

Subscribe to NOAA Coral Reef News, the monthly e-newsletter of NOAA's Coral Reef Conservation program.

# Coral Reef News



## INSIDE THIS ISSUE:

<b>Announcements:</b>	<b>1</b>
<b>Upcoming Events:</b>	<b>2</b>
<b>Updates:</b>	
<a href="#">Headquarters</a>	2
<a href="#">Atlantic/Caribbean</a>	2
<a href="#">Pacific</a>	2
<b>Special ICERS Feature</b>	<b>3</b>
<b>Publications</b>	<b>5</b>

The Coral Reef Conservation Program (CRCP) is a partnership between the NOAA Line Offices working on coral reef issues, including the National Ocean Service (NOS), the National Marine Fisheries Service (NMFS), the Office of Oceanic and Atmospheric Research (OAR) and the National Environmental Satellites, Data and Information Service (NESDIS). From mapping and monitoring to managing reef resources and removing harmful debris, the CRCP addresses the priorities laid out in both the [National Action Plan to Conserve Coral Reefs](#) and the [National Coral Reef Action Strategy](#).

Volume 5, No. 10

July 2008

## Announcements

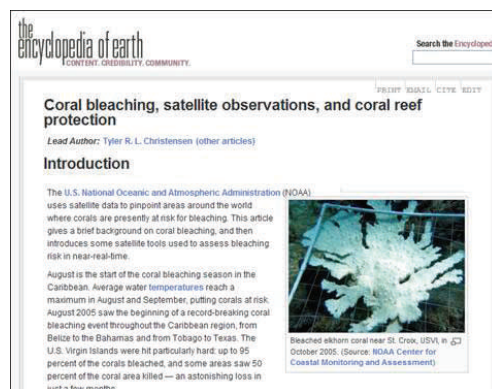
**Opportunity for Public Comment.** NOAA and the [U.S. Fish and Wildlife Service](#) have jointly issued proposed regulations to establish a [ship reporting system](#) for the [Papahānaumokuākea Marine National Monument](#) (Monument). This action would implement measures adopted by the [International Maritime Organization](#) requiring notification by ships that are passing through the Monument without interruption. The proposed rule was published on Monday, July 7 and the comment period will close on August 6. A draft environmental assessment has been prepared for this proposed action pursuant to the [National Environmental Policy Act](#), and is available for public review and comment concurrently with the proposed rule at the Monument's Web site.

**CRW Published in the *Encyclopedia of Earth*.** [Coral Reef Watch](#) (CRW) was invited to write an article on its satellite coral bleaching predictions which was published online July 15th in the [Encyclopedia of Earth](#). The [article](#) highlights NOAA's satellite sea surface temperature observations, and how they help to monitor for the conditions that cause coral bleaching. The *Encyclopedia* is a new online reference about the Earth, its natural environments, and their interaction with society. It is a free, fully searchable collection of articles written by scholars, professionals, educators, and experts who collaborate

and review each other's work. The articles are written in non-technical language and will be useful to students, educators, scholars, and professionals, as well as to the general public.

**CReefs Launches Coral Reef Biodiversity Resource Locator.** The [Census of Coral Reef Ecosystems](#) (CReefs) project of the [Census of Marine Life](#) launched the new [CReefs Biodiversity Resource Locator](#) (CBRL) during the [11<sup>th</sup> International Coral Reef Symposium](#) (ICRS) during the second week of July. This on-line database was designed to connect institutions and individuals associated with coral reef biodiversity research and conservation around the world. The CBRL is a networking search engine allowing users to locate "people" and "places" involved in coral reef biodiversity research globally. CBRL allows users to not only populate the system, but also search by expertise, location, taxonomy, and other keywords.

**NOAA Hosts Educators Climate Change Conference.** Sally Ride, the first American woman in space, will join NOAA scientists in Silver Spring July 23-24 to teach K-12 educators how to integrate the science of earth's changing climate into their classroom lesson plans during "Earth Then, Earth Now: Our Changing Climate." The two-day event is co-sponsored by NOAA and the [National Aeronautics and Space Administration](#) (NASA) in partnership with Ride's science education company, [Sally Ride Science™](#), and will be [Webcast live](#) for those unable to attend. Co-Chair of the 2007 Nobel Prize-winning Intergovernmental Panel on Climate Change and the discoverer of the cause of the Antarctic ozone hole, NOAA Senior Scientist Susan Solomon will give the conference's major climate address following Ride's opening keynote address Wednesday morning. The educator conference will include presentations by prominent scientists, hands-on activities, and ideas for facing the climate challenge and creating a healthier planet. Participants will learn about classroom activities and resources for their students. During an educator street fair, participants will have an (continued on page 5)



Screen capture of the *Encyclopedia of the Earth* article. Courtesy: Coral Reef Watch

## UPCOMING EVENTS

### August 2008

**6:** Deadline to provide [public comments](#) on the Monument ship notification proposed rule and draft ecosystem assessment.

