CORAL REEF NEWS

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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

18th U.S. Coral Reef Task Force Meeting:
Bridging Culture and Science for Conservation.
The U.S. Coral Reef Task Force (Task Force) will be meeting in Pago Pago, American Samoa from August 20-23. Co-chaired by the Department of Commerce and the Department of the Interior, the Task Force is composed of senior representatives of twelve federal agencies and the Governors of seven states, territories, and commonwealths. Since its establishment by Presidential Executive Order in 1998, the Task Force has helped lead U.S. efforts to address the global decline of coral reefs and to effectively manage the nation's valuable coral reef ecosystems.

This meeting will highlight the issues, progress, challenges and opportunities for coral reef management, with special sessions focused on climate change and regional ecosystem management. American Samoa is hosting a workshop on Translating Traditional Knowledge into management on Monday afternoon. On Tuesday, there will be a special session for state and territory partners on utilizing economic valuation information in management and policy decision-making processes. The public business meeting will open Wednesday with a traditional Samoan welcome ceremony and continue with the two special sessions listed above. Thursday will feature updates from members of the Task Force, decision on a draft action plan for the International Year of the Reef 2008, an update on the status of coral reef conservation at U.S. protectorate Navassa Island, and passage of proposed new Task Force actions.

Task Force meetings are open to the public. For more information on the meeting, visit the Task Force Meetings Web page.

ANNOUNCEMENTS

NOAA Partners with Australian Government to Conduct Climate Change Workshop. Coral reef managers around the world stand to benefit from a workshop "Responding to Climate Change: A Workshop for Coral Reef Managers" held July

30-August 3 on Australia's Great Barrier Reef. The workshop was hosted by the Great Barrier Reef Marine Park Authority (GBRMPA), NOAA, and the World Bank/Global Environment Facility (WB/GEF) Coral Reef Targeted Research Project (CRTR), with additional support from the Australian Department of Environment and Water Resources. Thirty international experts in coral reef management from Indonesia, Thailand, the Philippines, Malaysia, Australia, and the U.S.A. met to share strategies for mitigating and managing the future impacts of climate change on coral reefs. Two workshop trainers came from the Florida Keys National Marine Sanctuary (FKNMS) and Coral Reef Conservation Program (CRCP). Through presentations, interactive discussions and exercises, and in-water field activities, the workshop provided participants with the skills and tools they need to adapt their management programs to address the growing threat climate change poses to coral reefs, such as predicting where coral bleaching will occur, measuring coral reef resilience and assessing the socioeconomic impacts of coral bleaching. This event is the first of two workshops based on the publication "A Reef Manager's Guide to Coral Bleaching" and supported in 2007 by the CRCP, the NOS International Programs Office, and NOAA Coral Reef Watch. The same curriculum will be offered in American Samoa following the U.S. Coral Reef Task Force meeting this month.

Coral Education Product Wins Award for Excellence in Educational Publishing. NOAA and Project WET (Water Education for Teachers) were awarded the Association of Educational Publishers (AEP) 2007 Distinguished
Achievement Award for Excellence in Educational Publishing in the curriculum category of Science Instruction Workbook K-5 for the partnership publication 'Discover Coral Reefs.' The Kids In Discovery booklet, sponsored by the NOAA Coral Reef Conservation Program, was released in April 2007 at the National Science Teachers Association Convention in St. Louis,

MO. It was re-released recently at the National Marine Educators Association Conference in Portland, ME. The NOAA Project Manager for the booklet received the award for the NOAA/Project WET partnership at the Annual Awards Banquet and Gala event held at the Renaissance Hotel in Washington, D.C.

UPDATES

Atlantic

Restoration Workshop. The Southeast Fisheries Science Center (SEFSC), National Underwater Research Center (NURC), and the Florida Keys National Marine Sanctuary (FKNMS) will host a coral restoration meeting August 22-23 at the National Park Service (NPS) office in Homestead, FL. The workshop will focus on coral husbandry and transplantation techniques and activities as they relate to restoration efforts in the Florida Keys. The three proposed outcomes of this meeting are 1) improved communication among current restoration efforts; 2) discussion of management needs related to restoration best practices and related research gaps; and 3) planning for an 2007-2008 Aguarius Coral Restoration and Resilience Experiments (ACRREs) project, including a 2008 saturation mission.

