

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>.

IN THIS ISSUE:

OF SPECIAL NOTE (PAGE 2)

- **U.S. Coral Reef Task Force Meeting Postponed.**

ANNOUNCEMENTS (PAGE 2)

- **Funding Available for Coral Reef Conservation Projects Through the National Fish and Wildlife Foundation/NOAA Coral Reef Conservation Fund.**
- **The Commonwealth of the Northern Mariana Islands Accepts Applications for Marine Protected Areas Systems Specialist.**
- **NOAA Coral Program Awards \$9 Million in Reef Conservation Grants.**
- **NOAA Awards More Than \$700,000 For Coral Reef Ecosystem Research in the Caribbean.**
- **NOAA Coral Reef Watch Contributes to Approved World Bank Coral Reef Global Environment Facility Project.**
- **World Resources Institute Releases Two New Reports: "Caribbean Reefs at Risk" and "Fishing for Answers: Making Sense of the Global Fish Crisis."**

UPDATES (PAGE 3)

- **University of Queensland (Australia) Partners With NOAA's CRCP.**
- **Coral Reef Watch meets with The Nature Conservancy and Palau Delegate.**
- **Coral Reef Early Warning System Station Provides Data for the Caribbean Marine Research Center During Hurricane Frances.**
- **Researchers Explore Northwestern Hawaiian Islands on New NOAA Vessel, the Hi'ialakai.**
- **National Centers for Coastal Ocean Science Scientists Conduct Review Workshops of Benthic Habitat Maps of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.**
- **National Centers for Coastal Ocean Service Research Shows Hawaiian Reef Fishes Protected in "No Take" Zones.**
- **Joint Study to Assess Impact of Dredged Sediments on Corals.**
- **Lionfish, Cannibalism, and Potential Effects on Reef Ecosystems of the Atlantic.**
- **Preliminary Results Presented on the Effects of Trap Fishing on Coral Reefs and Associated Habitats.**
- **New Findings on Disease and Cyanobacteria on Coral Reefs on the Southwestern Coast of Puerto Rico.**
- **Coral Reef Information System Improves Map Search Function in Response to User Evaluations.**
- **Recent Metadata Additions to the Coral Reef Information System.**

CORAL REEFS IN THE NEWS (PAGE 7)

UPCOMING EVENTS (PAGE 9)



OF SPECIAL NOTE

U.S. Coral Reef Task Force Meeting Postponed. The 12th biannual U.S. Coral Reef Task Force meeting, originally scheduled for September 13-15 in Miami, FL, was postponed due to the projected impact of Hurricane Ivan on southern Florida. The Task Force steering committee is currently making arrangements to reschedule the Florida meeting for early December. Details on dates and specific location will be distributed in the October Coral Reef News and will eventually be posted at <http://www.ces.fau.edu/taskforce>.

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

ANNOUNCEMENTS

Funding Available for Coral Reef Conservation Projects Through the National Fish and Wildlife Foundation (NFWF)/NOAA Coral Reef Conservation Fund. NFWF, in partnership with the NOAA's CRCP, is accepting proposals for projects that build public-private partnerships to reduce and prevent degradation of coral reefs and associated reef habitats (e.g. seagrass beds, mangroves etc.). Projects may address causes of coral reef degradation wherever they occur, from coastal watersheds to the reefs and surrounding marine environment. The deadline for pre-proposals is January 31, 2005. For more information on applying for a grant, visit <http://www.nfwf.org/programs/coral.htm>. This year NOAA invested \$1.0 million in 26 projects through the NFWF/NOAA Coral Conservation Fund, leveraging \$1.5 million in matching funds for a total investment of \$2.5 million for the protection of corals worldwide.

The Commonwealth of the Northern Mariana Islands (CNMI) Accepts Applications for Marine Protected Areas (MPA) Systems Specialist. CNMI is seeking an MPA Systems Specialist. The position will provide technical assistance in MPA systems design, evaluation, and implementation for the Commonwealth. Specifically, the position will be responsible for preparing a comprehensive MPA Program Plan for the creation and management of a network of MPAs and marine management areas. The application deadline is October 13, 2004. The position is located in Saipan, CNMI. For more information, contact Jonathan.Kelsey@noaa.gov.