**25-29:** [20th U.S. Coral Reef Task Force Meeting](#), Kona, HI.

### September 2008

**2-5:** Responding to Climate Change Workshop, Kona, HI. Contact [Jessica Morgan](#) for further details.

**Check out our current expedition to the Dry Tortugas [here](#).**



### Be a Reef-Hugger

As the Summer boating and diving season continues, please make a point to **ALWAYS** use a mooring buoy or anchor away from reefs and sea grass beds.

## Updates from Headquarters

**CRW Participates in its Second Climate Camp.** [Climate Camp](#) was developed by [World Wildlife Fund](#) (WWF) to help conservation practitioners and resource managers learn more about the basics of climate change, interact with experts and peers, and work together to develop adaptation strategies. An abridged Climate Camp was offered as a one-day workshop on July 13 preceding the 22<sup>nd</sup> annual meeting of the [Society for Conservation Biology](#) in

Chattanooga, TN. Approximately 40 participants attended the workshop from the United States, Australia, Turkey, Kenya, Tanzania, the United Kingdom as well as other nations. A member of the Coral Reef Watch (CRW) staff attended as an instructor to help the campers learn about remote sensing, coral bleaching, the tools that are available to managers working in tropical marine systems, and applications of those tools.

## Updates from the Atlantic/Caribbean Region

**13th Annual Down Under, Out Yonder Educator Workshop.** The 13th annual [Down Under, Out Yonder](#) (DUOY) educator workshop and scuba field experience, sponsored by the [Gulf of Mexico Foundation](#) (GMF) and ConocoPhillips, took place July 19-23. Two days of instruction in GMF's [Corals to Classroom](#) workshop were followed by three days of scuba diving in the [Flower Garden Banks National Marine Sanctuary](#) (FGBNMS). Workshop participants learned a variety of hands-on techniques for teaching students about coral reefs and also participated in collecting data by conducting fish counts in FGBNMS.

**NCCOS Sets Priorities for Benthic Mapping in Puerto Rico.** Scientists from NOAA's [National Centers for Coastal Ocean Science](#) (NCCOS) and the members of the [Coral Reef Conservation Program](#) recently met in Puerto

Rico (PR) to determine near-future and long-term benthic mapping priorities to help design resource monitoring activities. Based upon consensus reached during the three meetings, which were held in mid-June, NCCOS will target its FY09 ship-based acoustical mapping efforts along the shelf edge south of Vieques, PR. This area has been identified as an active fishing area with numerous spawning aggregations of federally-managed species, although it is presently unprotected by management measures. The spatial data collected by NCCOS scientists will be integrated with visual fishery assessments conduct by the [Caribbean Fishery Management Council](#) to help update conservation measures and management actions. NOAA and its partners will also be developing a document outlining near- and long-term mapping efforts.

## Updates from the Pacific Region



**Derelict net removal during past marine debris removal effort.** Courtesy: PIFSC CRED Marine Debris Team

**Marine Debris Removal in Hawai'i.** In early July 2008, helicopter marine debris surveys were conducted by scientists from the [Pacific Islands Fisheries Science Center's Coral Reef Ecosystem Division](#) and [Protected Species Division](#) around the main Hawaiian Islands of Oahu, Kauai, and Maui. A total of 105 derelict nets were identified around the island of Oahu alone. Debris removal and clean up efforts are scheduled to

begin during the week of July 21.

**Pacific Educators Visit the Monument.** Some of the Northwestern Hawaiian Islands' most unique ecosystems were visited by a contingent of ten resource and cultural educators from across the Pacific on an International Year of the Reef Educator Expedition to [Papahānaumokuākea Marine National Monument](#) (Monument). The NOAA Ship *Hi'ialakai* embarked July 13 and will return July 24; the expedition will provide 11 days of experiential learning, scientific observation, cultural exchange and partnership. Participants come from Maui, Kaua'i, Moloka'i, Kiribati, Cook Islands, Australia, Palau, Marshall Islands, Fiji and American Samoa and are specialists in (continued on page 5)



**NOAA Participates in the 11th International Coral Reef Symposium.** The [11th International Coral Reef Symposium \(ICRS\)](#) took place July 7-11, in Ft. Lauderdale Florida. This Symposium takes place every four years and has not been hosted by the United States since 1977. Over 2,500 coral reef scientists from 114 countries participated. NOAA was widely represented and staff contributed to over 80 oral and poster presentations, planned and led field trips, organized topical side sessions, and hosted a NOAA seminar and panel discussion on new directions of the [Coral Reef Conservation Program](#).

