

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://coralreef.noaa.gov/news/welcome.html>.

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OF SPECIAL NOTE

NOAA, USCG Continue to Respond to Major Oil Spill in the Philippines. On August 11, 2006, *M/T Solar I* spilled 85,000 gallons of fuel oil and sank in 3,000 feet of water off the west coast of the central Philippines near Nueva Valencia. Several hundred miles of coast line, including sensitive mangrove and coral habitats, have been affected by the release so far. As much as 450,000 gallons of additional fuel remains in the vessel and may be spilled. The U.S. Department of State forwarded a request for help on Friday August 18th to the US Coast Guard, which will be deploying a small contingent from the Pacific Strike Force to evaluate cleanup potential and requirements for the spill. The US Coast Guard requested assistance from the NOAA Office of Response and Restoration's Scientific Support Team on Saturday August 19th. The NOAA Scientific Support Coordinator for the Northwest and Pacific region continues to support the USCG and local responders in conducting aerial over flights to verify initial observations and planning response methodologies for an area that is under developed and has terrain that makes over-ground travel extremely difficult. Response efforts have been somewhat hampered by a lack of response assets and technology at the spill source. The area of most severe impact appears to extend along the southwest coast of Guimaras Island and along the south sides of the smaller islands to the east. This area includes the Taklong and Tandog Islands Protected Landscape and Seascape Marine Protected Area. To read more about this spill, see the 'Coral Reefs in the News' section for media coverage.

Agencies Publish Rules On Northwestern Hawaiian Island Monument. Following President Bush's designation of the Northwestern Hawaiian Islands as a national monument on June 15, the two federal agencies charged with managing the monument published regulations in the Federal Register codifying the management

measures and prohibitions outlined in the President's proclamation. The new monument is cooperatively managed by three co-trustees: the Commerce Department's National Oceanic and Atmospheric Administration, the Department of the Interior's U.S. Fish and Wildlife Service, and the State of Hawai'i. The Proclamation had the full force and effect of law, and the management measures and prohibitions described within it became effective upon issuance. The rule codifies the Proclamation's important protections: the phase out of commercial fishing, the strict regulation of access to and activities within the monument area, the preservation of Native Hawaiian cultural activities, the careful regulation of educational and scientific activities, and the prohibition on oil, gas and mineral exploration and extraction. The co-trustees predict the monument will be a model for cooperative conservation to provide effective management and protection for these remote, ecologically and culturally significant islands and atolls. More information, can be found at: <http://hawaiiireef.noaa.gov/>; the newly published regulation will be posted in the near future.

NOAA Begins Restoration Efforts at Site of *Margara* Grounding. A cooperative emergency restoration effort is underway in Puerto Rico to save and restore coral reefs off Guayanilla Bay, Puerto Rico. The reefs were severely damaged by the grounding of the 748-foot oil tanker *Margara* along the south coast of Puerto Rico on April 27th. While en route to Tallaboa, Puerto Rico, the *M/T Margara* ran aground on the southwestern coast about two miles off the coast of Guayanilla. While no oil was released and the ship was re-floated about 23 hours later, the initial grounding and subsequent vessel removal efforts resulted in damage to an estimated 8,500 square meters – equivalent to 6439 football fields – of diverse coral reef habitat. This includes a relatively large thicket of *Acropora cervicornis*, or Staghorn coral, which was recently listed as 'threatened' by NOAA's National Marine Fisheries Service (NMFS) under the Endangered Species Act.

Because of the size of the impact, the quality of the reef and the variety of species present, the *Margara* incident may be one of the most significant coral groundings ever in the United States. Quick response by NOAA, Puerto Rico, and the Responsible Party resulted in the salvage of over 5000 pieces of hard and soft coral from the edges of the impact along with over 1000 fragments of Staghorn coral. NOAA, the Puerto Rico Department of Natural and Environmental Resources, and a contractor hired by the responsible party are performing immediate measures needed to reattach salvaged corals, secure loose rubble, rebuild portions of the impacted reef and remove anti-fouling paint from the site. The work began July 24th and is expected to take three to six months to complete. While additional restoration work will be necessary, the emergency effort is addressing restoration actions that are needed to minimize the loss of any more coral tissue due to potential hurricanes as well as the effects of a coral bleaching event. NOAA efforts are being lead by the Fisheries Restoration Center of NMFS's Habitat Program and the Damage Assessment, Remediation, and Restoration Program (DARRP) of the National Ocean Service. Because of the time sensitive nature of this effort, NOAA and the Responsible Party are discussing mobilizing additional trained personnel, including NOAA personnel, to assist and accelerate the restoration effort. Recognizing the gravity of the damage done to coral reefs by ship groundings, both houses of Congress have introduced bills (S. 1390 & H.R. 5622) to reauthorize the Coral Reef Conservation Act (CRCA) that highlight the need to address this serious issue. Both bills allow NOAA to use funds appropriated under the Act to take direct action to prevent or minimize impacts to coral reefs from vessel impacts, including vessel removal and emergency reef restabilization. Funding appropriated under the CRCA is administered by NOAA's Coral Reef Conservation Program. For

more information on the grounding and restoration, see the the *NOAA Magazine* article (<http://www.noaanews.noaa.gov/stories2006/s2680.htm>) or the NOAA press release (http://www.darrp.noaa.gov/press/pdf/Margara_Press_Release_FINAL.pdf).

ANNOUNCEMENTS

Acropora Conservation Workshops Summary Now Available. Following the May 2006 listing of elkhorn and staghorn corals as threatened species under the Endangered Species Act, NOAA Fisheries Service's (NMFS) Southeast Regional Office (SERO) held seven workshops to assist with creating a 4d rule and identifying critical habitat for these species. A summary document, "Summary Report: *Acropora* Conservation Workshops," for the seven *Acropora* Conservation Workshops held in May is now available. The summary document describes the workshop process and provides all of the information compiled during the break-out group discussions at all seven workshop locations. Access to the document is available on the SERO Protected Resources Division website at: http://sero.nmfs.noaa.gov/pr/pdf/080706_Acropora_Workshop_Summary.pdf. Additional informational materials on the listing process for threatened elkhorn and staghorn corals are available at <http://sero.nmfs.noaa.gov/pr/protres.htm#acropora>. This includes the biological status review document, all the listing documentation (including the 90-day petition response, proposed listing rule, and final listing rule), press releases, Frequently Asked Questions, and public presentations.

