National Oceanic and Atmospheric Administration
Information Exchange for Marine Educators
Archive of MPA Information

At Sea – A Cruise and Virtual Expedition to the Oculina Banks
Scientists and students explored deepwater coral reefs of the Oculina Banks, stretching 30 miles offshore from Ft. Pierce to Cape Canaveral, Florida. This remote MPA is designated a habitat of particular concern, and is a model for efforts underway to create new MPAs throughout southeast U.S. waters and the Gulf of Mexico. The team used a Remotely Operated Vehicle to study the current health of coral on the banks.
http://oceanica.cofc.edu/Oculina2003/home.htm

California Ocean Uses Atlas
The California Ocean Uses Atlas Project is a public-private partnership between NOAA's Marine Protected Areas Center and the Marine Conservation Biology Institute. The project maps significant human uses of the ocean in state and federal waters of the coast of California. Data, maps, and analytical products are available. In addition, the aim is to create Ocean Uses Atlases for all U.S. waters and they are actively seeking interested partners in coastal states and regions, and in other public and private entities.
http://mpa.gov/science_analysis/atlas.html

CaMPAM-L List Online
The Caribbean Marine Protected Areas Managers (CaMPAM) forum listserv is for people interested in marine protected areas management, science, policy, and governance in the Caribbean region. The list is supported by the Gulf and Caribbean Fisheries Institute (GCFI), the United Nations Environment Programme Caribbean Environment Programme, and NOAA's National Ocean Service. The CaMPAM list was recently migrated to the GCFI website and management; login is unnecessary.
http://listserv.gcfi.org/SCRIPTS/WA-GCFI.EXE?A0=CAMPAM-L

Caribbean Natural Resources Institute
The Caribbean Natural Resources Institute seeks to create avenues for the equitable participation and effective collaboration of Caribbean communities and institutions in managing the use of natural resources. *Marine Protected Areas and Sustainable Coastal Livelihoods* is based on research and includes guidelines on developing effective management partnerships that involve local stakeholders; dealing with conflicts between the tourism and fisheries sectors, and sustaining fishery-based livelihoods.
http://www.canari.org/mpa.htm

Caribbean Protected Area Communication Programs
The Trust for Sustainable Livelihoods offers the downloadable publication, *Protected Areas Management in the Caribbean: Core Themes for Education, Awareness, and Communication Programmes*. Information for the preparation of the report was gathered from a literature review and a survey of protected areas professionals in the wider Caribbean region.

http://www.sustrust.org/documents.html

Connectivity Handbook
Preserving Reef Connectivity - A Handbook for Marine Protected Area Managers is a product of the Coral Reef Targeted Research and Capacity Building for Management Program by the University of Queensland. The downloadable handbook offers a practical guide for reef managers and others interested in the science of coral reef connectivity. Contents include: What is connectivity, What process cause connectivity, The science of connectivity, and more.
http://www.gefcoral.org/LinkClick.aspx?fileticket=wUelZOi-9QI%3d&tabid=3260

Disneynature's Oceans
Disneynature's big-screen movie, Oceans, will be released on Earth Day, April 22, 2010. Disney is teaming up with The Nature Conservancy for the initiative, See OCEANS, Save Oceans, with a portion of each ticket sold for the film's opening week (April 22-28, 2010) going to help establish new marine protected areas in the Bahamas. An Educational Activity Guide and Educator's Guide are available for downloading from the website.
http://disney.go.com/disneynature/oceans/

EcoViz
EcoViz: Ecosystem Science and Visualizaion is a group of projects developing ecosystem science visualization products for research, education, and management applications. The goal is to research and develop landscape-scale visualizations as a means to enhance linkages between complex scientific research data sets, decision makers, and the general public. Recent work offers visualizations of MPAs and the research that is being done in support of them.
http://ecoviz.csumb.edu/home/

Educating Stakeholders about MPAs
MPA News, Vol. 8, No. 7 from February 2007 (MPA82.pdf) published *Educating Stakeholders about MPAs: Practitioners Use an Array of Methods*, offering a discussion of various methods to increase public awareness and community understanding of the benefits that can come from resource protection. The article examines how practitioners have employed a variety of approaches to inform and educate stakeholders.
http://depts.washington.edu/mpanews/issues.html

Encyclopedia of the National Marine Sanctuaries
The Encyclopedia of the National Marine Sanctuaries is an online guide that provides visitors access to photos, videos, and biological information for over 100 species of interest from each of the marine protected areas managed by NOAA. New sections highlighting the Stellwagen Bank and Thunder Bay national marine sanctuaries are now available.
http://www8.nos.noaa.gov/onms/park/

Enforcing U.S. Marine Protected Areas: Synthesis Report
The MPA Center has published *Enforcing U.S. Marine Protected Areas: Synthesis Report*. MPA.gov also hosts a link to the report and a presentation highlighting aspects of the report. The report provides a synthesis of existing information relevant to the enforcement of marine protected areas in the United States, as well as new insights into

the current challenges, needs, and suggestions of coastal and marine resource managers, enforcement agencies, education/outreach specialists, and others.
http://www3.mpa.gov/mpa_lib/publications.aspx

