

MPA CONNECTIONS

Newsletter of the National
Marine Protected Areas Center

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The mission of the National Marine Protected Areas Center is to facilitate the effective use of science, technology, training, and information in the planning, management, and evaluation of the nation's system of marine protected areas. MPA Connections was launched to meet continuing calls by agency and external stakeholders for information about MPA Center activities and to feature other actions that address Executive Order 13158 goals.

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NOAA Launches New Website on Social Science Tools for Marine Protected Areas

The Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) launched a new website on research techniques for examining the "human dimensions" of marine and coastal resource management. This Social Science Tools and Methods for Marine Protected Areas (MPA) Management website gives basic information about social science concepts and methods, and guides managers in determining the appropriate tools, such as surveys and cost-benefit analyses, to address their specific issues.

MPAs are valuable conservation tools, but the development and management of MPAs can be controversial. Recent studies found that social factors, rather than biological or physical factors, determine the success of an MPA. The Social Science Tools and Methods for MPA Management website provides officials with information that can help them address these social factors.

“Creating and managing a marine protected area is often challenging. This website provides resources that can help managers and staff understand and address many of the issues that arise between MPAs and affected stakeholders,” said Margaret Davidson, director of the NOAA Coastal Services Center, which developed the website in collaboration with NOAA’s National Marine Protected Areas Center.

The website, www.csc.noaa.gov/mpass/, is divided into sections that focus on social science themes (including use patterns; attitudes, perceptions and beliefs; governments, institutions and processes; communities; and economics), tools, case studies, and references. Topics include surveys, non-market valuation, and social assessment.

Recent Additions to the MPA Library

In the last three months of 2004, the MPA library added nearly 75 items to its collections, including 36 books/reports/conference proceedings; 25 journal articles; four conferences; and six websites. Twenty-nine of the publication entries (i.e. books, reports, conference proceedings, or journal articles) are available online in full-text. There are now 1,233 items in the MPA library.

Some recent additions to the library include:

- The George W. Bush Administration's response to the U.S. Commission on Ocean Policy's September 2004 report identifies short-term and long-term actions to provide direction for ocean policy, and addresses the needs for coordinating and better integrating the existing network of marine managed areas, and adopting an ocean parks strategy. Interagency Ocean Policy Group, Council on Environmental Quality, "U.S. Ocean Action Plan: The Bush Administration's Response to the U.S. Ocean Commission on Policy;" Washington, D.C.: Council on Environmental Quality, December 17, 2004 is available at <http://ocean.ceq.gov/actionplan.pdf>.
- A consensus statement on integrating marine reserve science and fisheries management was developed by a seven-member review panel at the National Fisheries Conservation Center (NFCC) Consensus Conference, which was held in Long Beach, California from June 7-9, 2004 (the MPA Center contributed some funding for the conference). The statement addresses six questions on the state of marine reserve science, circumstances for their use as an effective fisheries management tool, integration with other fishery management tools, reserve design approaches that meet fisheries objectives, uncertainties associated with reserves and conventional management approaches, and monitoring actions needed to evaluate the use of reserves as fishery management tools. "Integrating Marine

Reserve Science and Fisheries Management: NFCC Consensus Statement" is available at: http://nfcc-fisheries.org/images/uploads/Consensus_Statement.pdf.

- An MPA federal legal authorities report outlines U.S. jurisdiction over ocean resources, analyzes the existing laws to assess their application to marine environments, and describes the regulatory options related to MPA creation. The "U.S. Jurisdiction over Marine Resources" section covers the territorial sea, the Exclusive Economic Zone (EEZ), and the contiguous zone. The "Current Law Specific to Marine Environments" covers the National Marine Sanctuaries Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Outer Continental Shelf Lands Act, and the Coastal Zone Management Act. The "General Preservation Laws" section covers national monuments, the national park system, the national wildlife refuge system, and marine preservation through executive orders. "CRS Report for Congress: Marine Protected Areas: Federal Legal Authority" is available at: <http://www.ncseonline.org/NLE/CRSreports/04Jul/RL32486.pdf>.
- An action plan has been compiled by the California Resources Agency and California Environmental Protection Agency to recommend initial actions the state should take to manage and protect its ocean and coastal resources. It provides an overview of immediate and ongoing actions; a list of comprehensive and long-term findings and recommended actions; and a summary of major ocean and coastal issues facing California. Recommended actions are analyzed in terms of governance; economics and funding; research, education and technology development; and ocean and coastal stewardship. "Protecting Our Ocean: California's Action Strategy: Final Report to Governor Arnold Schwarzenegger" is available at: http://www.resources.ca.gov/ocean/Cal_Ocean_Action_Strategy.pdf.
- A new article reviews the legislative history of the Marine Protection, Research, and Sanctuaries Act of 1972, and discusses the act's tension between goals of preservation and multiple-use. It proposes that substantial amendment of the act may be required to establish a system of marine preservation areas that allow only uses truly compatible with preservation, or that Congress could authorize a separate system which could include any areas of the ocean, including presently protected areas, which fall under the new law's preservation and protection criteria. "The History and Evolution of the National Marine Sanctuaries Act" is available at: http://www.mcbl.org/marineprotected/NMSA_Leg_History.pdf
- A new book aims to help managers of coral reefs choose suitable ecological monitoring programs, protocols, and methods for their reef management needs. It discusses types of ecological monitoring, specific methods and programs, and associated costs. "Methods for Ecological Monitoring of Coral Reefs - Version 1 - A Resource for Managers" is available at: <http://www.aims.gov.au/pages/facilities/bookshop/monitoring-methods/monitoring-methods.html>.