NOAA Coral Program Awards \$9 Million in Reef Conservation Grants. In a September 15 press release, the NOAA CRCP announced that it will award almost \$9 million in grants to partners for coral reef conservation and research activities in fiscal year 2004. Funds will support a range of activities in the public, private and non-profit sectors, from community conservation projects to large-scale coral reef observation systems, and include support for three coral reef research institutes funded by NOAA in Hawai'i, Florida and Puerto Rico. The release specifically mentioned an almost \$1 million grant for the National Coral Reef Institute, based in Florida at Nova Southeastern University, and a separate September 28th release highlighted a \$959,900 grant to support the University of Puerto Rico's establishment of a Caribbean Coral Reef Institute to conduct biological and social research on Puerto Rico's coral reef resources. The awards reflect NOAA's strong support for coral reef conservation efforts outside the agency, and represent over thirty percent of the CRCP's budget of \$28 million in 2004. The full press release will be posted at <http://www.publicaffairs.noaa.gov/releases2004/>.

NOAA Awards More Than \$700,000 For Coral Reef Ecosystem Research in the Caribbean. On September 28, NOAA announced in a press release that the University of Puerto Rico, working under a new \$748,998 grant from NOAA, is initiating the third phase of a long-term study of Caribbean coral reefs in an effort to reverse reef degradation in the region. The grant is from the Coral Reef Ecosystems Studies (CRES) program, managed by NOAA's National Ocean Service, Coastal Ocean Program. The CRES program is a science-based, integrated approach to understand coral reef dynamics and processes, and to provide tools and options for coral reef management. In addition to the CRES Caribbean study, a CRES Micronesia study with similar objectives is also being conducted as a part of the overall program. The full press release will be posted at <http://www.publicaffairs.noaa.gov/releases2004/>.

NOAA Coral Reef Watch (CRW) Contributes to Approved World Bank Coral Reef Global Environment Facility (GEF) Project. Two NOAA scientists are part of the recently approved (September 15, 2004) World Bank "Targeted Research and Capacity Building for Management of Coral Reefs" project through the GEF. NOAA scientists serve on the Remote Sensing Working Group (WG), one of 6 WGs for the project. CRW, a NOAA/National Environmental Satellite, Data and Information Service (NESDIS) project, will receive funding through this project over the next five years (minimum) beginning early in 2005. Approximately 50 coral scientists from around the globe will be coordinating their efforts at four "Centers of Excellence" (Mexico, Zanzibar, Philippines, and Australia), promoting healthy reef practices/management, and utilizing new tools (e.g. satellites). A meeting of representatives of the WGs is planned for October 19-21 at the World Bank in Washington, DC to officially launch the

project and discuss "Common Sampling and Information-Sharing Approaches." Learn more about the GEF at <http://www.gefweb.org/>.

World Resources Institute Releases Two New Reports: "Caribbean Reefs at Risk" and "Fishing for Answers: Making Sense of the Global Fish Crisis." The World Resources Institute's new "Caribbean Reefs at Risk" is the third in a series of reports highlighting reefs at risk around the world. The first was a global assessment of the threats to coral reefs around the world, and the second focused on Southeast Asia--part of the Coral Triangle and the center of coral reef diversity. The most recent report focuses on the Caribbean, where the World Bank and other donors/stakeholders are currently involved in bilateral, regional and subregional efforts to address the threats to coral reefs -- from local development pressures to climate change. The second report focuses on the fishing crisis among small-scale fishers in Southeast Asia and their increasing marginalization by industrial fleets responding to the increasing global consumer demand for fish. Both publications discuss issues in which the World Bank is already engaged but which will be the focus of new initiatives involving global partnerships. Read the press releases for these two reports at <http://newsroom.wri.org/>.