Establishing Marine Protected Area Networks
The IUCN World Commission on Protected Areas (WCPA-Marine) has released a new guidebook summarizing key points in building MPA networks. The 16-page guide, *Establishing Marine Protected Area Networks: Making It Happen*, offers a concise synopsis of factors necessary for effective network design, including ecological criteria, best practices for planning, and other considerations. It is intended to show briefly how to transform policy aspirations into practical action, and is not meant to be exhaustive. A full technical report to flesh out the summary report's framework is expected to be released later in 2007.
http://www.iucn.org/themes/wcpa/biome/marine/mpanetworks/networks.html

Establishing Resilient Marine Protected Area Networks
Establishing Resilient Marine Protected Area Networks - Making It Happen is a new document that provides guidance for designing and implementing effective MPA networks. The guide contains information for MPA planners, managers, and conservation practitioners about the role of MPA networks in achieving marine conservation goals.
http://blog.protectplanetocean.org/2008/10/new-global-best-guidance-released-on.html

Federal MPA Legislative Authorities
There are many different kinds of marine protected areas created under different local, state, tribal, or federal authorities. The National MPA Center has a quick guide to some of the legislation that provides the authority for various federal agencies and government entities to establish, manage, monitor and/or evaluate marine protected areas at the federal level. More extensive information, with links to the legislation, can be found on the Ocean Planning Information System (OPIS) Legislative Framework page. For more information, check out http://mpa.gov/mpa_programs/mpa_legislation.html and http://www.csc.noaa.gov/opis/html/legal.htm .

Framework for a National System of Marine Protected Areas
The United States has developed a national system of marine protected areas to advance the conservation and sustainable use of the nation's vital natural and cultural marine resources. The national system is described in detail in the downloadable *Framework for a National System of Marine Protected Areas for the United States America*.
http://mpa.gov/national_system/national_system.html

A Global Analysis of the Effectiveness of Marine Protected Areas in Preventing Coral Loss
A recent paper in *PLoS One* examined surveys conducted in over 300 tropical MPAs for a meta-analysis, concluding that MPAs can be effective at preventing coral loss, especially after they have been established for a while, and argues that MPAs can be effective at increasing coral-reef resilience.
http://www.plosone.org/article/info:doi/10.1371/journal.pone.0009278

GCFI/CaMPAM Reference List
This reference list from CaMPAM and GCFI offers hyperlinks to downloadable publications on MPA science and practice in the Caribbean. The e-library includes information materials published on the Internet ranging from research papers to technical reports, pamphlets, brochures, and web sites, grouped by subjects related to marine conservation science and practice. Topics include best marine management practices, coral reefs, ecological services, MPA financing, and much more.
http://campam.gcfi.org/CaMPAMLibrary.php

Gorgona Island National Park, Colombia
Gorgona Island is located in the Pacific off the coast of Colombia, South America. It has two main ecosystems: coral reef and tropical rainforest. Representative animals include a blue lizard (an endemic species), capuchin monkeys, bats, toads, snakes, fisher eagles, pelicans, boobies, and frigate birds, along with a host of insect species. The Environmental Education Project addresses the community schools and an Intepretative and Interactive Center provides interpretative walks.
www.parquesnacionales.gov.co .

The Great Barrier Reef Marine Park
The Great Barrier Reef is widely acclaimed as one of the world's great natural treasurers. In 1981, the Great Barrier Reef gained international recognition through its inscription on the World Heritage List. The Great Barrier Reef World Heritage Area is the world's largest, and one of only a few World Heritage Areas that satisfy all four natural World Heritage Criteria (represent major stages of earth's history, represent significant ecological and biological evolutionary processes, contain superlative natural phenomena or beauty, and contain significant natural habitats for conservation). On July 1 2004, the Australian Commonwealth Government implemented a new zoning plan for the Great Barrier Reef which established a comprehensive network of protected areas covering more than 33 percent of the Great Barrier Reef Marine Park.

The charter of the Great Barrier Reef Marine Park Authority's Education Unit is to deliver education programs and activities about the Great Barrier Reef Marine Park and World Heritage Area throughout Australia. To meet this charter, the Education Unit has developed a range of programs and educational activities, including ReefEd, a dynamic educational website featuring a visual library, online curriculum units, the Great Barrier Reef Explorer, and a page designed specifically for student inquiry. For more information, check out http://www.reefed.edu.au/.

For more information on the marine park, ReefEd, and ReefHQ, check out
http://www.gbrmpa.gov.au/ .

How is Your MPA Doing?
NOAA, the World Commission on Protected Areas, and the World Wildlife Fund have published four case studies that test the MPA management effectiveness guidebook, *How is Your MPA Doing?* Check out how the Miramare Natural Marine Reserve in Trieste, Italy, fared with their evaluation at
http://mpa.gov/mpaservices/library/notables.html .