UNEP Pacific Mangroves Report Now Available. A United Nations Environment Programme (UNEP) Regional Seas Report 'Pacific Mangroves in a Changing Climate and Rising Sea' is now available. For a full pdf copy of the report visit: <http://www.unep.org/PDF/mangrove-report.pdf>.

International Pacific Marine Educators Conference Announced. Marine educators worldwide will gather January 15 to 20, 2007 to share resources and build a network aimed at ensuring the health of the Pacific Ocean and the communities who depend upon it. The International Pacific Marine Educators Conference (IPMEC) will be held at the University of the South Pacific in Suva, Fiji. IPMEC is an outcome of the One Ocean Marine Forum (OOMF), whose purpose was to design a worldwide network of educators for sustainable oceans, held in Hawai'i in July 2005. IPMEC will further the OOMF goal by piloting a network of Pacific marine educators. Web conferencing will allow educators who are unable to travel to Fiji to participate. For more information, visit: <http://www.ipmec.info/>.

UPDATES

Atlantic

Gill/Trammel Net Ban Signed into U.S. Virgin Islands Regulations. The regulations banning the use of gill and trammel nets in U.S. Virgin Islands waters, with the exceptions of some bait fish nets, have been signed by the Governor and are being promulgated through the publishing of announcements in local papers and at the annual commercial fishers license renewal. With CRCP funding, the Department of Planning and Natural Resources Division of Fish and Wildlife is supplementing the ban by implementing a buy-back program to purchase nets from fishermen. In particular, the buy-back program will be implemented in St. Croix, where net fishing is common. Both the regulations and the buy-back structure, which pays fishers on a scale based on their reliance on this gear, were developed by the Department in close cooperation with the St. Thomas/St. John and St. Croix Fishery Advisory Committees. The ban and buy-back also represent an effort on the part of the Territory to implement regulations that are complementary to those

recently amended by the Caribbean Fishery Management Council in response to the Sustainable Fisheries Act. Copies of the signed regulations are available upon request; contact Lisamarie.Carrubba@noaa.gov.

Water Quality Baseline Data to Improve Management of the Threatened Species Staghorn Coral. National Centers for Coastal Ocean Science (NCCOS)-sponsored researchers have demonstrated that studies of temporal and spatial changes in phytoplankton biomass and turbidity provide essential information on coral reef ecosystem function and health. In a study sponsored by NCCOS, scientists compiled baseline data for La Parguera Natural Reserve, located in Southwestern Puerto Rico, and provided evidence to support the efficacy of using phytoplankton biomass and turbidity as sentinels of significant environmental factors "modifying" coral reef systems. More specifically, they showed evidence supporting its efficacy as a sentinel of impacts to the threatened species staghorn coral (*Acropora cervicornis*). Fluctuation of phytoplankton biomass responds to several factors, including nutrient inputs derived from human activity and natural causes. Turbidity is mostly affected by sediment resuspension or transport from terrestrial systems. This information can inform management and ultimately lead to improved decision-making.

'Protecting Corals Saving Ships' Update. The 'Protecting Corals Saving Ships' project aims to produce electronic navigation charts (ENC) that reflect the positions of corals, marine protected areas (MPA), and other marine information objects (MIO) in order to protect marine resources, improve safety of navigation and to provide important information for both resource managers and navigators. Recently, the geographic coordinates of the Florida Keys National Marine Sanctuaries (FKNMS) regulated areas were compared with published data and verified for accuracy. Additionally, a final version

of the MPA Functional Classification System Center was received from the NOAA MPA Center. The functional characteristics contained in this document are expected to become a key component of the International Hydrographic Organization (IHO) S-57 data that makes up the Coral Reef and MPA MIO layer of the ENC. However, in order to gain international acceptance for using this classification system, work is still needed to convince the World Conservation Union (IUCN) Community that the MPA Functional Classification System is complimentary to, and not a substitute for, the IUCN Habitat Classification approach. To this end, a document will be prepared for IUCN. To read about more recent project accomplishments or for more information, visit: <http://savingcoralandships.noaa.gov/>.

Biogeography Team Provides Critical Data to Support Management of Marine Resources Around St. John, USVI. The Center for Coastal Monitoring & Assessment's (CCMA) Biogeography Team recently led a joint mission of over 500 SCUBA dives to characterize and monitor the coral ecosystem and living marine resources found around the island of St. John in the U.S. Virgin Islands. The work was conducted in partnership with the National Park Service (NPS), US Geological Survey (USGS), and the University of Hawai'i. The mission was conducted from July 7-30, 2006 and was supported by the Coral Reef Conservation Program, CCMA, NPS, and USGS. The objectives of the study were to 1) monitor the quality and condition of the coral reef ecosystem surrounding the near shore waters of St. John, 2) define reef fish habitat utilization patterns, 3) collect data on the distribution and abundance of fishes within and outside the Virgin Islands Coral Reef National Monument (VICRNM) to evaluate MPA effectiveness, and 4) track the movement of fishes between habitats and management strata using acoustic telemetry technology. Preliminary results for objectives 3) and 4) show that: the percent live coral cover at several sites has

dropped from between 40 and 60% cover to about 20% live coral cover, possibly due to impacts from coral bleaching and disease in 2005/2006; and the 46 acoustically tagged fishes representing 11 species and eight families show varying levels of movement depending on species. Learn more about the Biogeography Team's work at <http://ccma.nos.noaa.gov/about/biogeography/>.

