

MPA CONNECTIONS

Newsletter of the National Marine Protected Areas Center

July/August 2004

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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MPA Center Posts Report on Lessons Learned from Recent Marine Protected Area Designations in the United States

The National Marine Protected Areas Center has posted a report entitled, "Lessons Learned from Recent Marine Protected Area Designations in the United States" on the MPA.gov website.

The report is part of an MPA Center project to evaluate six recent MPA planning processes. The goal was to identify "lessons learned" that could improve ongoing and future planning processes.

The first phase of the Lessons Learned project objectively documented the establishment processes. It included producing a timeline of events and identifying the various entities involved

in each process. A report containing detailed case studies for five of the processes is available at <http://www.csc.noaa.gov/mpa/MPALessonsLearned.pdf>.

The second phase of the project involved interviewing participants to get individuals' subjective perception of what worked and what did not for each process. Contractors conducted this second phase, selecting candidates to interview based on their unique experience with and perspective on one or more MPA planning processes. In addition to resource managers from involved agencies, a wide range of stakeholder groups, including commercial and recreational interests, environmental groups, and scientists were interviewed.

The final report summarizes strengths and weaknesses and provides recommendations for ongoing and future MPA planning efforts. The six MPA designation processes selected for the project represent a range of governmental levels and geographic regions. They include:

- Multi-State/Federal Process: Schuster Horseshoe Crab Reserve (Delaware Bay)
- Federal/State Process: Channel Islands Marine Reserves (California)
- Federal/Fishery Management Council Process: Gulf of Mexico Grouper Closures (Gulf of Mexico)
- Federal/State/Local Process: San Juan County Bottomfish Recovery Zones (Washington)
- Federal/State Process: Tortugas Ecological Reserve (Florida)
- State Process: Marine Life Protection Act: Phase I (California)

You may read the final report at http://mpa.gov/information_tools/lessons_learned_table.html.

National Marine Protected Areas Center News

- MPA Federal Advisory Committee will meet in Maui, Hawaii September 21-24:
The next meeting of the MPA Federal Advisory Committee will take place from September 21-24 in Maui, Hawaii. During this meeting, the Committee's three subcommittees (National System of MPAs; MPA Stewardship and Effectiveness; and National and Regional Coordination of MPA Efforts) will continue to meet and report to the full Committee. The Advisory Committee will also hear from two panels: one consisting of representatives from Fishery Management Councils and another about Pacific island MPA management. In addition, public comment periods will be held on Tuesday, September 21, and on Thursday, September 23. A detailed agenda will be posted on the MPA.gov website soon. If you have questions, please contact Lauren.Wenzel@noaa.gov.
- MPA Center to Sponsor Education Journal Focused on Marine Protected Areas:
The MPA Center is sponsoring the July/August issue of the National Marine Educators Association journal, *Current: The Journal of Marine Education*. Various authors from around the country submitted articles for consideration, and topics include MPAs as a management tool, a native Hawaiian approach to marine resource management, maritime heritage, and many others. The issue will be distributed in late August. A Spanish-language edition will be published later in the fall.

MPA Volunteer Profile: Russ Wigh, Gray's Reef National Marine Sanctuary

(This is part of an occasional series on volunteers at various marine protected area sites around the country.)

To get a complete ecological picture of Gray's Reef National Marine Sanctuary you have to look above the water, not just under it, according to avid birder Russ Wigh.

In June 2003, Wigh and fellow birder Robert Calhoun spent seven days aboard the NOAA ship Nancy Foster completing the first formal bird survey ever done for the Sanctuary. What the volunteers saw was far more than Wigh expected.

Normally, birders travel 70 miles or more offshore Georgia to see true pelagic birds—birds like shearwaters, petrels and bridled terns that spend their entire lives at sea except when they nest or are blown inshore during heavy storms. But Gray's Reef is only 17 nautical miles off shore. Wigh saw the pelagics feeding there alongside seabirds—birds like gulls and royal terns that forage at sea but return regularly to land—during perfectly calm weather.

“And to think it's been going on under our noses and we didn't even know about it. Seeing those tubers put me in seventh heaven,” Wigh said.

Tuber is the nickname for the true pelagic birds because they have distinctive external tubes that run along their beaks. The tubes help them manage their intake of seawater when they dive in for their prey and lead directly to an enlarged olfactory gland.