Implementation and Management of Marine Protected Areas
The December 2005 issue of the journal Conservation Biology provides a special free-content section dedicated to implementation and management strategies for marine

protected areas (MPA), with cases drawn from sites worldwide. The special section was based on a symposium on MPAs held at the 2003 SCB Annual Meeting in Duluth, Minnesota, USA. To access the articles, click on the link for the December 2005 issue (Volume 19), then scroll down to the special section.
http://conbio.net/SCB/Publications/ConsBio/Search

Indicators for the Evaluation of Environmental Education, Interpretation and Information in Protected Areas
This article, featured in *Applied Environmental Education and Communication: An International Journal*, presents a model of evaluation of environmental education, interpretation and information carried out in the protected areas of the Balearic Islands off Spain. The article proposes indicators that can be used to analyze communications activities in protected areas.

> Sureda, Jaume Oliver MIquel Castells Margalida, 2004. Indicators for the evaluation of environmental education, interpretation and information in protected areas. 3, 3: 171-81. Spain

Integrating Marine Reserve Science and Fisheries Management
The National Fisheries Conservation Center has posted the Consensus Statement "Integrating Marine Reserve Science and Fisheries Management." The 30-page statement is the product of a two and a half day conference in June, 2004, featuring an expert panel from the fields of marine ecology, fishery management, economics, population dynamics, and modeling. The statement provides an objective examination and assessment of the information regarding potential biological, social, and economic consequences of marine reserves, their potential effectiveness as a fishery management tool in the U.S., the methods for integrating their application with existing U.S. fisheries management and how marine reserves might be designed, monitored and evaluated. In addition, the statement addresses sources and magnitudes of uncertainty associated with marine reserves and conventional management approaches, and recommends areas for further study. For more information, check out
http://nfcc-fisheries.org/consensus/index.php .

Ishmael's Inclinations: Non-Use Values of Marine Protected Areas
The authors describe four important non-use values to consider when considering MPAs: option value, quasi-option value, bequest value, and existence value.
http://unicorn.csc.noaa.gov/mpa/barrnuv.pdf

List of Caribbean Marine Protected Areas
A list of Caribbean marine protected areas was gleaned from the *Reefs at Risk* publication and the World Resources Institute. The website also includes important metadata and descriptor information. In addition, users can copy the latitude and longitude information and paste it directly into Google Earth.
http://www.coral.aoml.noaa.gov/mpa/sites/

Marine Cultural and Historic Newsletter
NOAA's National Marine Protected Areas Center distributes the monthly *Marine Cultural and Historic Newsletter*. It includes news and updates from around the world, providing a short summary followed by the link to the original news site and/or relevant agency website. Sections include Federal Agencies; Activities in States and Territories; From the Halls of Academia; Global Perspectives; The Reference Library; and Upcoming Events. Access the newsletter through the MPA Center's Cultural Resources website.

http://www.mpa.gov/information_tools/cultural_resources.html

Marine Protected Area Resources and Concepts for Teaching Ocean Literacy
This new publication developed by the National Geographic Society, NOAA, and partners links MPA Center educational resources with National Ocean Literacy Principles. The information is intended to help educators improve ocean literacy by highlighting MPA Center resources on marine protected areas and conservation.
http://www.mpa.gov/resources/education/

Marine Parks Primary Schools Education Kit
The aim of this project from New South Wales, Australia is to educate primary school children about the marine environment and marine protected areas. The downloadable kit offers a structured and directed primary level teaching resource with four separate modules covering marine parks and conservation, estuaries, rocky shores, and Aboriginal cultural heritage. Each module includes fact sheets, identification guides, risk assessments, and activity plans.
http://www.mpa.nsw.gov.au/index_kit.html

Marine Protected Areas
Thank You Ocean has launched this web page on marine protected areas, in both English and Spanish. The page provides basic information about MPAs, an overview of both state and federally-designated MPAs, and links to more in-depth information.
http://www.thankyouocean.org/threats/marine-life-decline/mpas/

Marine Protected Areas and Coastal Communities
This website from the Caribbean Natural Resources Institute offers tools and resources for managers with a focus on marine protected areas and sustainable coastal livelihoods, to help them better understand and respond to the needs of coastal communities. The website includes downloadable reports, case studies, guidelines, and training materials, along with links to other websites.
www.canari.org/mpa.htm

Marine Protected Areas Inventory Online
NOAA's National Marine Protected Areas Center, in cooperation with the Department of the Interior, has released the online inventory of the nation's marine protected areas (MPAs). This comprehensive inventory catalogs and classifies marine protected areas within US waters. Both tabular and GIS spatial data can be down-loaded, as well as mapping products and analysis reports created using the MPA Inventory data.
http://www.mpa.gov/helpful_resources/inventory.html

Marine Reserves as a Tool for Ecosystem-Based Management: The Potential Importance of Megafauna
Marine predators attract significant attention in ocean conservation planning and are therefore often used politically to promote reserve designation. This article discusses whether their ecology and life history can help provide a rigorous ecological foundation for marine reserve design.