**NOAA Leadership at ICRS.** Vice Admiral Lautenbacher, Undersecretary of Commerce for Oceans and Atmosphere and NOAA Administrator, provided plenary remarks about the NOAA [Coral Reef Conservation Program's](#) leadership and commitment to coral reef research and conservation. Deputy Assistant Secretary, Tim Keeney, participated in the opening ceremonies promoting the [International Year of the Reef 2008](#) and the important role scientists play in communicating the issues and inspiring action.



**Vice Admiral Lautenbacher gave plenary remarks on July 10. Courtesy: Gerlinde Photography/Michael Hopkins**

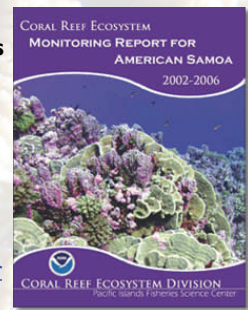
**NOAA Releases Latest Assessment of U.S. Coral Reef Ecosystem Conditions.** On July 7, NOAA released the third in a series of status reports assessing the condition of coral reef ecosystems in 15 locations ranging from the U.S. Caribbean and Gulf of Mexico to the western Pacific. The 569-page report, [The State of Coral Reef Ecosystems of the United States and Pacific Freely Associate States: 2008](#) represents an evolving effort to assess the condition of coral reef ecosystems at local, regional, and national scales, and serves as a vehicle for the dissemination of information about data collection activities in the U.S. and Freely Associated States.

Developed by NOAA's [National Centers for Coastal Ocean Science](#) and supported by the [Coral Reef Conservation Program \(CRCP\)](#), the report is structured to provide information according to the primary threats, topics, and goals out-

lined in the National Coral Reef Action Strategy and other guidance documents developed by NOAA's CRCP, the [U.S. Coral Reef Task Force](#), and its member organizations. More than 270 scientists and managers working throughout the Gulf of Mexico, Caribbean, the Atlantic and Pacific authored the jurisdiction-specific chapters of the report, and graded coral reefs and ecosystems on a five tier scale: excellent, good, fair, poor and unknown. Nearly half are now considered to be in "poor" or "fair" condition.

The report also describes the impacts of 13 major threats in each location while offering recommendations for on-the-ground conservation actions. Since publication of the second report in 2005, newly recognized threats, such as ocean acidification, have emerged while other threats have intensified. At present, high threats include climate-related issues such as the 2005 regional mass coral bleaching and disease event, which reduced live coral cover at monitoring sites in the U.S. Virgin Islands and Puerto Rico by approximately 50 percent, as well as stressors like coastal development, recreational and commercial fishing, tourism and recreational use, vessel damage and marine debris. ICRS participants were offered a copy of this report in CD format at the NOAA exhibit booth.

**NOAA Releases Comprehensive Assessment of American Samoa's Coral Reefs.** Vice Admiral Lautenbacher announced the release of the final version of the [Coral Reef Ecosystem Monitoring Report for American Samoa: 2002-2006](#) on July 10. This report, produced by the [Coral Reef Ecosystem Division \(CRED\)](#) of the [Pacific Islands Fisheries Science Center \(PIFSC\)](#) is the most comprehensive interdisciplinary coral reef ecosystem assessment of the Territory of American Samoa (AS) ever performed. It reflects extensive Reef Assessment and Monitoring Program (RAMP) research conducted in AS by PIFSC scientists and their partners during 2002-2006. The draft report was presented to the resource management agencies and key stakeholders in AS and at the 18th U.S. Coral Reef Task Force meeting in August 2007. A limited number of hard copies of the final report are available upon [request](#).



