subsequent diagnostic analysis. Learn more about the CDHC at http://www.coral.noaa.gov/coral_disease/cdhc.shtml.

NOAA Fisheries Researchers Observe Fish Spawning Behavior in the US Virgin Islands.

Researchers from the Southeast Fisheries Science Center (SEFSC) traveled to St. Thomas, U.S. Virgin Islands, to observe and monitor Nassau grouper activity on the Grammanik Bank around the February full moon spawning period. Divers identified the location of aggregations and observed the most activity at dusk when hundreds of yellowfin groupers and tens of Nassau groupers congregated on Grammanik Bank. While no spawning was observed, spawning or pre-spawning behavior was clearly documented, including color changes and distended abdomens. Visit <http://www.sefsc.noaa.gov/> for more information on the SEFSC.

New Bilingual Publication for Recreational Users of the Coral Reef Ecosystems of the U.S. Virgin Islands and Puerto Rico. The organization *Consultores Educativos Ambientales* has published a bilingual guide for recreational users of the coral reef ecosystems of the U.S. Virgin Islands and Puerto Rico. The publication was produced for the Caribbean Field Office of the NOAA Fisheries/Habitat

Conservation Division through funding from the NOAA General Coral Reef Conservation Grant Program. The guide provides recreational users in the U.S. Caribbean with a general overview of the location of natural reserves, parks and other protected areas containing coral reefs and associated habitats. It discusses the importance of appropriate anchorage practices, as well as some of the regulations in the U.S. Caribbean designed to protect the coral reef ecosystem.

National Centers for Coastal Ocean Science Evaluates Recovery Rates of South Florida Coral Reefs. The National Centers for Coastal Ocean Science (NCCOS) are sponsoring two long-term studies to document the health of coral reefs in the Florida Keys National Marine Sanctuary. The NCCOS-sponsored scientists are examining whether the reefs can recover following recent disturbances such as bleaching, coral disease, and poor water quality, and whether fully protected zones in the sanctuary influence the reefs' recovery rates. Data collected for this study, including species richness, coral bleaching levels, and disease rates, will also be linked to a larger ecosystem model used to understand and predict coral population trends. Results will be available later this year. Learn more about NCCOS at <http://www.nccos.noaa.gov/>.

Pacific

NOAA National Marine Sanctuaries Program Releases Operations Plan for Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve. On March 9, a notice announcing the availability of the Reserve Operations Plan (ROP) for the Northwestern Hawaiian Islands (NWHI) Coral Reef Ecosystem Reserve (Reserve) was published in the Federal Register. The National Marine Sanctuary Program, NOAA Fisheries, the state of Hawai'i, the U.S. Fish and Wildlife Service, and the Reserve Advisory Council developed

the plan. It addresses priority resource management issues, including the need to protect fragile coral reefs within the Reserve. It also includes strategies for education, enforcement of Reserve rules and guidelines, and research and monitoring activities. The plan will guide management and operations of the reserve as it undergoes the sanctuary designation process and will form the foundation of the draft sanctuary management plan. The final ROP is now available for download on the Reserve's website at: <http://www.hawaiiireef.noaa.gov/documents/welcome.html>.

NOAA Ship *Sette* Departs for First Main Hawaiian Islands Cruise. The NOAA Ship *Oscar Elton Sette* departed Thursday, February 24, on the first Main Hawaiian Islands Reef Assessment and Monitoring Program (RAMP) cruise, led by the NOAA Fisheries/Pacific Islands Fisheries Science Center/Coral Reef Ecosystem Division (CRED). The cruise is a collaborative effort with the State of Hawai'i's Division of Aquatic Resources, and in cooperation with NOAA Fisheries/Pacific Islands Regional Office, NOAA's National Marine Sanctuaries Program, Hawai'i Institute of Marine Biology, University of Hawai'i, Bishop Museum, Oceanic Institute, and The Nature Conservancy. Field operations will be conducted on the windward coasts of Maui and Hawai'i, and will include Rapid Ecological Assessments, towed diver surveys, benthic habitat mapping, deployment of surface temperature recorder (STR) buoys, chlorine, temperature and depth (CTD) casts, bioacoustic surveys, and midwater trawls. Learn more about CRED at <http://www.pifsc.noaa.gov/crd/>.