Marine Sanctuaries Issue of *Current*
The education program of NOAA's National Marine Sanctuary Program is featured in quarterly issue of the National Marine Educators Association's *Current: The Journal of Marine Education* (Volume 21, Number 1, 2005). The issue illustrates how national

marine sanctuaries serve as living classrooms where learners of all ages can see, touch, and learn about America's ocean and Great Lakes treasures.
Contact Michiko Martin at Michiko.Martin@noaa.gov

MedPAN
MedPAN is an European Union-funded initiative to network MPA managers in the Mediterranean whose aim is to facilitate exchange between Mediterranean marine protected areas in order to improve the efficiency of the management of these areas. The website, available in English and French, features a directory of Mediterranean MPAs by country, MPA-related documents, and more. Documents include the workshop proceedings on Education and Communication in Marine Protected Areas.
http://www.medpan.org

Monitoring Climate Effects in temperate MPAs
This publication provides a framework for monitoring the impacts of climate change on marine protected areas. Focusing on MPAs in California, the report aims to inform adaptive management of the state's temperate marine ecosystem. Among other guidelines, it describes how certain species can indicate the impacts of climate change, and how these species can be incorporated in existing monitoring programs.
http://monitoringenterprise.org/pdf/Monitoring_climate_change_effects_in_temperate_marine_ecosystems.pdf

MPA Blog
The IUCN's World Commission on Protected Areas has launched The Official MPA Blog to offer news and views from IUCN/WCPA. The system allows users to link the site as a news feed; search through news for particular subjects or through a structured archiving of old posting; and email stories of interest to friends and colleagues directly from the website.
http://officialmpa.blogspot.com/

MPA Enforcement International
MPA Enforcement International, LLC is a newly formed for-profit marine resource protection consulting and training firm. Comprised of staff with diverse expertise, MPA Enforcement International's mission is to provide solutions for management and enforcement of marine protected areas anywhere in the world.
http://www.mpaenforcementinternational.com/

MPA Issue of *Current: The Journal of Marine Education*
The National Marine Protected Areas Center has sponsored the July/August 2004 edition of the National Marine Educators Association's quarterly journal, *Current: the Journal of Marine Education*. The issue explores challenges facing MPA managers committed to wise public resource use and conservation, education about our nation's coastal and marine environment, and the public's interest in both enjoying these resources and preserving them for future generations.

Articles focus on seabirds and whales, coastal habitats and underwater shipwrecks, fisheries management, reserve design, a native Hawaiian approach to marine resource management, and questions facing managers when considering MPA networks. Three activities accompany the articles, enabling teachers to bring some of these issues directly into their classrooms. Jim Toomey, who draws "Sherman's Lagoon," generously contributed illustrations.

A Spanish language edition will be available later this year. In addition, the MPA Center will develop other activities to supplement the articles, and will post those activities on the www.MPA.gov website.

If you would like a copy of the issue or for more information, contact Phyllis Dermer at phyllis.dermer@noaa.gov, or (865) 932-5074.

MPA Mapping Tool
The MPA Center has created an interactive online mapping tool that allows users to view boundaries and access data for over a thousand marine protected areas in the United States. The tool provides simple functions to visualize MPA boundaries, review MPA classification information (e.g. level of protection, managing agency, fishing restrictions, etc), and explore all MPAs in a given location.
http://www.mpa.gov/dataanalysis/mpainventory/mpaviewer/mpaviewer.swf

MPA Networks
The MPA Center sponsored a special edition of *Current: The Journal of Marine Education* focused on networks and systems of marine protected areas. The issue includes articles written by authors who have had extensive experience in MPA network management and research. The activities and additional resources at the end of the articles can help you bring the concept of MPAs and networks of MPAs directly into your classroom. The special issue, along with some additional lesson plans, is downloadable.
http://mpa.gov/resources/education/

MPA News in Spanish
MPA News issues dating back to January 2008 are now available in Spanish.
http://depts.washington.edu/mpanews/issues.html

MPA Videos
The National Marine Protected Areas Center has posted four new videos on their website. Topics include protecting cultural resources, natural resources, and more.
http://www.mpa.gov/

MPA Virtual Library
The National Marine Protected Areas Center, in collaboration with the NOAA Central Library, hosts the MPA Virtual Library to facilitate access to information on MPAs. The MPA Virtual Library serves as a searchable database of print, electronic, and web-based resources on U.S. and international marine protected area issues. The resources described and linked to in the MPA Library are organized by bibliography, conferences and workshops, institutions and organizations, and web sites.
http://www2.mpa.gov/mpa/mpaservices/virtual_library/virtual_library.lasso

MPA.GOV Website Redesign
The MPA Center's Website has undergone an extensive redesign and is now easier to use than ever. In addition to updated information, we have added new sections on MPA Programs, Information and Tools, and Regional Information Centers. New features on the site include a common terminology and classification system for U.S. marine protected areas in the Great Lakes, coastal, and marine environment; expanded library search capabilities; and an extended Information and Tools section with fact sheets, press releases, presentations, Frequently Asked Questions, and much more.