**CRCP Releases Roadmap for the Future.** In 2007 NOAA's [Coral Reef Conservation Program \(CRCP\)](#) solicited an external review to assess the program's effectiveness in achieving its mandates and provide recommendations for improving its impact and performance. In response to the panel's recommendations and new program (*continued on page 4*)



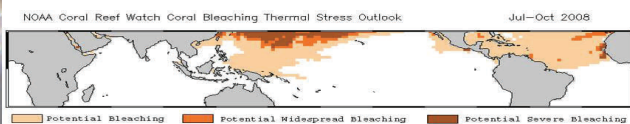


**Panel members present the CRCP Roadmap at ICRS during a special session. Courtesy: Gerlinde Photography/Michael Hopkins**

leadership, the CRCP released its [Roadmap for the Future: A Plan for developing CRCP direction through 2015](#) to set the program's direction for FY 2010-2015. The document lays out new CRCP principles and priorities, and a process for implementing the proposed changes. The Program will primarily focus its efforts on addressing coral reef management needs, and will do so by emphasizing work on understanding and addressing three key threat areas: the impacts of fishing, land-based sources of pollution and climate change. The CRCP will place greater emphasis on management-relevant science and develop coral conservation tools and products that are user-friendly. The Program will also strengthen its partnerships and leverage resources with coral reef managers at the federal, state, territorial, and local level. The CRCP held a special forum during ICRS to present these plans to the public and provide an opportunity for comment. The session, which was attended by over 140 NOAA staff and other partners in Federal agencies, non-governmental organizations, and academia, included a panel discussion with outside experts who provided their viewpoint of the program's future direction. In addition, a question and answer dialogue was generated with the attendees.

#### **NOAA Launches Experimental Bleaching Outlooks.**

NOAA's [Coral Reef Watch](#) (CRW) issued the first-ever seasonal coral [bleaching outlook](#) at ICRS. The new coral bleaching prediction system indicates that there will be some bleaching in the Caribbean later this year, but the event will probably not be severe. The system also suggests that there is a risk of widespread bleaching in the Northwestern Hawaiian Islands in August, but little bleaching elsewhere during the northern hemisphere summer. The new prediction system uses NOAA experimental sea surface temperature forecasts to develop maps of anticipated coral bleaching severity during the upcoming bleaching season. While CRW uses satellite sea surface temperature data to alert managers and scientists around the world of the current risk of coral bleaching, the new prediction system includes longer range temperature forecasts of up to three-months. The new system was developed by scientists with CRW in Silver Spring, MD and NOAA's [Earth Science Research Laboratory](#) in Boulder, CO, with funding from the NOAA Climate Program Office's [Sectoral Applications Research Program](#) and [Coral Reef Conservation Program](#). It is anticipated that the outlooks will be issued monthly during the



**Current coral bleaching outlook for July through October 2008. Courtesy: Coral Reef Watch.**

peak bleaching seasons for the northern and southern hemispheres. For more information, read the NOAA [press release](#).

**NOAA Exhibit Booth.** NOAA's exhibit, which featured the many products and services of the [Coral Reef Conservation Program](#) (CRCP) as well as highlighting the local reefs of the [Florida Keys National Marine Sanctuary](#), was one of the largest and most colorful exhibits within the exhibit hall. Two-sided lit displays featured images of coral reef ecosystems and the highly popular Caribbean and Indo-Pacific Reef Species ID posters. Three kiosks allowed for Internet access to key Web sites, online products, and videos. Knowledgeable staff from many of the CRCP's participating offices were on hand to provide expert information to visitors. Hundreds of symposium participants and members of the public stopped by to gather materials, network, and ask questions. In a 'green' effort, many of the



**Some of the NOAA staff pose in the exhibit booth during a break from their duties. Courtesy: Gerlinde Photography/Michael Hopkins**

CRCP's materials and reports were offered in CD format.

**NOAA in the News.** ICRS provided an excellent platform to spread the word and educate the public in the U.S. and around the globe about NOAA's efforts to restore and manage coral reef ecosystems. News about NOAA, the release of the *State of Coral Reef Ecosystems of the United States and Freely Associated States: 2008*, and the efforts of the [Coral Reef Conservation Program](#) reached over 400 media outlets, including *Time Magazine*, *USA Today*, *Discover Magazine*, ABC News, the *LA Times*, Clean Skies TV, *National Public Radio*, Germany's *FOCUS Online* and the United Kingdom's *Guardian*. NOAA hosted two press briefings—one on July 7 with Tim Keeney and the second on July 10 with Vice Admiral Lautenbacher. See page 5 for sample press coverage resulting from ICRS.