UPDATES

University of Queensland (Australia) Partners With NOAA's CRCP. The University of Queensland (UQ) recently joined NOAA's partnership with the Australian Institute of Marine Science (AIMS) and the Great Barrier Reef Marine Park Authority (GBRMPA). NOAA/National Environmental Satellite, Data and Information Service (NESDIS) scientists held a series of planning and leveraging meetings in Brisbane from August 24 to 28. UQ, working collaboratively

with NOAA/NESDIS's Coral Reef Watch (CRW) project, has proposed to use CRW projects to leverage a grant from the Australian Government-funded Australian Research Council. Visit <http://coralreefwatch.noaa.gov/> for more information on NOAA's Coral Reef Watch.

Coral Reef Watch (CRW) meets with The Nature Conservancy (TNC) and Palau Delegate. Mr. Noah Idechong, a member of Palau's House of Delegates and an internationally recognized leader in the environmental community, met with CRW, TNC, and other interested parties on August 23. TNC has provided funding for NOAA to develop a hydrodynamic model for the Palau coastal area, and a workshop on the model and its results will be held in Palau in late-October. The final report is due to TNC by the end of 2004. TNC hopes to use the results from this hydrodynamic model to help them better design marine protected areas around Palau and improve the chances for coral recovery following a bleaching event. Visit <http://coralreefwatch.noaa.gov/> for more information on NOAA's CRW.

Coral Reef Early Warning System (CREWS) Station Provides Data for the Caribbean Marine Research Center (CMRC) During Hurricane Frances. NOAA's CREWS, a network of meteorological and oceanographic monitoring stations at major US coral reef areas, supplied the CMRC with important information about wind gusts, barometric pressure, and tidal surges during Hurricane Frances. The CMRC, located on Lee Stocking Island, Exumas, Bahamas, is partially supported by NOAA's Undersea Research Program. CREWS data will be valuable to the many researchers who study North Norman's Patch Reef near the Center, as they will be able to see what the environmental parameters were before, during and after the hurricane. Based on available information, the CREWS station

suffered no major damage. Visit <http://www.coral.noaa.gov/crews/index.shtml> for more information on NOAA's CREWS.

Researchers Explore Northwestern Hawaiian Islands (NWHI) on New NOAA Vessel, the Hi'ialakai. Recently commissioned for service in Hawai'i on September 3, NOAA's new research vessel, the Hi'ialakai, is midway through its maiden voyage through the NWHI. The mission of the journey is to conduct research and baseline monitoring of marine ecosystems encompassed within the NWHI Coral Reef Ecosystem Reserve. Thus far, scientists aboard the ship have conducted research dives in the French Frigate Shoals, where they closely investigated a coral syndrome first detected on these reefs last summer. The scientists are now at Pearl and Hermes Atoll investigating reports of coral bleaching reported last month by NOAA's National Marine Fisheries Services/Coral Reef Ecosystem Division marine debris removal crews. The coral bleaching was first observed here in 2002. Researchers are also surveying a historic shipwreck site discovered at the atoll on September 20 by marine debris removal divers with NOAA's National Marine Fisheries Pacific Science Center, working in collaboration with the National Marine Sanctuary Program. The Hi'ialakai returns to its homeport of Honolulu on October 17. Learn more about the Hi'ialakai at <http://www.pmc.noaa.gov/ha/>.

National Centers for Coastal Ocean Science (NCCOS) Scientists Conduct Review Workshops of Benthic Habitat Maps of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI). Scientists from the NCCOS's Center for Coastal Monitoring and Assessment (CCMA) conducted peer review workshops of the shallow-water benthic habitat maps of several U.S. Pacific Territories and Commonwealths. A workshop was held with

each of the partners on Guam; Saipan, CNMI; and Tutuila, American Samoa. The workshops were the final stage of the map production process before final data are released to the public. Representatives from the scientific, research, and resource management communities, as well as civilian and military agencies and the private sector, participated in the sessions to provide feedback and local expert knowledge. The benthic habitat maps were generated through the visual interpretation of satellite imagery. Presently, CCMA is preparing a cd-rom, website, and color printed atlas as the means of distributing the data and maps that have been generated. It is anticipated that these products will be released in December of 2004, but until that time, the data can be accessed via a web-based map browser at <http://biogeo.nos.noaa.gov/projects/mapping/pacific/territories/>.