Pulley Ridge & South Atlantic Cruises. The Southeast Fisheries Science Center (SEFSC)
Panama City Lab will be conducting a two-week cruise aboard the NASA ship, M/V Freedom Star from August 17 - 30. The first week will be spent studying the deep hermatypic coral formations on Pulley Ridge in the southeast Gulf of Mexico, while the second will focus on five shelf-edge marine protected areas (MPAs) between Jacksonville, FL and Cape Fear, NC. During the transit to Pulley Ridge, the team will also make ROV dives on two small MPAs off St. Lucie and Marathon Key, FL. A remotely operated vehicle (ROV) owned by National Underwater Research Center (NURC)/University of North Carolina

Wilmington (UNCW) and operated by NURC/University of Connecticut (UConn) will be the primary gear employed. However, the team will also use a stationary video camera array, fish traps, and a five sensor conductivity, temperature, depth (CTD) gauge to collect data. In addition to the NURC personnel, researchers from Harbor Branch Oceanographic Institution (HBOI), the College of Marine Science at the University of South Florida, and two Teachers-at-Sea will participate. The HBOI scientist conducted submersible dives on several sites near Pulley Ridge in the 1980's and this expedition will revisit some of these sites for comparison purposes. CRCP-funded multibeam mapping projects have been instrumental in selecting other dive sites for this cruise.

Goliath Grouper Research Planning Meeting.

Florida's Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute hosted a Goliath Grouper Research Planning meeting in St. Petersburg Florida on August 6th to discuss the future of potential goliath grouper research activities. The meeting included a number of presentations on data summaries, updates on ongoing research, identification of research and management needs, among other topics. Multiple research partners, including the Southeast Fisheries Science Center (SEFSC) were represented. Most of the discussion centered on whether a limited take of goliath grouper is essential for critical biological/ecological data that could increase certainty surrounding stock assessment for this species.

Summer Research Expedition Underway at FGBNMS. The Flower Garden Banks National Marine Sanctuary (FGBNMS) summer research cruise took place the week of August 8. Researchers planned to conduct REEF fish surveys, parrotfish predation surveys, coral bleaching surveys, observe possible coral/sponge/brittle star spawning events,

download acoustic receivers to learn about the movements of six tagged manta rays, conduct *in situ* genetic sampling of lobster, conduct timelapse photography, complete some coral recruitment rack maintenance, and characterize sponges. Researchers on this cruise represent the University of Calgary, Texas A&M University-Corpus Christi (TAMU-CC), Wildlife Conservation Society, NOAA National Marine Fisheries Service, Florida Fish and Wildlife Conservation Commission, and the FGBNMS.

GRNMS Submits Final Project Report for 'From the Estuary to the Abyss'. A final report on the project, "From The Estuary To The Abyss: Exploring Along The Latitude 31-30 Transect," was submitted to the funding agency, NOAA Office of Ocean Exploration (OE). The project was conducted by the South Carolina Department of Natural Resources, and included coinvestigators at Gray's Reef National Marine Sanctuary (GRNMS). The report describes submersible observations and collections made during an OE expedition along a transect centered on the Latitude 31°-30'N line, in depths from 55 to 1000 m. The sampling expanded previous work completed by several NOAA offices along that transect that sampled from the coast out to 55 m. along a "Latitude 31-30" theme. The report describes observations of fishes made from the submersible, description of habitats and bottom types, analysis of infaunal invertebrates collected by the submersible and a Young grab, analysis of the fauna inhabiting some sponges and tunicates, and analysis of isotope composition of coral samples to determine historical oceanographic conditions and coral growth rates.

South FL Marine Ecosystem Summary Report. The Florida Keys National Marine Sanctuary (FKNMS) is preparing a summary report on knowledge of the South Florida marine ecosystem designed for a general audience including resource managers, decision-makers, and the interested public. An Environmental Protection Agency

scientist with the FKNMS, is organizing a series of workshops to enlist experts to prepare 1-2 page write-ups, replete with graphics on topics determined by the group. Workshops to date include coral reefs, seagrasses, and water quality.

Study Shows Contaminated Ground Water Reaches Keys' Coral. Results from a three-year study funded by the U.S. Environmental Protection Agency (EPA) reveal that common fecal indicator bacteria and human viruses are present in corals and ground water in a nearshore to offshore transect in the Upper Florida Keys. Researchers from the U.S. Geological survey and the University of Georgia conducted the study. Fecal indicator bacteria, which are not pathogens themselves but rather serve as surrogates for other disease-causing microbes found in sewage, declined with distance from shore but tended to be elevated in the surface layers of coral mucus relative to the surrounding water. Genetic material from enteric viruses, which do cause disease in humans but are only found in infected human feces and urine, were also commonly found throughout the sampled area, including ground water more than 6 miles offshore. Simply stated, data from this study indicate that sewagecontaminated ground water is reaching the offshore reefs of the Florida Keys. The report is being reviewed for publication in a peer-reviewed journal.

FKNMS Water Quality Protection Program.

The Steering Committee of the Florida Keys
National Marine Sanctuary (FKNMS) Water
Quality Protection Program met in Marathon, FL,
on July 24. The Steering Committee is co-chaired
by the U.S. Environmental Protection Agency and
the Florida Department of Environmental
Protection, and includes 17 members representing
State and federal agencies, Monroe County and
Florida Keys municipalities, and nongovernmental organizations. A budget was
approved for FY2008; approximately 94 percent
goes toward monitoring projects, research, and

data management. The Committee was presented with updates on water quality, seagrass, and coral reef monitoring projects, as well as the status of the "Comprehensive Report Summarizing the State of Knowledge on the South Florida Marine Ecosystem" and the review of the FKNMS science program. The review will include a Science Advisory Panel meeting with principal investigators on September 20.