SEFSC Completes Tortugas Ecological Reserve Fish Census. Reef fish visual census sampling was completed at the end of July in the Tortugas Ecological Reserves by the Southeast Fisheries Science Center (SEFSC). Three of four cruises were successfully completed, the first being pre-empted by Tropical Storm Alberto. Scientists completed 34 dives, during which 113 visual census transects were conducted. Three temperature loggers lost during the 2005 hurricane season were replaced. The data generated from the cruises will allow researchers to continue to assess the effects of MPA establishment on exploited fish communities in the Tortugas.

Florida Keys Coral Disease and Condition Survey. The Florida Keys National Marine Sanctuary (FKNMS), in partnership with the U.S. Environmental Protection Agency (EPA), will conduct its annual survey of coral disease and condition September 6-14 aboard the NOAA Ship *Nancy Foster*. These surveys have been conducted at fixed stations from the Tortugas to Biscayne Bay since 1998; a report on the findings from the first three years of the study was published recently. To read the abstract of this publication, please visit: <http://www.epa.gov/GED/publica/c0302.htm>.

Virgin Islands Watershed Protection Workshop Held. As part of a project funded through the NOAA Coral Reef Conservation Program to promote effective management of coral reef ecosystems, specifically by providing capacity building support for addressing land-based pollution sources, a three day workshop was

held on August 14-16, 2006 in St. Croix, U.S. Virgin Islands (USVI). The workshop focused on building effective erosion and sediment control (ESC) and stormwater programs in the USVI and adapting ESC and stormwater practices to island environments. Workshop attendees participated in case study activities to apply watershed planning and site design techniques to local examples and reviewed and evaluated USVI regulatory and programmatic capacity to apply priority watershed protection tools.

CSFCI Study Results Presented to Puerto Rican Fishermen. Eight workshops were held in Puerto Rico in support of the Southeast Fisheries Science Center (SEFSC) Caribbean Sustainable Fishing Communities Initiative (CSFCI) study. The main objective of these workshops was to present the major findings of the community profiling efforts in the area to fishermen, fishery managers and the general public. The exchanges in the various workshops helped validate the major findings of the community profile work and also provided an opportunity for fishermen to voice their concerns about the new fishing regulations, particularly the new licensing program; the impact of minimum size limits; and area and season closures. The workshops took place in San Juan, Fajardo, Peñuelas, Mayaguez, Puerto Real, Aguadilla and La Parguera between June 19 and 29, 2006. A report summarizing the feedback obtained from these workshops is currently being reviewed. These findings will be incorporated into the final report, to be completed in the upcoming months, which will detail the level of engagement and dependence of Puerto Rican fishing communities. For more information on the CSFCI, visit:

http://www.sefsc.noaa.gov/ssrg/ssrgsustain_init.html.

SEFSC Holds Workshops in USVI on Fishing Community Profiles. In August 2006, two workshops were conducted in St Croix, U.S. Virgin Islands (USVI) to review results from the profiling of fishing communities. These

workshops were intended to provide local stakeholders and the public the opportunity to comment and critique the findings from the ethnographic research undertaken in 2004 and 2005. Both workshops were designed to strengthen working relationships with local Cruzan people as well as strengthen their confidence in the research findings. The feedback from these workshops will be incorporated into the final in-depth community profile of St. Croix and its fisheries. Similar workshops will be conducted in St Thomas, USVI shortly after Labor Day.

SEFSC Completes Report on the Fishermen of Navassa Island. A report on the oral history and contemporary assessment of Navassa Island fishermen has been completed by the Southeast Fisheries Science Center (SEFSC). The completed report is in English, a French version is being reviewed. Copies of the reports will be sent to the Coral Reef Conservation Program, the Haitian Government, NOAA Headquarters, and the Caribbean Fishery Management Council after internal clearance is complete. These reports will also be made available on the SEFSC website in a pdf format; download the English version at: http://www.sefsc.noaa.gov/PDFdocs/CR_Wiener_2006.pdf.

Pacific

NCCOS-Supported Study Demonstrates NOAA Participates in Guam Coral Reef Funding Workshop. NOAA staff took part in a workshop held in Guam on July 11-12 to help identify funding and other support for priority coral reef protection and conservation projects in Guam. NOAA joined representatives from the U.S. Fish and Wildlife Service and other Department of Interior Bureaus, U.S. Environmental Protection Agency, and the Natural Resource Conservation Service in responding to priority projects beyond Guam's Local Action Strategies (LAS). These included watershed restoration, alternative energy development,

invasive species, social marketing, and development of mitigation plans and strategies. The coral point-of-contact for Guam gave an overview of local priority projects and needs. This was followed by a Federal presentation on grant opportunities and the ability to provide technical assistance addressing Guam's needs. Through breakout sessions, attendees were able to meet directly with each federal agency to discuss potential projects and the application process. Learn more about Guam's LAS at: http://www.coralreef.gov/las/pdf/Guam_LAS_factsheet.pdf.

NOAA Participates in CNMI Coral Reef Funding Workshop. NOAA staff took part in a workshop held in Saipan, Commonwealth of Northern Mariana Islands (CNMI) on July 13-14, 2006 to help identify funding and other support for priority coral reef protection and conservation projects in CNMI. NOAA joined representatives from the U.S. Fish and Wildlife Service and other Department of Interior Bureaus, and the U.S. Environmental Protection Agency in responding to priority projects within CNMI's Local Action Strategies (LAS). Other cross-cutting needs such as enforcement, construction, and personnel/capacity were topics of discussion during the workshop. Presentations were given by LAS coordinators highlighting projects that are in need of funding, technical assistance or other similar support. This was followed by a Federal presentation on grant opportunities and the ability to provide technical assistance addressing CNMI's needs. A number of promising partnership prospects resulted from the presentations. Discussions centered on increasing support for enforcement, creating partnerships with non-government organizations or other community groups, and improving coordination and communication. http://www.coralreef.gov/las/pdf/CNMI_LAS_factsheet.pdf.