National Centers for Coastal Ocean Science (NCCOS) Research Shows Hawaiian Reef Fishes Protected in “No Take” Zones.

Results of NCCOS-funded research regarding the West Hawai'i Aquarium Project shows that populations of aquarium fish species have increased in experimental "no-take" zones on the west coast of Hawai'i. The Hawai'i Coral Reef Initiative Research Program (HCRI-RP) has been monitoring the efficacy of protected areas in bolstering reef fish populations targeted by aquarium fishery. The state, through the West Hawai'i Regional Fisheries Management Area, regulated the impact of aquarium collecting by establishing a network of nine fish replenishment areas. This illustrates how marine managed areas promote depleted fish stock recovery in Hawai'i, reduce conflicts between collectors and other users, promote a sustainable fishery, and enhance aquarium fish populations. Visit <http://www.coralreefnetwork.com/network/hcri.htm> for more information on the HCRI-RP.

Joint Study to Assess Impact of Dredged Sediments on Corals. Research was undertaken in early August to lay the foundation for monitoring coral reef habitats that are in close proximity to ocean dredged material disposal sites. The South Florida Offshore Plume Study, conducted from aboard the NOAA Ship Nancy Foster, was a collaborative effort jointly sponsored by NOAA Research's Atlantic Oceanographic and Meteorological Laboratory (AOML) and the Environmental Protection Agency. Dredging operations are scheduled to begin in the fall of 2004 in both Miami and Ft. Lauderdale. Of particular concern is how the dumping will impact adjacent coral reefs. Corals could potentially be affected by the deposition of sediments, exposure to elevated suspended loads, and the attenuation of light due to high turbidity. Learn more about NOAA's AOML at <http://www.aoml.noaa.gov/>.

Lionfish, Cannibalism, and Potential Effects on Reef Ecosystems of the Atlantic.

The answer to whether the introduced lionfish of the Indo-Pacific will become an invasive species in the western North Atlantic Ocean may lie in what lionfish eat, including whether they eat each other, and what, if anything, eats lionfish. Known to be voracious predators on other fishes, they also have venomous spines that might prevent them from being eaten by other fishes, further influencing the reef ecosystems of the Atlantic. A lionfish, imported from the aquarium trade, was found cannibalized in a rearing tank, assumed to be from the stomach of another lionfish. Examination of another dead lionfish revealed a venomous spine located in the abdominal cavity. This implies that cannibalism and aggression by other lionfish could be one source of their natural mortality in the western Atlantic. Studies at the National Centers for Coastal Ocean Science, Center for Coastal Fisheries and Habitat Research will determine lionfish feeding preferences and whether native reef fishes of

the Atlantic can successfully eat lionfish. To learn more about lionfish, visit the Center for Coastal Fisheries and Habitat Research at <http://shrimp.ccfhrb.noaa.gov/lionfish/>.

Preliminary Results Presented on the Effects of Trap Fishing on Coral Reefs and Associated Habitats.

NOAA's Southeast Fisheries Science Center (SEFSC) presented preliminary results from an on-going coral reef research project to the Caribbean Fisheries Management Council at its August 2004 meeting in St. Croix, US Virgin Islands (USVI). The presentation covered the design of the project and the intended results of the completed study. To date, boat transects conducted with local research partners Florida Marine Research Institute, University of Puerto Rico-Mayagüez, and the USVI Fish and Wildlife Division have examined traps in Florida, Puerto Rico, and the USVI. Diver surveys in USVI discovered that 91.7% of traps set on hard bottom, 81.2% of traps set on reef and 33.3% of traps placed in patch reef/sand caused damage to structural organisms. Continuing research is evaluating the long-term effects of trap damage (mortality or recovery of organisms), examining the seasonality of trap placement, and completing samples in areas not yet surveyed. Visit <http://www.sefsc.noaa.gov/> for more information on NOAA's SEFSC.