The Education section, under Information & Tools, now hosts the current month's edition of this Information Exchange for Marine Educators, along with printable archives of all of the information shared to date. Future plans include making the archived information more user-friendly through the addition of search capabilities for all of the different programs and opportunities. For a direct link to the materials from the Information Exchange, browse to http://www.mpa.gov/information_tools/education.html#InfoExchange . For more information, check out www.mpa.gov .

MPAs – Local and Traditional Fishing Community Perspectives
The International Collective in Support of Fishworkers has launched a new website on MPAs, providing perspectives from local and traditional fishing communities. The website currently includes an overview of MPAs, an outline of international legal instruments protecting the resource rights of local communities, and summaries of case studies from five countries: Brazil, India, Mexico, South Africa, and Thailand. http://www.icsf.net/icsf2006/jspFiles/mpa/

National Marine Protected Areas Federal Advisory Committee Meeting
The Marine Protected Areas Federal Advisory Committee, managed jointly by the Department of Commerce and the Department of the Interior, will hold its third meeting April 6-8, 2004, Key Largo, Florida. Attendance is open to the public, but registration is required at the meeting site. Public comment periods are scheduled for April 6 and April 8. The Committee has formed subcommittees on the National System of MPAs, MPA Stewardship and Effectiveness, and National and Regional Coordination of MPA Efforts. For more information, check out http://mpa.gov/fac/fac.html .

Navigating the Nation's Marine Managed Areas
The MPA Center and NOAA's Office of Coast Survey are working jointly to include information about the nation's marine managed areas (MMAs) in the U.S. Coast Pilot® series to improve safe navigation and coastal stewardship. You can review *Navigating the Nation's MMAs*, which uses the coast of central California as a model. The purpose of this document is to provide an overview of the project and an example of how information on MMAs is intended to be presented in the U.S. Coast Pilot series. http://mpa.gov/

New Canadian MPA: The Gully
MPAs are being used worldwide as an ecosystem management tool. A neighboring example is the Gully, Canada's first east coast MPA designated under the Oceans Act, located off Nova Scotia, near Sable Island. It is the largest submarine canyon in eastern North America. The Gully contains a rich diversity of marine habitats and species, including deep-sea corals and the northern bottlenose whale. The website contains audio, pictures, and videos in addition to background information. For more information, check out http://www.mar.dfo-mpo.gc.ca/oceans/e/essim/essim-gully-e.html .

New Paradigms for Supporting the Resilience of Marine Ecosystems
This article discusses recent trends in understanding and moderating human impacts on marine ecosystems. The authors focus on the temporal and spatial scale of ecosystem dynamics and management, as well as the importance of biodiversity to the function and resilience of marine ecosystems.

http://www.sciencedirect.com/science/journal/01695347

Northwestern Hawaiian Islands Newspaper Insert
A newspaper insert prepared during the period in which draft fishing regulations are being developed for the proposed Northwestern Hawaiian Islands National Marine Sanctuary discusses the history and importance of the islands' ecosystem, fishery management plans and coral reef preservation actions, the seafood market and its importance to consumers, and research on fishing effects on the ecosystem.
http://www.wpcouncil.org/NWHI/Documents/NWHI_Insert.pdf

Ocean Portal
The Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) supports a web portal which provides a high-level directory for ocean data and information web sites. Links to MPA resources are currently available from the "Administration, Conservation and Policy" category, while the “Data Resources” links to databases around the world.
http://ioc.unesco.org/oceanportal/index.php

Northwestern Hawaiian Islands Marine National Monument Established
On June 15, 2006, President Bush signed a proclamation that created the Northwestern Hawaiian Islands Marine National Monument. The monument will be managed by the Commerce Department’s National Oceanic and Atmospheric Administration and the Department of the Interior’s U.S. Fish and Wildlife Service, in close coordination with the State of Hawaii. NOAA will have the primary responsibility regarding management of the marine areas.
http://hawaiireef.noaa.gov/management/

On-Line Inventory of Marine Managed Areas of the United States
The MPA Center is developing an on-line inventory of federal, state, and tribal marine managed areas in the U.S. The website currently includes information about 328 sites, and an on-going data collection process is adding new sites and information all the time. Check out the inventory at http://mpa.gov/mpaservices/mpa_inventory.html .