CDHC Convenes Pacific Coral Disease Workshop. A workshop hosted by the Coral Disease and Health Consortium (CDHC) was convened in Honolulu Hawai'i on June 19-23 to help chart a "Vision for Action" for Coral Disease in the Pacific and Indo-Pacific. The goal of the workshop was to develop a strategic plan of action to promote the effective detection, identification and management of coral diseases in the Pacific region. The workshop brought together more than 40 attendees from around the world with a broad range of expertise in coral biology and ecology, and human and wildlife disease investigation and management. Through working breakout sessions, strategic plans were generated to address: 1) research needs to better understand the etiologies, epidemiology and ecology of coral diseases; 2) management needs in the context of identifying innovative strategies for considering and implementing disease management on coral reefs; and 3) novel strategies to engage the public and political sectors in addressing coral disease in the Pacific. A workshop report presenting these action strategies and outlining additional needs and recommendations is expected by September 2006. Learn more about the CDHC at: http://www.coral.noaa.gov/coral_disease/cdhc.shtml.

Investigation of Unusual Coral Disease Outbreaks Training Held in Hawai'i. The Coral Disease and Health Consortium (CDHC) provided training in investigative techniques to respond to coral disease outbreaks for coral biologists and disease specialists in Honolulu, Hawai'i June 22-24, 2006. The training consisted of a half-day of classroom instruction prior to the trainees' participation in a mock field investigation. The field exercises demonstrated various ecological survey techniques and sample collection methods for water, sediments, and coral tissue and mucus from diseased and healthy colonies, including sampling for histology, molecular biology and microbiology. Following the field practical, a day was dedicated to debriefing; this allowed individuals with expertise

in various aspects of disease investigation to contribute to the investigative procedure. These ideas and perspectives will be used to further refine methodologies and enhance future response team training and outbreak investigations. Current Outbreak Investigation Guidelines and forms can be found on the CDHC website. Learn more about the CDHC at:
http://www.coral.noaa.gov/coral_disease/cdhc.shtml.

International

NCCOS-Supported Study Demonstrates Dramatic Impact of Poor Land Use Practices on Coral Reef Health. In a recent paper, National Centers for Coastal Ocean Science (NCCOS)-funded scientists in the Pacific island of Palau documented the fate of turbid river plumes on a linked mangrove, estuary, and coral reef lagoon ecosystem. While increased sediment loading was shown to have no measurable effect on mangroves lining the coast, excess silt which escaped the mangrove buffer prevented coral larvae from settling and smothered adjacent coral colonies. This led to substantial coral mortality in the lagoon. These results highlight the dramatic impact poor land use practices, leading to excessive siltation, can have on coral reefs adjacent to coastal watersheds. In efforts to reduce siltation, similar findings in the Ngerikill River watershed of Airai State in Palau resulted in a mangrove cutting moratorium throughout the state. Those findings also prompted national level legislation.

National/Headquarters

NOAA Coral Reef Watch Scientist Featured on "The World." British Broadcasting Corporation's "The World" aired a story on the record breaking 2005 Caribbean coral bleaching event on August 14th. The story included an interview with Dr. Mark Eakin, Coordinator of NOAA/NESDIS Coral Reef Watch and focused on the bleaching that occurred on reefs in the Caribbean, the upcoming bleaching season, and NOAA's satellite and in situ monitoring efforts.

The show airs internationally and on many National Public Radio stations in the United States. It can be heard at <http://www.theworld.org/?q=node/3672>. For more information on the Caribbean bleaching event see <http://coralreefwatch.noaa.gov/caribbean2005>.

New Products in CoRIS. See table on Page 15.

CORAL REEFS IN THE NEWS

Articles mentioning NOAA

"Shedding Light On Artificial's Impact" – July 30, 2006 (Miami Herald, FL and approx. 1 other source). "For decades, fisheries scientists and managers have debated the pros and cons of deploying artificial reefs, the major issue being whether man-made underwater structures draw fish away from natural coral reef habitats. A recent study by researchers at Nova Southeastern University Oceanographic Center shows the answer is no -- at least if the man-made structures are ships."
<http://www.miami.com/mld/miamiherald/sports/15154871.htm>

"Corals Are "In Hot Water": How NOAA Satellites Are Helping" – July 31, 2006 (NOAA Magazine). "...NOAA's polar-orbiting satellites that circle the Earth are a crucial tool in combating coral bleaching....On board each satellite is a sensor called the Advanced Very High Resolution Radiometer, or AVHRR. Among other things, this sensor can measure the heat that radiates from the surface of the Earth, including the ocean, allowing NOAA to monitor the sea surface temperature around the globe every day. The NOAA Coral Reef Watch program customizes products from these satellite temperature readings to look for areas at risk for coral bleaching."
<http://www.magazine.noaa.gov/stories/mag206.htm>

"Researchers Plot Future of Reefs During Annual Coral Spawning in NOAA's Florida

Keys National Marine Sanctuary” – August 4, 2006 (NOAA press release on <http://floridakeys.noaa.gov> and approx. 1 other source).

“Preserving the coral reefs of the Florida Keys National Marine Sanctuary will be much more than a nine to five job for a team of researchers studying this year's coral spawning. In a project funded by the sanctuary and NOAA's Coral Reef Conservation Program, the team will dive during the night and tend coral larvae during the day as they work on techniques to "seed" declining coral reefs with new larvae.”

<http://floridakeys.noaa.gov/news/coralspawning.pdf>

“Restoration Efforts Follow Ship Grounding, Reef Damage” – August 11, 2006 (NOAA Magazine).

“Emergency restoration efforts are underway in Puerto Rico following the grounding of the 748-foot oil tanker Margara along the south coast of Puerto Rico.”

<http://www.noanews.noaa.gov/stories2006/s2680.htm>

“Test-Tube Coral Babies’ May Mend Reefs” – August 16, 2006 (Associated Press in CBS News and approx. 200 other sources).

“Marine scientists hope ‘test-tube coral babies’ will take root to help restore a tract of reef ravaged by a 1984 ship grounding in the Florida Keys National Marine Sanctuary.”

<http://www.cbsnews.com/stories/2006/08/16/ap/tech/mainD8JHNOL01.shtml>

“Coral Warnings Issued Again” – August 23, 2006 (Caymanian Compass, Cayman Islands and approx. 2 other sources).

