



**NATIONAL MARINE PROTECTED AREAS CENTER
INFORMATION EXCHANGE FOR MARINE EDUCATORS**

SEPTEMBER 2004

This update is provided as a service by the National Marine Protected Areas Center to share information pertinent to the marine educator community. It is intended to encourage exchange of information and programs. We hope that it will also promote collaboration among the different educators addressing similar issues in their programs. Please share this email with your colleagues and constituents. If you request materials or respond to a request for information, please try to mention that you learned about it in the MPA Information Exchange.

The information included here has been compiled from many different sources, including SeaSpan, NSTA Express, edinfo at FREE, EE-NEWS@NAAEE, CREEC, EEinGEORGIA, Scuttlebutt, and others. We have attempted to verify web addresses, but make no guarantee of accuracy. The Department of Commerce/NOAA does not necessarily endorse or promote the views or facts presented on these sites.

To subscribe to this distribution list, send a blank message to requests@willamette.nos.noaa.gov with "subscribe infoexchange" in the subject field. Similarly, to remove yourself from the list, send the subject "unsubscribe infoexchange".

Contact the MPA Center's education coordinator directly at phyllis.dermer@noaa.gov, or by phone at (865) 932-5074, to discuss further enhancements or to contribute information for future issues.

MPA FACTS

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.

Notable Addition to MPA Library

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> .

Harmon, D., Kilgore, B.M. and Vietzke, G. E. *Protecting Our Diverse Heritage*. Proceedings volume from the 2003 George Wright Society / National Park Service Joint Conference.

Main MPA Library URL:

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

PROGRAM OF THE MONTH

Minerals Management Service Marine Education Materials

The Minerals Management Service manages more than a billion offshore acres and collects billions of dollars in mineral revenues annually. *MMS Ocean Science*, the agency's new bimonthly magazine, reports on research, including biological resources (fish, turtles, birds, whales), habitat resources (water quality, sediment quality), and socioeconomic resources (communities, archaeology, fiscal impacts). Their Alaska, Pacific, and Gulf of Mexico regions provide lesson plans, activities, posters, and teacher guides to teach about the resources they manage.

The Gulf of Mexico region has developed several posters and teacher's companions for use in the classroom. These materials are part of the Mineral Management Service's program to inform the public, and particularly students, that simultaneous production of natural resources to meet the nation's energy needs and the protection and enhancement of the environment are compatible. Topics include offshore oases, shipwrecks, chemosynthetic communities and more. The website links to additional articles on migrating birds, chemosynthetic communities, and more.

The Pacific region has developed a lesson plan, *Tidepool Math*, which teaches basic math principles and scientific method through sampling tidepool plats, with separate curriculum for K-8 and high school. In addition, they offer a teacher's resource guide on activities illustrating why and how earthquakes occur. Topics of additional activity guides include ocean energy, the ocean's sand and more.

The Alaska region "Kid's Corner" has a lab experiment to demonstrate ballast and stability, a photo gallery, activity books and puzzles, and short essays about a variety of topics related to the Mineral Management Service activities in the region.

For more information, check out these websites: <http://www.mms.gov/mmskids/> , <http://www.mms.gov/alaska/kids/> , <http://www.mms.gov/omm/pacific/kids/educate.htm>, and <http://www.gomr.mms.gov/homepg/lagniapp/lagniapp.html> . To sign up for a free *MMS Ocean Science* subscription, visit www.gomr.mms.gov and click on "E-mail subscriptions."

WEBSITE OF THE MONTH

Celebrate National Estuaries Day with Estuary Live

Take your students on a tour of estuaries of the United States by participating in the EstuaryLive interactive webcast. National Estuaries Day, September 25, 2004, is an annual celebration of the magical places where fresh water from rivers mix with salt water from the ocean. EstuaryLive kicks off the celebration on September 23 and 24 by bringing free, live, interactive, Internet field trips in seven different estuaries around the country right to your classroom.

EstuaryLive can be viewed by anyone; all you need is a computer hooked up to the Internet. As you and your classroom embark on these estuarine excursions, you can ask questions and have them answered live during the webcast. EstuaryLive targets students from kindergarten through high school, but because of its interactive component, it is great for all ages.

EstuaryLive 2004 will bring seven of our most precious ecosystems to a computer near you. Naturalists from NOAA's National Estuarine Research Reserve System and the U.S. EPA's National Estuary Programs will take participants on guided tours through the:

- Rachel Carson site of the North Carolina Reserve, in North Carolina
- Mullica River-Great Bay, in New Jersey
- Puget Sound, in Washington
- Peconic Estuary, in Eastern Long Island, New York
- South Slough, in Oregon
- Weeks Bay, in Alabama, and
- Waquoit Bay in the Cape Cod area of Massachusetts.