Pay per nature view: Understanding tourism revenues for effective management plans
This report will be of interest for those looking at tourism as an economic development tool and finance mechanism for conservation. This report asks two main questions: What mechanisms can protected areas use to raise funds from tourism? and To what extent should protected areas raise funds from tourism? The report describes six survival essentials for protected areas, and uses these as a context for analysis of the role and potential of tourism in protected areas.
http://www.leedsmet.ac.uk/lsif/the/documents/PayPerNatureView02.pdf

Phoenix Islands Protected Area
The small Pacific Island nation of Kiribati has established a California-sized marine protected area of coral reefs and rich fish populations. The Phoenix Islands Protected Area (PIPA) conserves one of the Earth's last intact oceanic coral archipelago ecosystems, consisting of eight coral atolls and two submerged reef systems in a nearly uninhabited region of abundant marine and bird life.
http://www.phoenixislands.org/index.php

Preserving Ocean Resources
This four page newspaper offers information relating long term ocean health and marine protected areas. Up to 10 copies are available to high school educators who are incorporating MPAs into their curriculum.
Contact christie_anastasia@nps.gov

Proceedings from the First International Marine Protected Areas Congress
Proceedings from the First International Marine Protected Areas Congress, held October 2005 in Australia, are now available. The document totals 665 pages and includes abstracts from all congress presentations, as well as full text of the meeting's plenary addresses. A full range of MPA issues is covered, including planning, management, science, and more. The file, 19 MB in size, is searchable by author, keyword, theme, and other criteria. It also includes a list of delegates with e-mail contact information.
http://www.impacongress.org/proceedings.htm

Protect Planet Ocean
The Protect Planet Ocean website aims to bring the best information on marine protected areas, including basic facts on each of nearly 5000 MPAs worldwide; the ability to upload information; discussions of the science of no-take marine reserves; multimedia content on MPAs; and more. *Oceans Live* offers live video from an underwater camera inside Glover's Reef Atoll World Heritage Area. The website also hosts The Official MPA Blog and MPA-related headlines from newspapers worldwide.
http://www.protectplanetocean.org/

Protecting our Diverse Heritage: The Role of Parks, Protected Areas, and Cultural Sites
These proceedings of the joint George Wright Society Biennial Conference/National Park Service Cultural Resources 2003 conference focus on parks, protected areas, and cultural sites. Categories of papers include: Administrative and Intellectual Tools for Park Management; Basic Values and Purposes of Parks; Cultural and Natural Resources: Conflicts and Opportunities for Cooperation; and more. The individual papers can be downloaded from the website. For more information, check out http://www.georgewright.org/2003proc.html .

Race Rocks
Race Rocks is Canada's first MPA established under the Oceans Act, and contains extraordinary ecological significance. These small islands and intertidal and subtidal reefs are located in the Strait of Juan de Fuca, south of Vancouver Island. It is managed by the staff and students at Lester B. Pearson College of the Pacific, for research and education

The website won the Commonwealth of Learning Award for Educational Excellence in Distance Education Material. The website allows you to “view” the site through 360-degree virtual reality panoramas around the island. The website offers video clips and photographs of sea lions and other marine mammals observed near Race Rocks. There are links to whale watching guides and plenty of background information about the normal inhabitants of the area. In addition, the site has a taxonomy activity, and accessible online lesson plans through the Jason Project.

For more information, check out http://www.racerocks.com/ . For additional information about using the virtual field trip as an educational activity, check out http://ali.apple.com/ali_sites/ali/exhibits/1000007/ .

Regional Information Centers on MPA Planning Processes
The National Marine Protected Areas Center launched a series of web-based regional information centers designed to provide comprehensive information on ongoing federal, state, and tribal MPA planning processes. Stakeholders can search the information centers by region of the US or by state. While the information centers are a work in progress and not all regions are completely populated, the Pacific Coast and New England regions are either complete or include a significant amount of information.
http://www3.mpa.gov/mpa_calendar/query/searchbyregion.aspx

Report on Caribbean MPA Capacity Assessment
The Caribbean Marine Protected Areas Management Network and Forum (CaMPAM) offers the downloadable Caribbean MPA Management Capacity Assessment, with the results of an assessment of management capacity at 27 MPA sites in 10 Caribbean countries and territories. The findings of the report are already forming the basis of a peer-to-peer summit.
http://campam.gcfi.org/CapAssess/CapacityAssessmentReport2011/index.html

Rethinking Protected Areas in a Changing World
The George Wright Society adheres to an open-access publication philosophy and as such, they have published on the web "Rethinking Protected Areas in a Changing World: Proceedings of the 2011 Conference on Parks, Protected Areas, and Cultural Sites." Note that it is a 423-page volume containing 71 papers from the conference last year in New Orleans, but each section can be downloaded individually. Topics include fire, climate change, ecotourism, and much more.
http://www.georgewright.org/proceedings2011

Sanctuaries of the Caribbean
Sanctuaries of the Caribbean is a short film about MPAs in the Southeastern Caribbean, produced as part of the Coastal and Marine Management and Education in the Southeastern Caribbean project. It can be viewed on YouTube.
http://www.youtube.com/watch?v=sMKKkpLreXw

Sanctuaries Fun Pages
The National Marine Sanctuaries For Fun website offers games and downloads for young students. Download the new Ocean Guardian Activity Book, play the Kure Waste Chase game, go on a virtual submersible dive into Monterey Bay, work puzzles, and much more. Students can spend hours here, learning about the ocean all the while.
http://sanctuaries.noaa.gov/education/fun/