Wigh, who has organized pelagic birding trips for many years and written articles for the journal of the Georgia Ornithological Society, said pelagic birds like shearwaters and petrels can smell schooling bait fish miles away.

“If the live bottom area is rich throughout the water column than you should expect to see the very small fish and the even smaller creatures they feed on. To find the true pelagic birds here foraging on them completes the ecological picture,” Wigh said.

Several scientists used the Nancy Foster ship last summer as a platform to study how larval fish are distributed in the waters of Gray's Reef. Wigh said that conducting ongoing bird surveys at Gray's Reef National Marine Sanctuary to uncover patterns of when and where the pelagic birds are feeding would help complete the picture of the Sanctuary's trophic (nutrition) cycle.

Because they spend so much of their lives far out at sea, pelagic birds are difficult to study. Like sea turtles, they only come ashore to nest and the picture of their life cycles is in no way complete. Studying the pelagics at Gray's Reef could fill in plenty of information and can bring the Sanctuary to the attention of the huge birding community.

“We do have a tendency to focus on the aquatic rather than the avian species at the sanctuary,” said Reed Bohne, manager of Gray's Reef. “It was a great pleasure to have Robert and Russ touting tubers instead of ctenophores (jellyfish-like animals) and it adds a valuable chapter to the richness of the sanctuary which has to date been unappreciated.”

In seven days at sea, their first exposure to Gray's Reef, Wigh and Calhoun logged 270 bird observations and recorded 13 species. "This put me solidly in the camp of supporting and protecting the Sanctuary," Wigh said.

Gray's Reef National Marine Sanctuary is one of the largest nearshore sandstone reefs in the southeastern United States. It is located off the coast of Georgia in waters 20 meters deep. The area earned sanctuary designation in 1981, and was recognized as an international Biosphere Reserve by UNESCO in 1986. Gray's Reef consists of sandstone outcroppings and ledges up to three meters in height, with sandy, flat-bottomed troughs between. Because of the diversity of marine life, Gray's Reef is one of the most popular sport fishing and diving destinations along the Georgia coast.

For more information about Gray's Reef National Marine Sanctuary, go to <http://www.sanctuaries.noaa.gov/oms/omsgrays/omsgrays.html>. If you would like to nominate someone to be profiled in this series, write to mpainfo@noaa.gov.

**Employment Opportunity: Coastal Management Specialist
to Conduct MPA Effectiveness Training and Technical Assistance**

A coastal management specialist position has opened at the National MPA Center's Training and Technical Assistance Institute in Charleston, South Carolina. Job duties include participating in the development and implementation of training programs and performance and effectiveness measures relating to marine protected areas (MPAs), and working closely with government agencies, interagency committees, and stakeholders to design factors for measuring national system effectiveness.

A masters degree in marine affairs, coastal management, or a related field (or equivalent experience), and a minimum of 2 years experience in coastal resource management is required. Experience with instructional design, training, and evaluation desired. Applicants should have excellent writing skills and be proficient with MS Office application software. Familiarity with marine protected areas and/or experience in marine education and outreach desired.

This is a contract position. To learn more or apply for the position, go to <http://careers.psgs.com/CareerOppLocation2.asp?location=CHARLESTON>.

MPA Federal Advisory Committee Profile: Chairman Daniel W. Bromley

Dr. Daniel W. Bromley, Anderson-Bascom professor of applied economics at the University of Wisconsin-Madison, was elected chair of the Marine Protected Areas (MPA) Federal Advisory Committee at the committee's second meeting in November 2003.

Dr. Bromley joined the faculty of the Department of Agricultural and Applied Economics after receiving his doctorate in natural resource economics from Oregon State University in 1969. Since then he has contributed to the advancement of applied economics on a continuing basis as

a teacher, researcher, journal editor, administrator, and advisor of governments, international organizations, and universities.

As a teacher, Dr. Bromley recognized from the early 1970s that an advanced body of knowledge was evolving in natural resource economics, and he took the lead in adding regular courses to the graduate curriculum. When this augmented curriculum was combined with his department's traditional strengths, and Wisconsin's excellent supporting departments, the University of Wisconsin's graduate program in natural resource economics became (and remains) renowned worldwide.