Additionally, this year EstuaryLive brings you a program dedicated exclusively to comparing estuaries located on the Atlantic and Pacific Coasts of the United States. Join the South Slough Reserve in Oregon, the Jacques Cousteau Reserve in New Jersey, and the North Carolina Reserve in comparing their unique estuarine habitats. It is a great way to teach your students about estuarine and comparative ecology.

The goals of EstuaryLive are to:

- Provide an opportunity for students around the country and world to experience, in real-time, a field trip to the unique habitat of an estuary
- Give students the opportunity to compare different estuaries around the country
- Take students on an exploratory trip to the estuary with the opportunity to interact with research scientists, education professionals, and natural resource management professionals

- Increase students' understanding of estuarine ecological, social and economic principals;
- Provide a resource for further information.

Educational materials to complement your EstuaryLive experience are available on the website. For more information about EstuaryLive, including the program schedule and registration, check out www.estuaries.gov

REQUESTS

Looking for Australian Biofacts

The National Aquarium in Baltimore is in need of Australian biofacts, interesting stories, Aboriginal artwork, etc. to be used in new programs focusing on the Northern Territory and major Australian biomes. Cast replicas can be made. For more information, please contact Marjorie Bollinger at mbollinger@aqua.org.

Looking for High School Marine Statistical Analysis Lab Activity

Kim Raccio is looking for a good statistical analysis lab or lab activity for high school students, preferably using data about marine organisms in the New England area, if possible. She is interested in labs introducing Chi-squared analysis, but any basic descriptive statistics would suffice. She would prefer a lab that can be completed in 1-2 class periods. Her inquiry on Scuttlebutt generated requests from other teachers who are interested in similar materials. If you can help, please contact Kim at xiphia@hotmail.com.

Looking for Waterfront Youth Recreation Studies

Mike Hammer is doing research for the Children's Outdoor Bill of Rights for the California Roundtable on Recreation Parks and Tourism. He is looking for any studies that outline benefits of youth recreation on any type of waterfront. If you can help, please contact him at mrhammer@ucla.edu. If you send large attachments, please use mikehammercom@yahoo.com.

GRANTS AND OPPORTUNITIES

American Honda Foundation Grants

The American Honda Foundation makes grants to K–12 schools, colleges, universities, trade schools, and others for programs that benefit youth and scientific education. The foundation seeks programs that are scientific, creative, humanistic, youthful, innovative, and more. The deadline for application is November 1, 2004. For more information, check out <http://www.hondacorporate.com/community/index.html?subsection=foundation>

Bring Back the Natives – Request for Proposals

The National Fish and Wildlife Foundation, in cooperation with other agencies and organizations, is pleased to request pre-proposals from nonprofit organizations, universities, Native American tribes, and local, state, and federal agencies interested in restoring native populations of sensitive or listed aquatic species. The Bring Back the Natives initiative funds on-the-ground efforts to restore native aquatic species to their historic range. Projects should focus on habitat needs of species such as fish, invertebrates, and amphibians that originally inhabited the waterways across the country. These matching funds are for projects that initiate partnerships with private

landowners, demonstrate successful collaborative efforts, address watershed health issues that would lead to restoring habitats and are key to restoring native aquatic species and their migration corridors. Pre-proposals are due September 17, 2004. For more information, check out <http://www.nfwf.org/programs/bbn.htm> .

Budweiser Conservation Scholarship Program

Anheuser-Busch and the National Fish and Wildlife Foundation seek applications for the Budweiser Conservation Scholarship Program. This program supports and promotes innovative research or study that seeks to respond to today's most pressing conservation issues, including the sustainable use of natural resources, recovery of endangered species, and control of invasive exotic species, by providing scholarships to eligible graduate and undergraduate students. Please note that the application materials for the 2005 scholarship program will be available in October 2004. For more information, check out <http://www.nfwf.org/programs/budscholarship.htm> .

Christopher Columbus Awards Program

This annual award is sponsored by the Christopher Columbus Fellowship Foundation in cooperation with the National Science Foundation. With the help of an adult coach, middle school students work in teams to identify a community issue and use science and technology to develop an innovative solution. The application deadline is February 14, 2005. For more information, check out <http://www.christophercolumbusawards.com> .