For more resources, go to

http://www2.mpa.gov/mpa/mpaservices/virtual_library/virtual_library.lasso.

Explore the Marine Managed Areas Inventory Database: Expanded Pages, New Features Improve Access to Information

The National Marine Protected Areas Center, in coordination with the National Ocean Service's Special Projects, has re-launched its "Explore the Inventory" pages on the www.MPA.gov website. The new pages provide a wealth of information about and expand access to the data that has been collected for the marine managed areas inventory since 2001. Several new tools and features are now available, including:

- Marine Managed Areas A to Z: alphabetical listing of marine managed areas.
- Key Questions: get answers to frequently asked questions, including how many marine managed area sites are listed in the inventory, how many marine managed areas restrict commercial or recreating fishing, what are the different cultural resources found in the marine managed areas listed in the inventory, how many marine managed areas have endangered/threatened species within them, and more.
- Topical Search: search the inventory database by topic (region/state, level of government, activities/restrictions, etc.) or related category (type of protection, type of restriction, etc.)
- Geographic Search: use an interactive map to spatially identify and query marine managed areas throughout the U.S., create custom maps, and download marine managed areas data for further analysis.
- Data Download: download marine managed areas inventory attribute data tables and/or geographic shapefiles to your hard drive.

The MPA Center is still collecting data for the inventory, however, federal data collection is nearly complete (currently, 278 federal sites are included in the inventory, with updated information provided on a regular basis) and draft data has been collected and/or posted for many states and territories. There are currently hundreds of federal, state, territory, and tribal MPA authorities with thousands of sites in U.S. waters. Based on initial draft data collected from states and territories, the MPA Center estimates that once complete, the marine managed areas inventory database will include a total of at least 2,000 sites.

In addition to its utility for agency and analytical purposes, the inventory data will be used by the MPA Center to assess, filter, and identify which sites qualify for the list of MPAs that will begin to comprise the national MPA system. This process will be a public one and will be based on goals of the national system development process and final criteria. The list of MPAs and the national system are called for in Presidential

Executive Order 13158, which was signed in May 2000. The list and subsequent national system are in the early stages of development and are expected to be completed in 2007 or 2008.

To learn more about the marine managed areas inventory and to search the expanded database pages, go to <http://mpa.gov/inventory/inventory.html>.

**Free MPA Newsletters Available: Highlight on MPA Center's
New MPA Cultural and Historic Resources Newsletter**

- The National MPA Center has launched a monthly newsletter highlighting marine cultural and historic news and updates from around the world. The publication, *Marine Protected Areas Cultural and Historic Resources*, features short summaries and links to news sites or relevant agency websites, and provides contact information when available. The newsletter serves as a prime resource for government and non-governmental partners engaged in MPA cultural resources work, as well as those interested in the subject of maritime heritage. To sign-up for the newsletter, or to submit ideas and other content, please contact the MPA Center's marine archaeologist, Brian Jordan, at Brian.Jordan@noaa.gov. Issues of the newsletter are available on http://mpa.gov/information_tools/newsletters.html.
- The MPA Center also produces a monthly education-focused newsletter called *Information Exchange for Marine Educators*. The publication highlights an education program and website each month and lists grants and opportunities, conferences and workshops, educational resources, and initiatives, journals, and education news. It is intended to encourage exchange of information and programs and promote collaboration among educators. Issues are distributed via a listserv and posted on the MPA.gov website. For more information, contact Phyllis Dermer, the MPA Center's education coordinator, at Phyllis.Dermer@noaa.gov. You can find current and archived issues of the *Information Exchange* at http://mpa.gov/information_tools/education.html#InfoExchange.
- In November 2004, NOAA Fisheries' Office of Habitat Conservation re-launched an old favorite, *Habitat Connections*, with a new look. The publication began circulating in 1997. As its name suggests, *Habitat Connections* provides constituents and other interested parties with information about habitat issues. More specifically, it delves into the relationships between habitat and a number of related subjects including fisheries resources, overall environmental health, and social and economic conditions. The current issue (November 2004) is the first in a four-part series discussing the status of oysters in the United States. *Habitat Connections* will be distributed quarterly and made available electronically as well as in hard copy format. The Office of Habitat Conservation is currently

updating the distribution list for the publication. Interested parties should contact Laura Walko at Laura.Walko@noaa.gov.