NOAA's CRCP to Meet With the Freely Associated States to Develop a Mapping Implementation Plan. In April 2005, NOAA CRCP representatives engaged in coral ecosystem mapping efforts will travel to Koror, Republic of Palau; Pohnpei, Federated States of

Micronesia; and Majuro, Republic of the Marshall Islands and convene a series of meetings to gather information needed to develop a Freely Associated States Shallow-water Coral Ecosystem Mapping Implementation Plan. At the meetings, NOAA will collect information from representatives of coral ecosystem conservation and management organizations on geographic area priorities, management requirements, completed mapping activities, and map product needs. NOAA is scheduled to meet with over 20 partners from local government, U.S. government agencies, non-governmental organizations, academia and other organizations.

Newspaper Insert on Marine Protected Areas in Hawai'i Published in the *Honolulu Advertiser*. An informative newspaper insert on "Marine Protected Areas in Hawai'i" was published in the *Honolulu Advertiser* on March 9, 2005. This project was developed by the Hawai'i State Department of Land and Natural Resources/Division of Aquatic Resources (DAR) with support from the NOAA CRCP and the National Marine Protected Areas (MPA) Center. Over the past year, NOAA worked closely with a DAR MPA group to develop a science-based product that presents an unbiased look at MPAs specific to Hawai'i. The insert includes the historical and cultural context of closed areas in Hawai'i, status and threats to marine resources, benefits and drawbacks of MPAs, and the state's next steps in MPA management. The insert also provides the public with information to engage in further discussions on MPAs in Hawai'i. It can be viewed at: <http://www.hawaii.gov/dlnr/dar/library/index.htm#MPApub>.

Headquarters

Recent Data Additions to the Coral Reef Information System. Metadata for two sets of CRCP products were recently added to the

Coral Reef Information System (CoRIS). They include links to vectorized shoreline data and benthic habitat shapefiles for American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (http://biogeo.nos.noaa.gov/products/us_pacific/htm/data.htm). CoRIS now includes 843 metadata records that provide access to over 10,600 products, as well as citations of 878 coral-related publications in the NOAA Library.

NOAA Hosts Successful Author's Workshop on the Status of the U.S. Deep-Sea Corals Report.

Scientists from the deep-sea coral community came together on March 14-15, 2005, to share the progress that they have made on regional chapters for the first Deep-Sea Coral Status Report. The group also discussed the general structure of the report, brainstormed additional information could be included in the report, and addressed some basic questions regarding terminology and taxonomy. The function of this report is to inform policy-makers about the status of these resources and to highlight some major threats or stressors affecting deep-sea coral communities. The report will be completed for distribution at the 3rd International Symposium on Deep-Sea Corals, to be held November 28-December 2, 2005. For more information on the Symposium, visit <http://conference.ifas.ufl.edu/coral/>.

CORAL REEFS IN THE NEWS

Articles mentioning NOAA

“NOAA Fisheries Proposes First Listing of Corals Under the Endangered Species Act” – March 3, 2005 (NOAA Magazine). “NOAA Fisheries announced today that it will propose listing staghorn (*Acropora cervicornis*) and elkhorn (*Acropora palmata*) corals as threatened under the Endangered Species Act. This would be the first listing of any coral

species as threatened or endangered under the ESA.”

<http://www.noanews.noaa.gov/stories2005/s2398.htm>

“Corals proposed for endangered listing for first time” – March 3, 2005 (Associated Press in the San Diego Union-Tribune, CA, and about 50 other outlets). “The government is proposing to list two types of corals as endangered species, the first such listing for any coral. The listing would cover staghorn coral and elkhorn coral, said the National Oceanic and Atmospheric Administration.” <http://www.signonsandiego.com/news/science/20050303-1512-endangeredcoral.html>

“Agency wants two types of coral to be protected as threatened species” – March 4, 2005 (South Florida Sun-Sentinel). “Two species of coral that live in South Florida waters were proposed for protection Thursday under the federal Endangered Species Act, a powerful law that has never been used before to defend coral.” <http://www.sun-sentinel.com/news/local/broward/sfl-ccoral04mar04,0,1585795.story?coll=sfla-news-broward>

“More than a drop in the ocean” – March 4, 2005 (Baltimore Sun). “Greenhouse gases are warming up our oceans, changing their chemistry and threatening rainfall patterns that provide the planet with its fresh water, scientists say....Richard Feely, a researcher for the NOAA, said that coral reefs in tropical seas are already being damaged.” <http://www.baltimoresun.com/news/health/bal-hs.oceans04mar04,1,1452245.story?ctrack=3&cset=true>

“Algae taking over at site of ship grounding” – March 7, 2005 (Associated Press on KPUA, HI). “Biologists say a quick-invading seaweed has already moved into areas damaged by the Cape Flattery, a 555-foot cargo ship that ran aground off Barbers Point Harbor in early

February.”