Derelict Fishing Gear Workshop. NOAA and the U.S. Dept of State co-hosted a Caribbean-wide derelict fishing gear workshop at the Florida Keys Eco-Discovery center in Key West, Florida July 17-19. The workshop brought representatives from multiple Caribbean nations together to discuss topics related to derelict fishing gear, specifically what it is, is it a problem and if so, what can be done to address it. Participants created an action plan of activities for the next 18 months to survey Caribbean nations on the scope of derelict fishing gear problems in their jurisdictions.

Pacific

NCCOS Assists With Guam Coral Reef
Sediment Study. A scientist from NOAA's
National Centers for Coastal Ocean Science
(NCCOS) assisted researchers from the U.S.
Geological Survey's (USGS) Pacific Science
Center with an instrument deployment in the War
in the Pacific National Historical Park in Guam
during July 12-23. The USGS project utilizes a
ridge-to-reef approach to examine sediment
impacts on coral reefs by monitoring stream
discharge, nearshore waves and currents, and
sediment transport.

Study Highlights Differences in Management and Actions Between Micronesia Islanders and Regulation-based Cultures. Research conducted through the Coral Reef Ecosystems Studies (CRES) in Micronesia, a project supported by NOAA's National Centers for Coastal Ocean Science (NCCOS), is highlighted in the

July/August issue of the journal *BioScience*. The journal's editorial discusses the value of research when the results are made available to stakeholders in a manner that empowers them to take action and change their behavior in order to benefit their environment. The editorial highlights a CRES publication which compared the sociocultural practices and attitudes of Pacific Islanders with the Western style of environmental regulations, identified lessons from success stories, and made recommendations on how to improve environmental management strategies.

International

Ongoing Collaborations: CRW and Australia. NOAA Coral Reef Watch (CRW) program staff traveled to Townsville, Australia, to visit with managers and scientists at the Great Barrier Reef Marine Park Authority (GBRMPA). GBRMPA has been involved in several successful collaborations with NOAA's Coral Reef Conservation Program (CRCP), including the publication of "A Reef Manager's Guide to Bleaching," and the development of a series of capacity-building workshops based on the guide. CRW staff presented an invited seminar on NOAA's Coral Program, including the Coral Reef **Ecosystem Integrated Observing System** (CREIOS), and the CRCP's climate initiatives for ocean acidification, coral bleaching, and climate change management. CRW staff also met with the global coordinator of the Global Coral Reef Monitoring Network (GCRMN), to discuss the development and publication of a new book, "Status Of Caribbean Coral Reefs After Bleaching and Hurricanes In 2005." CRW will contribute a chapter that details the thermal stress patterns and Satellite Bleaching Alerts (SBAs) issued during the 2005 Caribbean Bleaching Event, and a chapter that describes the history of hurricanes in the Caribbean and Atlantic, and their influence on coral reefs.

International Coral Reef Managers Submit Requests for Satellite Bleaching Alert Sites Throughout Southeast Asia and Australia.

NOAA Coral Reef Watch (CRW) currently has 24 operational Virtual Stations located throughout the tropical oceans. When the CRW product suite (including sea surface temperature, HotSpots, and Degree Heating Weeks) observes conditions conducive to mass coral bleaching, Satellite Bleaching Alert (SBA) email messages are automatically sent out to more than 200 users around the world. In partnership with the World Bank/Global Environment Facility (WB/GEF) Coral Reef Targeted Research (CRTR) project, CRW has recently begun the process of defining and implementing new Virtual Stations. During the recent workshop "Responding to Climate Change" for coral reef managers held in Australia, more than ten international coral reef managers requested new Virtual Station locations in Thailand, Malaysia, Indonesia, the Philippines, and Australia.

National/Headquarters

What's New in CoRIS.

CoRIS now has 1753 metadata records providing access to 19699 data products via the CoRIS web site portal.	
CoRIS Metadata Additions	
Product Name	Description
CRED	These maps display optical
Cumulative	validation observation locations
Map of Percent	and percent coverage of
Scleractinian	scleractinian coral overlaid on
Coral Cover	bathymetry for various Pacific
	Islands.
Sample Link:	
http://www.coris.noaa.gov/metadata/records/html/c	
red_toad_map_kure_atoll_2002-2004.html	

CORAL REEFS IN THE NEWS

This section is on hiatus until the newsletter format is updated in the Fall.

UPCOMING EVENTS

September 2007

14 – 16: **Marine Aquarium Conference of North America (MACNA).** Pittsburgh, PA. http://www.macnaxix.com/

25 – 27: **CRCP External Program Review.** Silver Spring, MD.

http://coralreef.noaa.gov/review.html

25 – 28: **European Symposium on Marine Protected Areas.** Murcia, Spain. http://www.mpasymposium2007.eu/index.html