Sanctuary Atlas Maps, Images, and Videos
Download atlas maps, high resolution images, and watch compelling videos from the 14 marine protected areas managed by NOAA's National Marine Sanctuaries Program.
http://sanctuaries.noaa.gov/pgallery/

Sanctuary Calendars
The National Marine Sanctuary Foundation is a non-profit organization created to assist the National Marine Sanctuary Program with education and outreach programs designed

to preserve, protect and promote meaningful opportunities for public interaction with the nation's marine sanctuaries. T
http://nmsfocean.org/

Sanctuary Integrated Monitoring Network
NOAA and partners have launched SIMoN, the Sanctuary Integrated Monitoring Network, a user-friendly website featuring background information about three West Coast national marine sanctuaries, Monterey Bay, Gulf of the Farallones, and Cordell Bank, along with information about the latest scientific research in these locations. Topics include rocky shores, estuaries, geology, and much more. The website includes a photo library, interactive maps, species database, and more.
http://www.sanctuarysimon.org/index.php

Sanctuary Integrated Monitoring Network
The Monterey Bay National Marine Sanctuary launched the Sanctuary Integrated Monitoring Network (SIMoN). Users can access the website to obtain local water quality monitoring information, generate watershed maps, locate monitoring information, link to data sets from individual stations, and download GIS layers.
http://mbnms-simon.org .

Sanctuary Sam
The NOAA National Marine Sanctuary Program has announced the launch of a new national ocean literacy, education, and public awareness campaign featuring Sanctuary Sam, a California sea lion who will be the program's "spokes-sea lion." Sanctuary Sam will help convey messages to the American public, particularly children, about the marine environment, highlighting the current problems facing the oceans, including pollution, marine debris, and habitat destruction. Learn more by visiting his MySpace page.
http://myspace.com/sanctuarysam

Sanctuary Science Conservation Series
The Marine Sanctuaries Conservation Series provides a forum for publication and discussion of the complex issues the National Marine Sanctuary Program faces. Topics of published reports vary and may include descriptions of educational programs, discussions on resource management issues, and results of scientific research and monitoring projects.
http://sanctuaries.noaa.gov/science/conservation/welcome.html

Sanctuary Watch
The latest issue of *Sanctuary Watch*, a publication from NOAA's Office of National Marine Sanctuaries. features America's Great Outdoors: The Ocean, Connecting Children to the Great Outdoors; an animated story about the *R/V Manta*; and more. You can download a copy of this issue and read archived issues from the website.
http://sanctuaries.noaa.gov/news/sw/

Sanctuary Watch
Sanctuary Watch is a publication produced by NOAA's Office of National Marine Sanctuaries. It includes news about happenings in the sanctuary program, "Critter Files" that highlight specific species of animals, spotlights on sanctuary partners and staff, and beautiful photos. Subscribe to the online publication and look through past editions on the website.
http://www.sanctuaries.noaa.gov/news/sw/welcome.html

Sanctuary Watch: Education Edition
Ocean education and hands-on field activities from around the country are highlighted in the new education edition of the Sanctuary Watch newsletter produced by NOAA's National Marine Sanctuary Program. You can subscribe to Sanctuary Watch electronically by sending an email to requests@willamette.nos.noaa.gov and putting "subscribe sanctuarywatch" in the subject line.
Sanctuary.Education@noaa.gov .

Scaling Up Marine Management: The Role of Marine Protected Areas
This report from the World Bank assesses factors likely to determine marine protected areas' success and identifies opportunities for the bank and its partners to scale up MPA implementation to meet global conservation targets. The report focuses on how best to capture the potential benefits of MPAs for helping the world's poor while addressing the sociocultural and political realities of restricting access to the sea and regulating what has traditionally been considered common property.
http://siteresources.worldbank.org/INTCMM/Publications/21108865/Final_Printed_Version_MPA_ESW.pdf

Science of Marine Reserves Booklet Series
The Partnership for Interdisciplinary Studies of Coastal Oceans has released the latest booklet in its series on the science of no-take marine reserves. The new booklet summarizes current peer-reviewed knowledge and focuses on Europe, with several case studies from European MPAs. It also offers a Latin and Caribbean version. The series is available for downloading from the website.
http://www.piscoweb.org/publications/outreach-materials/science-of-marine-reserves

Science of Marine Reserves
The *Science of Marine Reserves* is now available online in an interactive format. The new educational layer in Google Earth, the MPA Layer, shows the locations of over 4000 MPAs around the globe. The case studies are highlighted in the layer through interactive graphics, along with meta-analysis depicting responses inside marine reserves around the world. In addition, the expanded information from the case studies booklet is hosted on Protect Planet Ocean.
http://www.piscoweb.org/outreach/pubs/reserves
http://earth.google.com/outreach/kml_entry.html#tMarine%20Protected%20Areas
http://www.protectplanetocean.org/somr/effectsInside.html

The Science of Marine Reserves
The updated Science of Marine Reserves is offered by the Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO). The booklet is now presented in two English versions: a U.S. version and an international version. These resources provide the latest scientific information about reserves in an understandable and accessible format. They are designed to be used by natural resource managers, government officials, scientists, and the interested public.
http://www.piscoweb.org/outreach/pubs/reserves