“Scientists issued a warning Tuesday that temperatures in the Caribbean Sea were abnormally high and approaching levels that could be disastrous for coral reefs – many of which suffered unprecedented die-offs last year due to hot waters....NOAA alerted scuba-dive operators and underwater researchers in the U.S. Caribbean territories to look for coral damage and to be careful around the reefs, which are easily damaged by physical contact, [A] Strong told The Associated Press in a telephone interview from

Maryland. The agency issued a warning that is in effect until the waters cool off.”

<http://www.caycompass.com/cgi-bin/CFPnews.cgi?ID=1015824>

“NOAA Warning: Virgin Islands Coral Reefs Threatened Again” – August 23, 2006 (CYBER DIVER News Network on www.cdnn.info).

“Scientists with the National Oceanic and Atmospheric Administration's Coral Reef Watch have issued a warning to scuba-dive operators and fishery managers to be on the lookout for signs of coral bleaching after satellite images taken earlier this week reflected above normal temperatures in the Caribbean Sea.”

<http://www.cdnn.info/news/eco/e060823.html>

Other articles

“Marine Protected Areas: It Takes a Village, Study Says” – July 27, 2006 (Wildlife Conservation Society press release on www.eurekalert.org and approx. 5 other sources).

“Coral reef marine protected areas established by local people for traditional use can be far more effective at protecting fish and wildlife than reserves set up by governments expressly for conservation purposes, according to a study by the New York-based Wildlife Conservation Society (WCS) and other groups.”

http://www.eurekalert.org/pub_releases/2006-07/wcs-mpa072706.php

“Reef Gets Sugar Hit in Ship Mishap” – July 27, 2006 (The Australian, Australia and approx. 10 other sources).

“Tonnes of Queensland sugar had to be pumped overboard after a bulk carrier crashed into a coral reef in Papua New Guinea, but authorities are unsure what damage it might do to marine life. Marine salvagers dumped the spoiled sugar into the ocean in order to refloat the *Zhi Qiang* on July 13 after it hit Long Reef, between Samarai and Misima Islands, 12 days earlier.”

<http://www.theaustralian.news.com.au/story/0,20867,19928092-23109,00.html>

“Speaker Warns of Climate Risk” – July 27, 2006 (Honolulu Star Bulletin, HI). “...Based on prehistoric records, when Earth averaged just 2 degrees Fahrenheit warmer on average than it is now, sea levels were 24 to 27 feet higher, said Thomas Goreau, president of the Global Coral Reef Alliance.... Goreau estimates that "alarming increases in sea-surface temperatures" will eventually put all coral reefs at risk -- even if people stopped all fossil fuel use right away. In the face of such a dire prediction, his nonprofit organization is sharing its technique for growing and maintaining coral that can survive temperature stress 16 to 50 times better than in nature.”
<http://starbulletin.com/2006/07/27/news/story11.html>

“Health Check For Malaysia's Coral Reefs” – July 28, 2006 (FISHupdate, United Kingdom). “The UK Government is providing £18,000 to support the establishment of a sustainable Reef Check Centre in Malaysia. Announcing the funding during his visit to Malaysia, UK Biodiversity Minister, Barry Gardiner, said that the project will improve the availability of information on the status of Malaysian coral reefs and enable better management of marine ecosystems. ‘Coral reefs represent an economically important ecosystem in Malaysia as the foundation of a significant percentage of the country's tourist industry.’”
http://www.fishupdate.com/news/fullstory.php/aid/5030/Health_check_for_Malaysia's_coral_reefs.html

“135 Students Learn Of Coral Reefs at Summer Programme” – July 29, 2006 (Democrat Newspaper, St. Kitts and Nevis). “...The sub-theme for this years programme was “People and Corals: Healthy Coral Reefs Produce A Healthy Environment” and utilized persons from both the public and private sector. Adding to the suitability of the chosen topic is the eventual

implementation of the Coral Reef package into the school curriculum.”

[http://www.pandemocrat.org/Newspaper/Details.cfm?Nz=%247GIJ2%20%20%20%0A&Iz=%24\(2PJ%23%40%20%20%0A](http://www.pandemocrat.org/Newspaper/Details.cfm?Nz=%247GIJ2%20%20%20%0A&Iz=%24(2PJ%23%40%20%20%0A)

“Strategy Sought for Protecting Endangered Sea Turtles, Coral Reefs in The Region” – July 30, 2006 (AME Info, United Arab Emirates). “Region-wide cooperation in the conservation of endangered marine turtles and coral reefs in the Gulf will be the focus of a regional conference to be held in Abu Dhabi in September this year.”
<http://www.ameinfo.com/92700.html>

“Altered Oceans” – July 30-August 3, 2006 (Los Angeles Times, CA and approx. 2 other sources). “A five-part series on the crisis in the seas.” <http://www.latimes.com/news/local/oceans/la-oceans-series.0,7842752.special>

“Malaysia’s Reef Project Gets Grant” – July 31, 2006 (www.greenconsumerguide.com, United Kingdom). “A centre designed to promote the sustainability of Malaysia’s coral reefs has received an £18,000 grant from the UK Government. The Reef Check Centre project will improve the availability of information on the reefs, and help develop better management of marine ecosystems.”
<http://www.greenconsumerguide.com/index.php?news=3214>

“Port Richey Wants to Plant Artificial Reefs” – August 2, 2006 (St. Petersburg Times, FL). “City officials will ask the county for \$50,000 to plant 375 Ecoreefs to promote natural coral reef growth and attract tourists to area keys.”
http://www.sptimes.com/2006/08/02/Pasco/Port_Richey_wants_to_.shtml

“Pacific Leaders Back Bottom Trawling Ban” – August 2, 2006 (Greenpeace press release on www.scoop.co.nz, New Zealand).

“The Presidents of the Republic of the Marshall Islands (“RMI”), the Federated States of Micronesia (“FSM”), and the Republic of Palau (“Palau”) have called for a temporary moratorium on deep sea bottom trawling in the Pacific and pledged to pursue the issue before the Pacific Islands Forum and the United Nations when those organizations take up the issue in negotiations this Fall.”