<http://www.kpua.net/news.php?id=4733>

“The struggle to save Earth's largest life form” – March 9, 2005 (*The Christian Science Monitor*). “Townsville, Australia – Leaf through the latest tomes on the status of coral reefs worldwide and a grim picture emerges.”

<http://www.csmonitor.com/2005/0310/p14s01-sten.html>

“Deep-sea expedition: A 120-day research trip to a string of submarine volcanoes will test two UH mini subs” – March 9, 2005 (*Honolulu Star-Bulletin*). “The longest, most-challenging expedition in the Hawai’i Undersea Research Laboratory’s 25-year history will begin March 18.”

<http://starbulletin.com/2005/03/09/news/story3.html>

“Tsunami alert's upgrades approved” – March 12, 2005 (*Honolulu Advertiser*). “Bills to expand and upgrade the nation’s tsunami warning system and help clean debris from U.S. shores are on their way to the full Senate after receiving committee approval this week.”

<http://the.honoluluadvertiser.com/article/2005/Mar/12/ln/ln05p.html>

“Sea life returning to repaired coral” – March 15, 2005 (*Honolulu Advertiser*).

“Divers are seeing reef fish returning to rescued coral heads at the site of last month’s grounding of the cargo ship Cape Flattery.”

<http://the.honoluluadvertiser.com/article/2005/Mar/15/ln/ln05p.html>

“Bush not supporting marine debris bill” – March 17, 2005 (*Honolulu Advertiser*). “A U.S. Senate committee has unanimously approved a bill introduced by Sen. Dan Inouye to provide money to research and prevent the proliferation of marine debris, but the proposal does not appear to have the support of the Bush

administration.”

<http://the.honoluluadvertiser.com/article/2005/Mar/17/ln/ln29p.html>

“Marine researchers deliver blueprint for rescuing America's troubled coral reefs” – March 17, 2005 (Stanford University press release on *EurekAlert*). “An international team of marine ecologists is urging the United States to take immediate action to save its fragile coral reefs. Their message is contained a strongly worded essay titled, ‘Are U.S. Coral Reefs on the Slippery Slope to Slime?’ that appears in the March 18 edition of the journal *Science*.”

http://www.eurekalert.org/pub_releases/2005-03/su-mrd031605.php. Read the *Science* article at

<http://www.sciencemag.org/cgi/content/full/307/5716/1725>

“Scientists say S. Florida's reefs could become ‘rubble, seaweed and slime’” – March 18, 2005 (*South Florida Sun-Sentinel* and approx 15 other outlets). “The coral reefs of South Florida will continue to decline, becoming little more than ‘rubble, seaweed and slime,’ unless the government takes stronger steps to protect them, according to an article published today in the journal *Science*.”

<http://www.sun-sentinel.com/news/local/broward/sfl-creefs18mar18,0,6697617.story?coll=sfla-news-broward>

“Florida Keys Teens Urge Members of Congress to Support Global Warming Legislation during Washington Visit” – March 18, 2005 (World Wildlife Fund press release on *U.S. Newswire*). “Eleven teenagers from the Florida Keys traveled to the nation’s capital this week and secured new interest in co-sponsorship for the Climate Stewardship Act, legislation that would start reducing heat-trapping pollution generated by the United States and help prevent further damage from global warming to South Florida’s vulnerable

environment.”

<http://releases.usnewswire.com/GetRelease.asp?id=44610>

“Inouye’s marine-debris bill backed by Commerce Department” – March 22, 2005 (*Honolulu Advertiser*). “The U.S. Department of Commerce strongly supports Sen. Dan Inouye's bill to expand the federal government's role in researching and controlling marine debris, although thus far there has been no commitment to pay for the measure's \$15 million annual cost.”