- Four times a year, the National Marine Sanctuary Program publishes *Sanctuary Watch*, a national newsletter in print and electronic format to keep colleagues, collaborators and constituents informed about the many program activities and accomplishments that take place within the 13 national marine sanctuaries in the United States. To subscribe to the *Sanctuary Watch* e-mail newsletter please send an e-mail to: requests@willamette.nos.noaa.gov, and in the subject line please put the following exactly as it appears here: subscribe sanctuarywatch. Issues are archived at http://www.sanctuaries.noaa.gov/news/sanctuarywatch/sanctuary_watch.html.
- *NOAA Coral Reef News*, launched in 2004, 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 and other relevant NOAA programs. The NOAA Coral Reef Conservation Program supports effective management and sound science to preserve, sustain and restore valuable coral reef ecosystems. To subscribe to the newsletter, send an e-mail with "subscribe coralreefnews" in the subject line to requests@willamette.nos.noaa.gov. Back issues of the newsletter are available at www.coralreef.noaa.gov.
- *MPA News*, the newsletter focused on planning and management of marine protected areas, serves the global MPA community with news, views, analysis, and tips gathered from experts around the world. Thousands of readers in more than 80 countries have come to rely on *MPA News*. The newsletter is published by Marine Affairs Research and Education in association with the University of Washington School of Marine Affairs in Seattle. If you would like to automatically receive each month's issue of *MPA News* as soon as it is published, send an e-mail message to mpanews@u.washington.edu. The newsletter is also available online at <http://depts.washington.edu/mpanews/>.

To subscribe to *MPA Connections*, send an email to Dana.Topousis@noaa.gov. Issues dating back to October 2002 are posted on the www.MPA.gov website: http://mpa.gov/information_tools/newsletters.html.

MPA Volunteer Profile: Fred Pulis, Chincoteague National Wildlife Refuge

Some of us comb the beaches for seashells. Others don metal detectors to look for treasure. At Chincoteague National Wildlife Refuge, volunteer Fred Pulis and company are searching for something entirely different: marine debris.

Fred, a survey leader with The Ocean Conservancy's National Marine Debris Monitoring Program, lists among his unique findings turtle bites on plastic and balloons. Lots of balloons.

To combat the problem of marine debris--the trash and litter on our beaches and in the oceans--the U.S. Environmental Protection Agency (EPA) teamed up with The Ocean Conservancy to create the National Marine Debris Monitoring Program. Carried out by trained volunteers, the program is designed to answer two specific questions: Is the amount of debris increasing or decreasing? What is the source of that debris?

According to Fred, the amount of debris collected and catalogued by his group at Chincoteague has remained roughly constant since he and his fellow volunteers hit the beach more than seven years ago.

In order to produce statistically viable and consistent data on what is washing up on our beaches, volunteer surveys have to take place every 28 days over the same 500-meter stretch of beach. To deal with inclement weather and other forces of nature, the volunteers are given a six-day window of three days before and three days after the scheduled survey date to complete the dual monitoring-cleanup.

"We are still the longest continuing group to never miss a data collection date," Fred noted, adding that the group has conducted 85 consecutive surveys since they first began cleaning up and documenting marine debris in the refuge in September 1997.

In fact, the group was the only one in the nationwide study to complete all of its scheduled data collection activities within the statistically significant timeframes from 1997-2002. As a result, The Ocean Conservancy named the Chincoteague Island Volunteers a Sentinel Group and selected its beach as one of 14 sentinel sites from which data would be used for national analysis. Selection was also based upon the consistency and accuracy of the reporting, a testament to Fred's organizational skills and dedication.

Fred, a 62-year-old retired Navy Senior Chief, has learned a few things about managing a successful volunteer operation. The group always meets at the same time and place, has a backup plan and schedule in the event of bad weather, and members also get together for social activities and other events at the Refuge. Amazingly, 12 of the 13 original group members, dubbed "season-ticket holders" by Fred, are still on board. In 2003, the Chincoteague Island Volunteers won AT&T's Outstanding Conservation Award and a \$1,000 check to donate to the environmental group of their choice.

To ensure the accuracy of its work, the group occasionally conducts self-assessments by dumping out the trash and taking another count of the amount and type collected. And because the group's survey area is located 500 meters up the beach from the parking lot, the Chincoteague Refuge receives the added benefit of getting 1,000 meters of its beaches cleaned. Another quality assurance method entails recording any missed debris as the group backtracks following the initial pick-up. So far they haven't noticed any missed debris.