<http://www.scoop.co.nz/stories/PO0608/S00026.htm>

“Outbreak On Reef Is Due” – August 4, 2006 (*The Courier-Mail*, Australia).

“The coral-devouring crown of thorns starfish is ripe for another assault on the Great Barrier Reef, scientists warn. It’s been 16 years since the last COT outbreak leaving the starfish with plenty of regenerated coral on which to feed. Australian Institute of Marine Science research director Peter Doherty said there had been up to three outbreaks documented at regular intervals since the mid-1960s.”

<http://www.news.com.au/couriermail/story/0,23739,2014434-953,00.html>

“Scientists Call for Tougher Fish Theft Laws” – August 4, 2006 (*ABC News* on www.abc.net.au, Australia and approx. 1 other source).

“...Professor David Bellwood, from the James Cook University, says “roving bandits” are cleaning out entire species of coral reef fish and selling them in the lucrative international live fish market. He has joined a team of 20 international marine scientists to address the global problem and says governments must act now to preserve the world’s ocean resources.”

<http://www.abc.net.au/news/newsitems/200608/s1706410.htm>

“Scientists Call for Coral Reef Regulations” – August 4, 2006 (*United Press International* on www.upi.com and approx. 11 other sources).

“...With the health of tropical coral reefs facing a serious threat from the burgeoning live fish trade in areas like Hong Kong, a team of scientists from the University of Cambridge have joined with other marine specialists to ask that governments regulate the harvesting of reef fish worldwide, said the journal *Science*. The scientists claim reef fishermen employ destructive methods in gathering fish from coral reefs and also over-harvest the larger fish that help sustain the ecosystem around the reefs.”

<http://www.upi.com/NewsTrack/view.php?StoryID=20060804-025440-5074r>

“Live Fish Trade Threatens Coral Reefs” – August 4, 2006 (*Life Style Extra*, United Kingdom).

“...Already under threat from global warming, the \$1billion (£530m) live reef fish trade could wipe out species and destroy weakened reefs in the Indo-Pacific region around Malaysia and Borneo and even further afield. It also threatens to destroy the tourist diving industry in affected areas. Many of the fishermen use cyanide to kill the fish - which also damages the reef and is illegal. One million kilos of the poison have been used in this way since the 1960s.”

http://www.lse.co.uk/ShowStory.asp?story=LJ427798D&news_headline=live_fish_trade_threatens_coral_reefs

“Researchers Appeal for New Regulations to Save Coral Reefs From Live Fish Trade” – August 4, 2006 (*CYBER DIVER News Network* on www.cdnn.info and approx. 3 other sources).

“Researchers are calling for tighter controls on the live reef fish trade, a growing threat to coral reefs, in letters to the international journal *Science*.”

<http://www.cdnn.info/news/eco/e060804a.html>

“Survey Will Target Areas of Martin County’s Coral Reefs Needing Care” – August 6, 2006

(*TC Palm, FL*). “To protect increasingly rare corals and better understand how South Florida residents use the near-shore reefs, researchers from the University of Miami have begun surveying anglers, divers and surfers from Martin to Miami-Dade counties.”

http://www.tcpalm.com/tcp/local_news/article/0,2545,TCP_16736_4897016,00.html

“Run-off Stressing Coral: Study” – August 7, 2006

(*ABC News on www.abc.net.au, Australia and approx. 3 other source*). “A new study of the Great Barrier Reef shows the coral inshore is in sharp decline, in comparison to the reef further off the coast...University of Queensland researcher Guy Marion says increased nutrients and sediment from farming and development have stressed and killed inshore coral.”

<http://www.abc.net.au/news/newsitems/200608/s1708155.htm>

“Leaders Take on Micronesia Challenge” – August 8, 2006

(*Saipan Tribune, Commonwealth of the Northern Mariana Islands*). “Leaders from all over Micronesia have signed an agreement to work together to conserve the region's natural resources. Dubbed the "Micronesia Challenge," the regional program aims to effectively conserve at least 30 percent of near-shore marine and 20 percent of forest resources across Micronesia by 2020...The Northern Marianas, Guam, Palau, Marshall Islands, and the Federated States of Micronesia are all participants in the Challenge.”

<http://www.saipantribune.com/newsstory.aspx?cat=1&newsID=60021>

“Phu Quoc Island Moves to Preserve Coral Reefs” – August 8, 2006

(*Vietnam News Agency on VietNamNet Bridge, Vietnam and approx. 2 other sources*). “Authorities of southern Kien Giang province are working with oceanographers

to zone off the coral reefs and seaweed-inhabited areas around the Phu Quoc Island for preservation.”

<http://english.vietnamnet.vn/tech/2006/08/597719/>

“Buoys To Mark Off Underwater Preserve At St. Lucie Inlet” – August 10, 2006

(*TC Palm, FL*). “Starting this morning, state officials will install mooring and boundary buoys at the St. Lucie Inlet Preserve State Park to encourage diving, fishing and snorkeling while protecting the fragile corals. A dozen yellow buoys — anchored a half-mile apart — will delineate the 7-square-mile underwater preserve, while six white buoys will provide an easy way to tie up a boat for a visit.”

http://www.tcpalm.com/tcp/local_news/article/0,2545,TCP_16736_4905606,00.html

“Reef Madness” – August 10, 2006

(*New Times Broward-Palm Beach, FL*). “Just east of downtown Delray Beach, a yard-wide pipe runs beneath the beach, dipping under the sandy floor where the Atlantic laps against the shore...Tons of “nutrients” that the pipe spits out each month can at times act as a virtual steroid for algae, which, in amounts too great, smother and kill coral reef. The nitrate-rich liquid is swept north to the nearby Gulf Stream Reef, where it saturates the coral. This is the third-largest reef in the world, stretching from the Dry Tortugas in the Keys to West Palm Beach. Because of the burgeoning population in South Florida, it’s also the most imperiled.”

http://www.newtimesbpb.com/Issues/2006-08-10/news/feature_full.html

“What Are Coral Reefs?” – August 10, 2006

(*Jamaica Gleaner, Jamaica*). “...Coral reefs are among the most biologically diverse regions on earth. Only tropical rainforests might provide homes for more species of plant and animal life. Even though they cover only a tiny fraction (less

than .2 per cent) of the ocean's bottom, coral reefs contain more than 25 per cent of all marine life.”