**NOAA Educational Presentation.** NOAA's [Coral Reef Conservation Program](#) (CRCP) conducted an educational workshop for teachers and conference attendees during ICRS. The hour-long session introduced participants to basic coral biology and coral reef ecology, as well as providing teachers with methods to bring coral reefs into the classrooms. Presenters offered tips on how to relate concepts like ocean acidification, coral bleaching and symbiosis to elementary and middle school students. Participants received a copy of the [2008 Resource Roundup CD](#), a collection of lesson plans, student activities and videos. The CD was compiled by the [U.S. Coral Reef Task Force](#) and produced by the CRCP.

## Announcements continued...

opportunity to interact with federal agencies and organizations on the front lines of climate change research. In addition to NOAA and NASA sponsorship, additional support for the conference is provided by the [Department of Energy](#), [U.S. Forest Service](#), [Northrop Grumman](#)

[Corporation](#), the [National Environmental Education Foundation](#) and the [National Science Teachers Association](#). The [Coral Reef Conservation Program](#) will participate in both the presentations and exhibit opportunities at this event.

## Pacific Updates continued...

cultural practices, fisheries, conservation, math, science and coral reef ecology. The group visited Nihoa, Mokumanamana and French Frigate Shoals. The collective mission is to bring together marine conservation educators from across Oceania in support of [International Year of the Reef 2008](#), and to build an educator-network across Oceania. The Monument and its

unique protections is being used as a model with the hope to promote the incorporation of traditional rights, knowledge and values, as well as local management strategies into formal educational systems in an effort to inspire future reef and marine managers. To learn more or see photos from this expedition, read the *Honolulu Advertiser* [article](#) or the [mission blog](#).

## Publications

**The Deeper We Go, The Less We Know.** NOAA scientists have published a research article revealing the bias of coral reef research towards nearshore shallow reefs, and suggesting that the healthiest reefs may also be the least studied. The authors assert that more research is needed on mesophotic (from 30 m to approximately 80 m deep) reefs to mitigate the incomplete scope of current research efforts. Of note in the list of reasons for this needed research is the hypothesis that these deeper reefs may serve as refugia for shallow reef species during times of stress. The analysis is based on a literature review and field data collected in the [U.S. Virgin Islands National Park](#) and [Virgin Islands Coral Reef National Monument](#) using the NOAA vessel *Nancy Foster* from 2004 to 2007. The article entitled "The deeper we go the less we know" is published in the proceedings of the 33rd Scientific Meeting of the [Association of Marine Laboratories of the Caribbean](#), which took place in St. Thomas, U.S. Virgin Islands on June

4-8. Menza, C., M. Kendall, and S. Hile. 2008. The deeper we go the less we know. *Revista de Biologia Tropical* (International Journal of Tropical Biology) 56(1):11-24.

**Adaptations for Climate Sensitive Ecosystems Report.** A report of interest to managers of marine protected areas, "[Preliminary Review of Adaptation Options for Climate Sensitive Ecosystems and Resources](#)," was released by the U.S. Climate Change Science Program on June 20. The [U.S. Environmental Protection Agency](#) led the preparation of the report. Brian Keller, of NOAA's Office of National Marine Sanctuaries, was the lead author for a chapter on marine protected areas. That chapter emphasized coral reef ecosystems and included case studies of the [Florida Keys National Marine Sanctuary](#), [Great Barrier Reef Marine Park](#), and [Papahānaumokuākea Marine National Monument](#). Hard copies can be requested [online](#).

## Sample ICRS Press Coverage

NOAA Press Release: [NOAA Report States Half of U.S. Coral Reefs in "Poor" or "Fair" Condition](#)  
 ABC News: [Life in the Balance: Coral Reefs Are Declining](#) Video: [Rainforests of the Ocean](#)  
 Time Magazine: [Coral Reefs Face Extinction](#)  
 The Guardian: [NOAA report: US coral reefs in severe decline](#)  
 USA Today: ['Invasive' humans threaten U.S. coral reefs](#)

**We value your feedback. Feel free to [email us](#) comments .**

[Subscribe](#) to NOAA Coral Reef News, the monthly e-newsletter of NOAA's Coral Reef Conservation program .

Attn: Outreach and Education  
 NOAA Coral Reef Conservation Program, N/OCRM  
 1305 East West Highway, 10th Floor  
 Silver Spring, MD 20910-3281

Phone: (301) 713-3155  
 Fax: (301) 713-4389  
 E-mail: [coralreef@noaa.gov](mailto:coralreef@noaa.gov)

**We're on the Web!**  
<http://coralreef.noaa.gov>

*The CRCP supports effective management and sound science to preserve, sustain and restore valuable coral reef ecosystems.*