One important reason for eliminating marine debris is its harmful impact on wildlife. Plastic bags, yards of carelessly discarded monofilament, and commercial fishing nets and longlines set adrift often prove deadly to many sea creatures. Pelicans and other seabirds become irreparably entangled in monofilament; sea turtles die after ingesting plastic bags that they mistake for jellyfish, a favorite food.

Mother Nature poses the greatest obstacle to the group's work, which has gone forward despite rain and snow and the unpleasant variants in between. Inclement weather has also forced the volunteers to go high-tech, however. After losing seven boundary markers to nor'easters, the group now identifies its survey area by GPS.

"To have conducted over five-years of surveys without missing a date speaks highly of the friendship, camaraderie, and high degree of teamwork of all of the Chincoteague Island Volunteers." Charlie Barr, the National Debris Monitoring program manager, said. The EPA-funded program has been so successful that the data collected now comprises the definitive database on marine debris in the United States.

To suggest a volunteer or volunteers to be profiled in this series, send an email to Daphne.Pee@noaa.gov.

MPA Center Publishes Inventory of Decision-Support Tools for MPAs

In an effort to document existing GIS decision-support tools to aid MPA managers, the MPA Center's Training and Technical Assistance Institute has compiled an "Inventory of GIS-Based Decision-Support Tools for MPAs." The report focuses on GIS tools with the highest utility for MPA processes. Each tool summary includes a description of what the tool does, the data and software needed to run it, and contact information. In addition, several tools are highlighted in greater detail, providing examples of how they have been used in MPA zoning and monitoring activities. The inventory is intended as a living document and will be updated to include new tools on a regular basis. It is available online at

http://mpa.gov/virtual_library/Publications/FINAL_Decision%20Sup%20Rpt.pdf.

National Ocean Service Discovery Centers: MPA Lesson Plans Available

NOAA's National Ocean Service has organized formal educational resources within the Discovery Center website, including materials on MPAs. These resources have been developed for educators and students at the high school level, but are easily adaptable for students in middle school or for undergraduates. Resources include Discovery Kits, Discovery Stories, and the Discovery Classroom.

The Discovery Classroom is a collection of inquiry-based, formal lesson plans based on the major thematic areas of the National Ocean Service website. All of the lessons are downloadable, emphasize hands-on activities using on-line data resources, and are correlated to National Science Education Standards and the American Association for the Advancement of Science Benchmarks for Science Literacy.

Current topics in the Discovery Classroom include:

- Marine Protected Areas
- Coral Reef Conservation
- International Collaboration
- National Marine Sanctuaries
- Ocean Exploration
- Coastal Ecosystem Science
- Coastal Management
- Harmful Algal Blooms
- Natural Resource Restoration

Be sure to check out the MPA lesson plans, *Protect This!* and *Water Parks*. For more information, go to <http://www.nos.noaa.gov/education/welcome.html> .

Events and Conferences

January

5-10: Society for Historical Archaeology/Conference on Underwater Archaeology, York, England; <http://www.sha.org/About/Conferences/mt2005.htm>

26-27: Federal Agency MPA Workshop (invitational), Washington, D.C.

February

2-3: MPA Center/Western States and Territories Workshop (invitational), Tiburon, California

15-17: MPA Federal Advisory Committee Meeting, Washington, D.C.;
http://mpa.gov/fac/fac_meetings.html

28-March 4: Commission on Environmental Cooperation, North American MPA Network, Loreto, Mexico; <http://www.cec.org/>.

March

7-9: NOAA Office of Ocean and Coastal Resource Management, annual managers' meeting, Washington, D.C.

7-10: Coastal GeoTools '05, Myrtle Beach, South Carolina. There will be MPA related sessions and posters; <http://www.csc.noaa.gov/geotools/>.

14-18: The George Wright Society Biennial Conference, Philadelphia, Pennsylvania;
<http://www.georgewright.org/2005.html>.

24-26: 'Managing Our Nation's Fisheries II – Focus on the Future', co-sponsored by the eight Regional Fishery Management Councils, the three Interstate Marine Fisheries Commissions, and NOAA Fisheries; www.managingfisheries.org

April

12-14: MPA Center/Southeastern States and Territories Workshop (invitational), St. Petersburg, Florida

May

17-19: MPA Federal Advisory Committee Meeting, New England;
http://mpa.gov/fac/fac_meetings.html

July

18-21: Coastal Zone '05, New Orleans, Louisiana, <http://www.csc.noaa.gov/cz/>.

October

23-27: First International Marine Protected Areas Congress, Geelong, Australia,
<http://www.impacongress.org/>

November

28-December 2: Third International Symposium on Deep-Sea Corals, Miami, Florida;
<http://www.conference.ifas.ufl.edu/coral>.

TO SUBSCRIBE: Send an email to Dana.Topousis@noaa.gov.