<http://www.jamaica-gleaner.com/gleaner/20060810/eyes/eyes2.html>

“Big Algae Bloom Overshadows Coral Reefs” – August 12, 2006 (*The Ledger, FL*). “Officials say a large bloom of blue-green algae stretching across South Florida bays is threatening coral reefs and seagrass.”

<http://www.theledger.com/apps/pbcs.dll/article?AID=/20060812/NEWS/608120372/1004>

“RP’s Coral Reefs Get Big Promo in the US” – August 18, 2006 (*Philippine News Agency on www.bayanihan.org*). “Philippine coral reefs are getting a big promotion in the United States (US) through the Shedd Aquarium in Chicago.....The Wild Reef has attempted to recreate a Philippine coral reef and based this on the Apo Island Marine Reserve located in the town of Dauin, Negros Oriental in Central Philippines.”

<http://www.bayanihan.org/html/article.php/20060818201323986>

“RM10mil to Build Reefs for Turtles” – August 18, 2006 (*The Star, Malaysia*). “The Terengganu government has allocated RM10mil to build giant artificial coral reefs in several designated coastal areas in the state in an effort to protect the leatherback turtle.”

<http://thestar.com.my/news/story.asp?file=/2006/8/18/nation/15174012&sec=nation>

“Mauritius to Save World’s Top Sites From Climate Change” – August 19, 2006 (*African News Dimension Network, South Africa*). “As a member of the World Heritage Committee, Mauritius will be discussing what action to take in protecting the five World Heritage sites currently under threat from climate change. These sites include; Mount Everest (glaciers), the Peruvian Andes (glaciers), US and Canadian glaciers, the Great Barrier and Belize Barrier (coral) Reefs.”

<http://www.andnetwork.com/index?service=direct/0/Home/recent.titleStory&sp=149913>

“Global Warming Threatens Life of Corals” – August 22, 2006 (*The Hindu, India*). “The marine eco system especially the corals in India are being threatened due to global warming, causing concern to the government as well as to environmentalists, according to a senior forest official who has been conducting an extensive study of the corals. ‘Global warming is leading to bleaching and mass mortality of the corals which form a very vital part of the marine eco system,’ said C N Pande a senior forest officer in Gujarat.” <http://www.hindu.com/thehindu/holnus/002200608221121.htm>

“Sex in the Sea” – August 23, 2006 (*Voice of America, U.S.*). “....Coral spawning is described by some scientists as an explosion of eggs and sperm. This year researchers at the Florida Keys National Marine Sanctuary are collecting coral spawn to study and reproduce coral in the laboratory. Test tube baby coral will then be used to restore damaged reef in the shallow waters near Key Largo, Florida.”

<http://www.voanews.com/english/2006-08-23-voa50.cfm>

“Moving Day for Prickly Creatures: Scientists Hope to Protect Animals From Dangerous Hurricane Seasons” – August 27, 2006 (*The News-Press, FL*). “....Scientists and volunteers spent the day 5 miles offshore rounding up about 500 long-spined sea urchins in a shallow rubble zone and moving them to deeper water on the coral reef. With the height of hurricane season approaching, the idea was that the urchins (often called Diadema for their scientific name *Diadema antillarum*) will be safer on a reef in deep water than in rubble in shallow water.” <http://www.news-press.com/apps/pbcs.dll/article?AID=/20060827/NEWS0105/608270416/1075>

“Cleanup Teams Spray Chemicals on Oil Spill” – August 27, 2006 (*Manila Standard Today, Philippines*). “The Coast Guard and private contractors sprayed large amounts of chemical dispersant on a massive oil spill on Guimaras

Island in a last-ditch effort to keep it from spreading, officials said yesterday. But a Coast Guard official conceded they did not know if they could contain the spill from the sunken Solar I tanker because they had not yet determined if the tanker was still leaking oil more than two weeks after it went down in rough weather.”

http://www.manilastandardtoday.com/?page=news03aug28_2006

“World Helps Philippines With Oil Spill” – August 28, 2006 (Associated Press in The Boston Globe). “Australia and France have pledged to help the Philippines clean up a massive oil spill from a sunken tanker, President Gloria Macapagal Arroyo said Monday. Arroyo thanked the United States and Japan for sending experts to help deal with the spill, which has contaminated resorts, marine reserves, seaweed farms and fishing communities on the southern coast of Guimaras island and outlying areas.”

http://www.boston.com/news/world/europe/articles/2006/08/28/world_helps_philippines_with_oil_spill/

“Petron: Insurance to Pay Cleanup Bill” – August 28, 2006 (Associated Press in Manila Standard Today). “Under fire for its attempt to dodge legal liability for the Guimaras oil spill, Petron Corp. yesterday assured Congress that the ship owner’s insurance company would make \$300 million or about P1.7 billion available for cleanup and rehabilitation efforts.”

http://www.manilastandardtoday.com/?page=news01aug29_2006

“Study Shows Significant Coral Reef Regeneration in the Arabian Gulf” – August 29, 2006 (World Wildlife Fund press release on www.panda.org and approx. 1 other source).

“Researchers studying coral reefs in the Arabian Gulf have found encouraging signs that corals in Abu Dhabi and Qatar are regenerating. According to the WWF-sponsored coral reef study, at least 18 out of an original 36 species of coral found in the

region have recovered from damage suffered due to past climatic events.”

http://www.panda.org/news_facts/newsroom/index.cfm?uNewsID=79300

“Saving Taklong Island: UPV Scientists And Volunteers Work Together To Clean Marine Reserve Of Oil Slick” – August 31, 2006 (The News Today, Philippines). “At first glance and viewed from afar, Taklong Island, which is maintained by UP in the Visayas, may still look its pristine self. Rowing nearer to it however, one can already see the oil slick floating on the water surface.”