One focus of Dr. Bromley's research is U.S. commercial fisheries policy and management. His work in this area includes the construction of a bio-economic model of a fishery that, when linked to a simulation model, can assess different pricing regimes concerning entry to the fishery and fees on landings in terms of their effects on fishing effort, harvests, stock response, revenue ("resource rent") to state and federal governments, and income to the industry.

"All of my work concerns how legal arrangements (laws, administrative rules, legal decrees) are structured, modified, fought over, and "worked out" to alter the way nature is used and managed. This is precisely the issue with MPAs," Bromley said.

His additional research interests concern the institutional foundations of economic activity, and how nation states craft legal arrangements to govern use of natural resources--land, forests, water, and biological assets.

Dr. Bromley is a Fellow of the American Agricultural Economics Association, and is listed in Who's Who in Economics. He has published extensively on natural resource and environmental economics, institutional economics, and economic development. He has been editor of the journal *Land Economics* since 1974. In addition, he has served on the Ocean Studies Board, and on several National Research Council study committees of the National Academy of Sciences. He has been a consultant to a number of national and international organizations and governments on matters of public policy.

In addition, Dr. Bromley has been a consultant to the Global Environment Facility, the World Bank, the Ford Foundation, the U.S. Agency for International Development, the Asian Development Bank, the Organization for Economic Cooperation and Development, and the Ministry for the Environment in New Zealand.

The MPA Federal Advisory Committee members include representatives from different geographic regions, including the Great Lakes and U.S. territories. They represent a wide variety of interests including resource management (state, territorial, and tribal), science (economics, anthropology, and marine sciences), policy (environmental and social), and industry (commercial and recreational fishing, oil and gas production, shipping and ports, and recreation and tourism).

To learn more about the MPA Federal Advisory Committee, go to <http://www.mpa.gov/fac/fac.html>.

MPA Center and Coastal States Organization Publish Case Studies of State-Level Marine Managed Area Systems

The MPA Center and Coastal States Organization have published a case studies supplement to the “State Policies and Programs Related to Marine Managed Areas: Issues and Recommendations for a National System” analysis that was issued earlier this year.

The supplement report was commissioned to more closely examine marine managed areas (MMA) systems under state jurisdiction, and to document the lessons learned by state managers involved with their development and implementation.

Six marine managed area systems were selected based on geographic representation, uniformity among sites, availability/willingness of identified respondents, and general characteristics. Different types of MMA systems were examined to identify commonalities and ecological conditions and priorities that the MMAs are designed to address. For this reason, the selected systems ranged from sites established through local comprehensive plans in Oregon, to cultural reserves in Michigan, to nursery habitat areas in North Carolina.

The case studies are presented using information about stakeholder involvement, goals and objectives, roles of science, boundary issues, enforcement, education/outreach, and institutional arrangements for each MMA system.

The analysis report, “State Policies and Programs Related to Marine Managed Areas,” published in February, was the first of its kind to characterize existing MMA policies and programs at the state level while presenting the potential implications of the proposed national system of marine protected areas on state agencies. The report presents a series of recommendations, given by state-level coastal and ocean resource managers, toward an effective national MPA system for consideration by both state and federal officials.

To read the case studies, go to

http://www.mpa.gov/virtual_library/Publications/FinalAddendum_CaseStudies.pdf.

The analysis, “State Policies and Programs Related to Marine Managed Areas: Issues and Recommendations for a National System,” can be found at

http://www.mpa.gov/virtual_library/Publications/State_Policies_n_Programs.pdf.

New in the MPA Library

- The World Bank has just released a revised version of the "*Score Card to Assess Progress in Achieving Management Effectiveness Goals*." It is a simple site-level tracking tool to facilitate reporting on management effectiveness of MPAs. It has been adapted principally from a tool developed by the World Bank - WWF Alliance for terrestrial Protected Areas (Stolton S. et Al. 2003).

The purpose of the Score Card is to help marine protected area managers and local stakeholders determine their progress along the management continuum. It is a short,

straightforward self-assessment tool to help managers identify where they are succeeding and where they need to address gaps. Because it is intended to be completed by the MPA staff and other stakeholders, it can be a useful team building exercise. The Score Card is aimed at helping managers report progress on management effectiveness from a given baseline. It should not replace more thorough methods of evaluation which may require considerable field work and data collection, for the purposes of adaptive management.

It is now available in English, French and Spanish. For more information or to obtain a copy, please contact Francis Staub: fstaub@environmentservices.com or visit www.mpascorecard.net (to download the PDF version).