<http://the.honoluluadvertiser.com/article/2005/Mar/22/lh/lh28p.html>

“Concern over reefs runs high” – March 28, 2005 (*Honolulu Advertiser*). “How much do people in Hawai’i care about the shores and reefs? A series of inquiries, including 10 focus groups and a telephone survey of 1,600 people, suggests they care a lot — though those who use the resources care much more than those who don't.”

<http://the.honoluluadvertiser.com/current/lh/jan>

Other articles

“City pushes coral reef awareness” – March 4, 2005 (*Taipei Times*). “The Taipei City Government has linked up with the private sector in an effort to let the public learn of the importance of the nation's marine environment.”

<http://www.taipetimes.com/News/taiwan/archives/2005/03/04/2003225383>

“Starfish destroying coral reefs in S. Leyte alarms gov” – March 7, 2005 (*INQ7 Interactive, Inc., Philippines*). “The provincial government has sought the help of the Department of Environment and Natural Resources and Coast Guard divers to stem an outbreak of crown-of-thorns starfish that have been eating up the coral reefs off the historical island of Limasawa.”

http://news.inq7.net/regions/index.php?index=1&story_id=29660

“WRI Report Says Increasing Human Activities Threaten Caribbean Coral Reefs” – March 9, 2005 (World Resources Institute press release on *Common Dreams*). “Nearly two-thirds of coral reefs in the Caribbean are threatened by human activities, according to a report released today by scientists at the World Resources Institute (WRI). . . .Lauretta Burke and her co-author, Jon Maidens, launched the English-language version of their report in September. Today, the Spanish-language version is being released at its newly revamped companion Web site.”

<http://www.commondreams.org/news2005/0309-15.htm>

“Greenpeace says Japan, US plan to build an airbase atop a coral reef” – March 10, 2005 (*WAVY-TV, VA and approx. 10 other outlets*). “TOKYO – Environmental activists say the U-S military plans to build a naval air base on top of a coral reef in southern Japan in violation of environmental laws.”

<http://www.wavy.com/Global/story.asp?S=3056748b>

“Underwater Explorer Returns, Finds Fewer Fish” – March 11, 2005 (*St. John Source, USVI*) – “While the reef structure still looks good, most of the big fish are gone, acclaimed oceanographer Sylvia Earle said Friday after she dove at Lameshur Bay, St. John.”

<http://www.onepaper.com/stjohnvi/?v=d&i=&s=News:Local&p=1105682494>

“Report details gradual deterioration of V.I.’s coral reefs” – March 11, 2005 (*The Virgin Islands Daily News*). “St. Thomas – Virgin Islands coral reefs have changed for the worse during the last 25 years, according to a report that is being released today by the Washington-based advocacy group The Ocean

Conservancy.”

http://www.virginislandsdailynews.com/index.pl/article_home?id=3575757

“Islanders learn to save reefs” – March 12, 2005 (*Fiji Times*). “A workshop to enhance community awareness and skills to enable villagers to effectively conserve their coral reefs will be held in the Mamanuca Group next week.”

<http://www.fijitimes.com/story.aspx?id=17709>

“Coral World opens new exhibit on reef decay” – March 12, 2005 (*The Virgin Islands Daily News*). “St. Thomas – Coral World has unveiled a new, permanent exhibit that illustrates how the territory's coral reefs have changed during recent decades.”

http://www.virginislandsdailynews.com/index.pl/article_home?id=3599939

“Fishermen protect Khanh Hoa’s coral reef” – March 14, 2005 (*Vietnam News*). “Khanh Hoa — The coral reefs and the rich marine biodiversity of the Ran Trao coastal region, a tourist hot spot, in Khanh Hoa Province have found unlikely saviours in a bunch of fishermen, who despite their many handicaps are protecting this ecologically sensitive area for future generations.”

<http://vietnamnews.vnagency.com.vn/showarticle.php?num=01ENV140305>

“Tsunami reformed shape, depth of coastal lands” – March 15, 2005 (*Knight Ridder Newspapers in Monterey County Herald and approx. 20 other outlets*). “Wandoor, India - The earthquake that triggered the catastrophic Dec. 26 tsunami was so violent that it transformed much of the coastal landscape from western Indonesia to India's Andaman and Nicobar islands.”

<http://www.montereyherald.com/mld/montereyherald/news/world/11142332.htm>

“Maldives Coral Reef Left Unscathed by Tsunami – Report” – March 16, 2005 (*Reuters and approx. 10 other outlets*).