New Findings on Disease and Cyanobacteria on Coral Reefs on the Southwestern Coast of Puerto Rico.

Coral reefs on the southwestern coast of Puerto Rico are being threatened by newly discovered cyanobacteria and disease. A red algal species that overgrows and kills fire coral, *Metapeyssonelia corallepida*, has been identified, as well as a new record of a disease state in coralline algae, termed "coralline white band syndrome," which kills tissue of *Neogoniolithon accretum*. Also, a bacterium was isolated from White Band Disease, identified, and shown to cause the disease upon re-inoculation in the field. The finding of the

bacterium is an important step in understanding the origins of coral diseases. The National Centers for Coastal Ocean Science, Coral Reef Ecosystem Studies (CRES) program at the University of Puerto Rico, "Integrating Science and Management in the Caribbean," is a five-year, science-based, integrated approach to understand coral reef dynamics and processes, and to provide tools and options for coral reef management. Visit

http://www.cop.noaa.gov/Fact_Sheets/CRESCaribbean.html for more information on NCCOS's CRES program at the University of Puerto Rico.

Coral Reef Information System (CoRIS) Improves Map Search Function in Response to User Evaluations.

In response to user input, the CoRIS team has implemented improvements to one of NOAA's CoRIS Data Discovery tools, the Map Search service. Using "Map Search," a person can view geographic distributions of one or more data types, select data sets, view samples and documentation, and download copies of data (see <http://www.coris.noaa.gov/metadata/map-search/viewer.htm>). The list of data types was revamped for clarity and consistency with other data discovery tools in CoRIS.

Coral Reef Information System (CoRIS) – Recent Metadata Additions.

Environmental Sensitivity Index Maps for American Samoa and the US Virgin Islands are now available via the CoRIS website, Discover NOAA's Data (see <http://www.coris.noaa.gov/data/welcome.html>). Pacific sea surface temperatures and near surface oceanographic mooring metadata records provided by the Pacific Islands Fisheries Science Center, Coral Reef Ecosystem Division have also been added to CoRIS. These metadata records include 7 records for new mooring sites and 9 updated records for existing sites. CoRIS has 582 metadata records referring to 9715 products,

and distributes 169 products via the CoRIS server.

CORAL REEFS IN THE NEWS

“Sex on the reef” ritual attracts UB biologists seeking genomic clues to coral bleaching” – September 1, 2004 (*University of Buffalo Reporter*). “The one-night-a-year spawning of massive star corals (*Montastraea* species) off the Florida coast generates millions of infant corals, each of which has the potential to help replenish coral reefs that have undergone significant environmental damage in recent years.”

<http://www.buffalo.edu/reporter/vol36/vol36n1/articles/CORAL.html>

“Billion-dollar Asian reef fish industry in peril” – September 1, 2004 (*Reuters, in Cyber Diver News Network*). “JAKARTA, Indonesia — An insatiable appetite for live reef fish in Asian restaurants is ravaging aquatic stocks in Indonesia, damaging reefs, and threatening the sustainability of a \$1 billion industry in the region, a conservation group said.”

<http://www.cdninfo.com/eco/e040901/e040901.html>

“Climate change takes its toll on Fiji's coral” – September 3, 2004 (*New Zealand Herald*).

“A marine biologist is alarmed at the deterioration of the Fijian coral reefs he has seen in the past 20 years.”

<http://www.nzherald.co.nz/storydisplay.cfm?storyID=3589159&thesection=news&thesubsection=world&thesecondsubsection>

“Ship will study reefs in NW Hawaiian Isles: NOAA's new research vessel will sail on its first voyage Sept. 13” – September 4, 2004 (*Honolulu Star-Bulletin*). “The ship *Hi'ialakai* opens a new era for studying the coral reefs of the Northwestern Hawaiian

Islands, said scientists at the ship's commissioning yesterday at Aloha Tower.”
<http://starbulletin.com/2004/09/04/news/story5.html>

“Mexico beach towns say NO to cruise ships” – September 4, 2004 (*Cyber Diver News Network*). “MEXICO CITY, Mexico – A revolt is growing in the Caribbean over increasingly massive cruise ships disgorging thousands of passengers who swamp beach towns, buy perhaps a soda and a few trinkets, and re-embark a few hours later.”