- A recent article in *Ecology and Society* discusses large MPAs which have been created in the Dutch Wadden Sea where shellfish fishing is prohibited to protect oystercatchers (shellfish-eating birds) and to allow recovery of important habitats. Because there was no observable redistribution of oystercatchers, and reproductive success of oystercatchers has declined, the article suggests that success of MPAs may necessitate design geared to distribution mechanisms of target species. The article entitled, "Shellfish Fishery Severely Reduces Condition and Survival of Oystercatchers Despite Creation of Large Marine Protected Areas," is available at: <http://www.ecologyandsociety.org/vol9/iss1/art17/print.pdf>
- The Australian Institute of Marine Science and the IUCN Marine Program have released "Monitoring Coral Reef Marine Protected Areas Version 1: A Practical Guide on How Monitoring Can Support Effective Management of MPAs." This guide provides practical advice on how to design and implement ecological and socioeconomic monitoring programs to enable effective management of MPAs. It includes case studies from around the world, information on organizations involved with coral reef monitoring and management, and recommendations on coral reef monitoring and information processing from the International Tropical Marine Ecosystems Management Symposium of 2003. The guide is available at: <http://www.aims.gov.au/pages/reflib/mcrmpa/pdf/mcrmpa-v1.pdf>
- White Water to Blue Water has started a partnership to establish an effectively-managed representative network of marine and coastal protected areas, consistent with international law and based on scientific information. The Marine Protected Areas Network Partnership brings together MPA managers, researchers, administrators, governmental contacts, NGOs, and other stakeholders to exchange ideas and address gaps in scientific knowledge related to connections in diverse spatial/temporal scales. The MPA Networks Project falls under White Water to Blue Water's Marine Ecosystem-based Management thematic area. For more information, go to <http://www.ww2bw.org/Members/dhhernandez/Project.2004-02-04.1054757866/view>

Events and Conferences

August

3-5: National Marine Sanctuary Program's Maritime Heritage Program Working Group Meeting, Alpena, Michigan

15-26: Remote Sensing for Spatial Analysts Course, NOAA Coastal Services Center, Charleston, South Carolina; www.csc.noaa.gov/crs/rs_training.html.

21-26: American Fisheries Society Annual Meeting, Madison, Wisconsin; <http://www.afs2004madison.org/>.

September

12-15: Restore America's Estuaries, Second National Conference on Coastal and Estuarine Habitat Restoration, Washington State Trade and Convention Center, Seattle, Washington; <http://www.estuaries.org/>

14-15: U.S. Coral Reef Task Force, Miami, Florida; <http://coralreef.gov/>.

20-22: Littoral Seventh International Conference, "Delivering Sustainable Coasts: Connecting Science and Policy," Aberdeen, Scotland; <http://www.littoral2004.org/>.

21-24: MPA Federal Advisory Committee meeting, Maui, Hawaii; <http://mpa.gov/fac/fac.html>.

27-30: National Extension Tourism Conference 2004, Kissimmee, Florida; <http://srdc.msstate.edu/04tourism/>

October

12-15: Coastal States Organization Annual Meeting, Traverse City, Michigan; <http://www.sso.org/cso/conferences01.htm>.

26-29: Gulf of Maine Summit, St. Andrews, New Brunswick; <http://www.gulfofmainesummit.org/>

27-30: Seventh Maritime Heritage Conference, Norfolk, Virginia, <http://www.nauticus.org/MHConference.html>.

November

6-10: North American Association of Environmental Educators annual conference, Biloxi, Mississippi; <http://www.naaee.org/>.

16-20: National Interpreters Workshop, Grand Rapids, Michigan; <http://www.interpnet.com/niw2004/>.

17-25: 3rd IUCN World Conservation Congress, Bangkok, Thailand,
<http://www.iucn.org/themes/marine/>.

2005

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

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

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

March 7-10: Coastal GeoTools '05, Myrtle Beach, South Carolina. MPAs are a theme, and the call for papers will go out at the end of June. <http://www.csc.noaa.gov/geotools/>

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

July 17-21: Coastal Zone '05; theme is "Balancing on the Edge." New Orleans, Louisiana,
<http://www.csc.noaa.gov/cz/>. Deadline for abstracts is October 4, 2004.

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>.

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