<http://www.thenewstoday.info/2006/09/01/saving.taklong.island.upv.scientists.and.volunteers.work.together.to.clean.marine.reserve.of.oil.slick.html>

New Products in CoRIS.

Product Name	Description
NODC Coral Pacific Dataset	Investigation of the Marine Communities of Midway Harbor and Adjacent Lagoon, 1998; NODC 0001098
<i>Link:</i> http://www.coris.noaa.gov/metadata/records/html/nodc_0001098_marine_communities_midway_harbor_1998.html	
NODC Coral Pacific Dataset	Impact of Point and Non-point Source Pollution on Coral Reef Ecosystems In Mamala Bay, Oahu, Hawaii, 1993-1994, based on Water Quality Measurements and Benthic Surveys; NODC 0001172
<i>Link:</i> http://www.coris.noaa.gov/metadata/records/html/nodc_0001172_non_point_source_pollution_mamala_bay_oahu_1994.html	
NODC Coral Pacific Dataset	Kailua Bay, Oahu, Hawaii Benthic Mapping Data 1999-2001; NODC 0001239
<i>Link:</i> http://www.coris.noaa.gov/metadata/records/html/nodc_0001239_benthic_mapping_kailua_bay_oahu_2001.html	
NODC Coral Pacific Dataset	Water Quality in Ala Wai Canal 1994; Two 24-hour Studies of Water Quality in the Ala Wai Canal during March and July, 1994 for the Mamala Bay Study, Pollutant Source Identification Project MB-3; NODC 0001188
<i>Link:</i> http://www.coris.noaa.gov/metadata/records/html/nodc_0001188_water_quality_ala_wai_canal_oahu_1994.html	
NODC Coral Pacific Dataset	Benthic Surveys for Ground Truthing of Coastal Benthic Mapping in the Main Eight Hawaiian Islands 2001-2002; NODC 0001329
<i>Link:</i> http://www.coris.noaa.gov/metadata/records/html/nodc_0001329_benthic_mapping_ground_truthing_hawaiian_islands_2002.html	
Environmental Sensitivity Index (ESI) for Florida, 1995 (metadata and maps)	ESI maps contain three types of information: shoreline habitats (classified according to their sensitivity to oiling), sensitive biological resources, and human-use resources.
<i>Link:</i> ftp://ftp.nodc.noaa.gov/pub/outgoing/CoRIS/data/nos/ESI/Florida	

UPCOMING EVENTS

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

September 2006

1-2: **Third Coastal Zone Asia Pacific Conference.** Batam Island, Indonesia.

http://cdc.fish.ku.ac.th/czap_06/index.htm

10 – 14: **American Fisheries Society 136th Annual Meeting.** Lake Placid, NY. <http://www.afslakeplacid.org/>

17 – 20: **California and World Oceans Conference.** Long Beach, CA. <http://resources.ca.gov/ocean/cwo06/>

18 – 22: **Marine Technology Society and IEEE Oceanic Engineering Society Oceans Conference 2006.**

Boston, MA. <http://www.oceans2006americas.org/>

19 – 22: **European Coral Reef Conference 2006.** Bremen, Germany. Abstracts and early registration due by May 15th. <http://isrs2006.zmt-bremen.de>
22 – 24: **MACNA XVIII: Futures in Reefkeeping.** Houston, TX. <http://www.macnaxviii.com/>

October 2006

10 – 14: **35th Annual North American Association for Environmental Education (NAAEE).** St. Paul, MN. <http://www.naaee.org/conference/naaee-2006-conference-start>
15: **Pre-ITMEMS 3 Workshop, “2005 Caribbean Bleaching Event: Response and Assessment.”** Cozumel, México. Registration deadline is September 15th, 2006. <http://www.itmems.org/bleaching.html>
15: **Pre-ITMEMS 3 Workshop, “Caribbean Coral Disease Workshop.”** Cozumel, México. <http://www.itmems.org/disease.htm>
15 – 20: **ITMEMS 3: Global Problems, Local Solutions.** Cozumel, México. <http://www.itmems.org>
21 – 25: **Post-ITMEMS 3 Workshop: “CSI for Coral Reefs: Investigative & Enforcement Forensics Field Training Workshop.”** Cozumel, México. <http://www.itmems.org/csi.htm>
22 – 23: **ICRI General Meeting.** Cozumel, México. <http://www.icriforum.org/router.cfm?show=secretariat/gmcozumelhome.html>
24 – 28: **16th U.S. Coral Reef Task Force Meeting.** St. Thomas, U.S. Virgin Islands. <http://www.coralreef.gov/taskforce/meetings.html>
30 – 31: **Coral Reef Ecosystems Biodiversity Forum.** Noumea, New Caledonia. http://www.ird.nc/biodec/english/home_page.html

November 2006

1 – 4: **Coral Reef Ecosystems Biodiversity Forum.** Noumea, New Caledonia. http://www.ird.nc/biodec/english/home_page.html
6 – 10: **59th Meeting of the Gulf and Caribbean Fisheries Institute (CGFI).** Belize City, Belize. www.gcfi.org
8 – 9: **Second Annual Coral Reef Conservation and Management Conference.** Miami, FL. <http://www.informalearning.com/CoralReefs>
10 – 11: **CGFI Caribbean Connectivity Symposium (featuring Caribbean MPA Managers’ Meeting events).** Belize City, Belize. <http://www.gcfi.org/Conferences/59th/CaribbeanConnectivity.html>
28 – 30: **Meso-scale Effects of Coral Bleaching Workshop.** Zanzibar, Tanzania. Abstracts due August 31. Contact the workshop leaders, Dr. Tim McClanahan (Wildlife Conservation Society) tmccclanahan@wcs.org and Dr. Mebrahtu Ateweberhan (Wildlife Conservation Society) mateweberhan@wcs.org, for registration details.

December 2006

9 – 13: **Restoring America’s Estuaries (RAE) – Forging the National Imperative.** New Orleans, LA. <http://www.estuaries.org/?id=4>

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>.