Sea Search
Sea Search is a monitoring program for community groups volunteering in Victoria, Australia's Marine National Parks and Sanctuaries. Volunteers can explore and learn about the diversity of marine plants and animals found in Victoria's marine protected

areas while adding to the scientific knowledge of the parks. Community and school groups work with park rangers and a project officer to collect seasonal data in their local MPA and at nearby control sites. The website includes an overview document for community-based monitoring, individual guides for intertidal, subtidal, and seagrass monitoring, data entry sheets, and field fact sheets. *MPA News #81* (at http://www.mpanews.org) includes a discussion about the program, challenges faced, and lessons learned.
http://www.seasearch.org.au/index.htm

Sheltered Sea
The Baum Foundation and Coyote Films offer the public service film, A Sheltered Sea - The Southern Passage, about the Marine Life Protection Act Initiative along the California coast. The film highlights the activities taking place in the south coast region from Point Conception to Mexico. The Southern Passage features the collective benefits and challenges of creating a network of MPAs. The website offers a 3-minute trailer along with the downloadable 25-minute film.
Contact Jen Melcon at jen@thebaumfoundation.org
http://www.thebaumfoundation.org/ashelteredsea.html

Social Science for Marine Protected Areas
The Social Science Methods for Marine Protected Areas website focuses on the human dimensions of coastal resource management. Several topics, including surveys, nonmarket valuation, and social assessments, are illustrated through case studies. The site is a collaboration between the NOAA Coastal Services Center and the National Marine Protected Areas Center. For more information, check out
http://www.csc.noaa.gov/mpass/

Southeast Regional Marine Plan: Implementing Australia's Oceans Policy in the Southeast Marine Region
Australia's National Oceans Office has released the first in a series of regional plans to ensure the protection and sustainable development of its vast ocean territory. The plan, downloadable from the website, addresses the southeast region's rich biodiversity, and the economic, social, and cultural values important to the region's communities.

Spanish issue of *Current: the Journal of Marine Education* focused on Marine Protected Areas
The National Marine Protected Areas Center sponsored the Spanish translation of the July/August 2004 edition of the National Marine Educators Association's quarterly journal, *Current: the Journal of Marine Education*. The issue focuses on marine protected areas (MPAs) and explores challenges facing MPA managers committed to wise public resource use and conservation, education about our nation's coastal and marine environment, and the public's interest in both enjoying these resources and preserving them for future generations. Over the coming year, the MPA Center will develop other activities to supplement the articles, and will post those activities on the www.MPA.gov website.

State Policies and Programs Related to Marine Managed Areas: Issues and Recommendations for a National System
CSO and the National MPA Center conducted research and interviews related to state level marine managed areas (MMAs) and the potential for future federal/state coordination within a national MPA system. This report characterizes existing MMA

policies and programs at the state level; presents the potential implications of the proposed national system of MPAs for coastal states; and proposes recommendations toward national MPA system for consideration by both state and federal officials. http://www2.mpa.gov/mpa/mpaservices/virtual_library/publications.lasso .

Webcams in Marine Protected Areas
MPA NEWS, Vol. 8, No. 5 from November 2006 published *Bringing MPAs Online: The Use of Webcams for Education, Monitoring, and Other Purposes*, offering a discussion of the use of webcams in marine protected areas for education, monitoring, and other purposes. In offers min-case studies of some of the ongoing projects, successes, and problems associated with this technology.
http://depts.washington.edu/mpanews/issues.html#Nov%202006

What is a Marine Protected Area?
The term "marine protected area" is a broad umbrella term used to describe an area-based management approach used in marine, Great Lakes, and near-shore waters. The federal government, in Executive Order #13158, defines MPAs as:

> "…any area of the marine environment that has been reserved by Federal, State, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein."

Less than 1 percent of US waters are no-take areas. Instead, the majority of U.S. MPAs are multiple use conservation areas that often permit both consumptive and nonconsumptive activities, such as fishing, diving, boating and swimming.

Examples of multiple use MPAs include most national marine sanctuaries, national estuarine research reserves, national parks and wildlife refuges with marine components, and many state underwater parks. These multiple use MPAs function both to protect ecosystems, and, at times, to support sustainable fisheries while allowing residents and other users to enjoy the resource.

For more information about this and other MPA facts, subscribe the MPA Center's monthly *Connections*, by sending an email request to Dana.Topousis@noaa.gov .

World Database on the Protected Areas of the World
The World Database on Protected Areas (WDPA) Consortium website contains information about the 2004 World Database on the Protected Areas of the World, a CD-ROM product. It was part of the WDPA Consortium efforts to share conservation information for the Fifth World Parks Congress. The Consortium welcomes contributions to the database by experts on protected areas.
http://www.biodiversity.org/wcpa/ev.php?URL_ID=1697&URL_DO=DO_TOPIC&URL_SECTION=201&reload=1099533914 .