“Sydney – The coral reefs of the Maldives, backbone of the island nation's tourism-dependent economy, survived the Dec. 26 tsunami virtually unscathed, according to an Australian marine report released Wednesday.”

<http://www.reuters.com/newsArticle.jhtml?type=scienceNews&storyID=7915544>

“Smithsonian Exhibition provides an underwater look at coral reefs” – March 18, 2005 (*Baltimore Times*). “Washington, D.C. — Visitors to the Smithsonian can experience the beauty of the world's coral reef up close.

“Miracles Under the Waves,” a collection of 34 images by photographer Akiyoshi Ito, will be on display in the Concourse of the S. Dillon Ripley Center through May 1.”

<http://www.btimes.com/News/article/article.asp?NewsID=55050&sID=4>

“Phuket governor told to halt destruction of coral” – March 23, 2005 (*MCOT, Thailand*).

“Phuket – Local fisheries officials in Thailand's southern resort province of Phuket yesterday promised to closely monitor the activities of trawler vessels, following the discovery that trawlers are destroying coral reefs which provide essential monsoon shelter for dolphins.”

<http://www.mcot.org/query.php?nid=37010>

“Tsunami region takes stock of reef damage” – March 25, 2005 (*Reuters on MSNBC*). “Koh Phi Phi, Thailand - Three months after the Indian Ocean tsunami, divers are still pulling mattresses and metal from the coral-lined bays of Thai paradise isles, although experts say overall reef damage is not that bad.” <http://msnbc.msn.com/id/7295133/>

“Reefs linked to greenhouse gas” – March 28, 2005 (*Honolulu Star-Bulletin*). “Hawai’i’s coral reefs contribute to global warming by

producing carbon dioxide when they calcify while building skeletons, University of Hawai'i researchers have found."

<http://starbulletin.com/2005/03/28/news/story4.html>

"Tsunami study touts natural barriers' value" – March 30, 2005 (*The Arizona Republic*).

"Arizona State University professor and tsunami expert Harindra Fernando went to his native land of Sri Lanka in January with a team of scientists to study the effects of the tidal waves that ravaged the island nation and left more than 40,000 dead... 'we learned that in areas where there were coral reefs offshore, the force of the waves was considerably mitigated and the damage was far less.'"

<http://www.azcentral.com/arizonarepublic/template/articles/0330campusbeat30Z10.html>

"Turmoil in the Sea: Blast Fishing Destroys Coral Reefs" – March 30, 2005 (*The Daily Californian*). "All you need is some fertilizer, kerosene, and an empty booze bottle—that's enough to kill one of the world's most fragile and endangered ecosystems."

<http://www.dailycal.org/article.php?id=18135>

"MARCH 2005 – Maldives Coral Spawning" – March 31, 2005 (Maldives Ministry of Information press release).

"Following the December 2004 tsunami there has been much debate about the amount of environmental damage caused by the large waves and oceanic swells... It seems that the corals have bounced back with the resilience of true Maldivians, spawning in huge numbers shortly after the March full moon."

<http://www.maldivesinfo.gov.mv/news.php?newsid=6542>

UPCOMING EVENTS

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

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/>

18 – 22: **Dive In To Earth Day (The Coral Reef Alliance)**. Regional events internationally.

<http://www.coralreefalliance.org/divein/>

25 – 28: **ICRI General Meeting (Final meeting of the current secretariat)**. The Seychelles.

http://www.icriforum.org/secretariat/ICRI_GM_April05.html

May 2005

17 – 19: **MPA Federal Advisory Committee Meeting**. New England.

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

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

11 – 16: **National Marine Educators Association Annual Conference**. Maui, HI.

<http://www.hawaii.edu/mcc/oceania/NMEA05.html>

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

August 2005

13 – 19: **8th International Phycological Congress**. Durban, South Africa. <http://www.ipc8.org.za/>

September 2005

19 – 23: **Marine Technology Society and IEEE Oceanic Engineering Society Oceans Conference**

2005. Abstracts due Feb. 15, 2005. Washington, DC. <http://www.oceans2005.org/>

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>

Questions, comments?

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

Access to NOAA's coral reef data and information is provided through NOAA's Coral Reef Information System at <http://www.coris.noaa.gov>. Current news on NOAA's coral reef activities can be found on the NOAA Coral Reef Conservation Program Web site, <http://www.coralreef.noaa.gov>.