<http://www.cdninfo.com/industry/i040904/i040904.html>

“Group: Red Sea Pollution Hurts Coral Reef” – September 12, 2004 (*Associated Press, on ABC News*). “JERUSALEM - A panel of experts from Israel and abroad on Sunday urged the government to immediately halt fish farming in Israel's Red Sea coastal waters, saying pollution from operation is killing a unique coral reef.”

http://abcnews.go.com/wire/World/ap20040912_723.html

“Museum to Get \$60 Million Exhibit: Smithsonian Plans Ocean Display, Research at Natural History” – September 16, 2004 (*The Washington Post*). “The Smithsonian's National Museum of Natural History plans to announce today the largest renovation in its nearly 95-year history, creating Ocean Hall, an unusual hybrid of public display and research... Huge screens will show current video from the research vessels of the National Oceanic and Atmospheric Administration and the U.S. Navy. There will be a living coral reef, a captured giant squid and a special display for the coelacanth, a prehistoric fish that was thought to be extinct until one was found in 1938... So far, the oceans project has received \$18 million from NOAA and \$18.2 million from Congress.”

<http://www.washingtonpost.com/wp-dyn/articles/A24705-2004Sep15.html>

“Human Remains Used in Artificial Reefs” – September 25, 2004 (*Associated Press, in the Columbus Ledger-Enquirer and approx. 50 other publications*). “OCEAN CITY, N.J. - As if shooting a loved one's ashes into space or pressing them into artificial diamonds were not sufficiently offbeat, relatives of the deceased now can have their ashes mixed into concrete to help form ocean habitats.” <http://www.ledger-enquirer.com/mld/ledgerenquirer/news/nation/9760750.htm>

“Protection plea for reef fish” – September 25, 2004 (*Nature, on BBC News Web site*). “A rare reef fish called the humphead wrasse should be guarded from overfishing, experts have claimed. The WWF and the IUCN-World

Conservation Union are set to ask an international trade watchdog to include the fish on its list of protected species.”

<http://news.bbc.co.uk/1/hi/sci/tech/3684266.stm>

“World Resources Institute (WRI) report says human activities threaten bulk of Caribbean coral reefs” (News Release) – **September 29, 2004** (*World Resources Institute*). “MONTEGO BAY, JAMAICA -- Nearly two-thirds of coral reefs in the Caribbean are threatened by human activities, according to a new report by scientists at the World Resources Institute (WRI). Additionally, coral reefs are a vital component of coastal defense against the ravages of storms and hurricanes like Frances and Ivan.” http://marine.wri.org/newsrelease_text.cfm?NewsReleaseID=296

UPCOMING EVENTS

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

October 2004

3: **Coast Day 2004 – University of Delaware.** Lewes, Delaware.

<http://www.ocean.udel.edu/coastday/>

4: **Presenters' abstracts due for Coastal Zone 05 – Balancing on the Edge.** New Orleans, LA. <http://www.csc.noaa.gov/cz/>.

12 – 15: **Coastal States Organization Annual Meeting.** Traverse City, Michigan.

<http://www.sso.org/cso/conferences01.htm>.

13 – 16: **Diving Equipment and Marketing Association (DEMA) Convention.** Houston, TX.

www.demashow.com.

November 2004

2 – 4: **Third Scientific Symposium on Resource Investigations in the Northwestern Hawaiian Islands.** Honolulu, HI. <http://www.wpcouncil.org/nwhisymposium.htm>.

5: **UK Coral Reef Stakeholder Meeting.** London, England.

<http://www.icriforum.org/router.cfm?show=calendar.cfm>.

17 – 25: **3rd IUCN World Conservation Congress.** Bangkok, Thailand.

<http://www.iucn.org/congress>.

December 2004

13 – 17: **American Geophysical Union Annual Meeting.** San Francisco, CA.

<http://www.agu.org/meetings/fm04>.

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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>.