Coast Day Essay Contest – Delaware Grade 5

Coast Day is held every year on the first Sunday in October. This essay contest for 5th grade Delaware students is designed to spark youngsters' interest in the ocean. It not only raises awareness about local marine issues and animals of the Delaware Bay and ocean, but also teaches children how to research a topic with the help of the library and other resources and then use the information they have found to write an essay in their own words. This year's theme is "A Day in the Life of My Favorite Ocean Critter." Essays should be approximately 250 words. For more information, check out <http://www.ocean.udel.edu/newscenter/2004CDEssay.html> .

Conservation on Private Lands Grants

The National Fish and Wildlife Foundation, in partnership with the Natural Resources Conservation Service, announce matching Grants for Conservation on Private Lands for 2004. The goal of the partnership is to support high quality projects that engage private landowners, primarily farmers, and ranchers in the conservation and enhancement of fish and wildlife and natural resources on their lands. A new focus of this year's program is on agricultural land upstream from or adjacent to coral reefs and on implementing land-based conservation projects that would enhance these ecosystems. Matching grants will be awarded through a competitive process to eligible grant recipients including state and local governments, education institutions, and nonprofit organizations. Grants to, or in partnership with, the NRCS, Resource Conservation and Development Areas, and local conservation districts will be given special consideration. For more information, check out <http://www.nfwf.org/programs/nrcsnacd.htm> .

DisneyHand Teacher Awards

The DisneyHand Teacher Awards honor full-time creative, inspiring teachers who showcase creativity in the classroom and assist in developing creative teaching strategies in their school districts. Teachers can be nominated by students, former students, students' parents, principals, or members of the community. The nomination

deadline is October 15, 2004. For more information, check out <http://disney.go.com/disneyhand/learning/teacherawards/nominate.html> .

Do Something BRICK Awards - New Category

The Do Something BRICK Awards program has added a new category for young leaders age 19-25. The program honors and funds the efforts of dynamic leaders who have devised and implemented innovative solutions to problems in their local communities in the areas of community building, health and the environment. The application deadline is November 1, 2004. For more information, check out <http://www.dosomething.org/brick-awards.htm> .

Interdisciplinary Research Training in the Education Sciences Grants

The Institute of Education Sciences announces FY2005 grants to support pdoctoral interdisciplinary research training in education sciences. The intent of these grants is to support the development of innovative interdisciplinary training programs for doctoral students interested in conducting applied education research, and to establish a network of training programs to produce a cadre of education researchers able to conduct scientific research to provide solutions to pressing education problems. Eligible applicants include non- and for-profit organizations, public and private agencies, and universities. An optional letter of intent is due by September 17, 2004; application deadline is November 18, 2004. For more information, check out www.ed.gov/legislation/FedRegister/announcements/2004-3/082004a.html ,

NSTA Back-to-School Grants Special

The National Science Teachers Association has developed a special back-to-school list of upcoming grants, competitions, and scholarships. For more information, check out http://science.nsta.org/nstaexpress/nstaexpress_2004_08_30_grants.htm .

Neotropical Migratory Bird Conservation Act Request for Proposals

The Neotropical Migratory Bird Conservation Act establishes a matching grants program to fund projects that promote the conservation of these birds in the United States, Latin America, and the Caribbean. Projects may include activities to benefit bird populations and their habitats, research and monitoring, law enforcement, and outreach and education. All grant requests must be matched by partner funds at least 3:1. Partner funds from a U.S. federal source may be involved in the project, but are not eligible as match. Proposal deadline is December 3, 2004. For more information, check out http://birdhabitat.fws.gov/NMBCA/eng_neo.htm .

Siemens-Westinghouse Scholarship Competition

The Siemens-Westinghouse Competition is open to senior high school students who would like to submit an original science and math research project. The Competition promotes excellence by encouraging students to undertake individual or team research projects in science, mathematics, engineering and technology or in combinations of these disciplines. The deadline for entries is October 1, 2004. For more information, check out <http://www.siemens-foundation.org/> .

Whale Tail Grants Program - California

The California Coastal Commission's annual Whale Tail Grants Program for schools and nonprofits supports programs that encourage people to value and take action to improve the health of California's coast, marine life, or inland watersheds, with an emphasis on reaching underserved students and members of the public. Educational beach

maintenance and coastal habitat restoration programs are also eligible. Application deadline is December 10, 2004. For more information, check out www.coastforyou.org .

Youth Venture

Youth Venture provides seed money grants for new youth-created, youth-led, sustainable ventures that benefit the community. Youth ages 12-20 who want to start a new ongoing environmental club or organization can get guidance on how to plan, organize, and launch their venture, along with funds for start-up expenses. For more information, check out Get Involved → Become a Venturer, at <http://www.youthventure.org/> .

Youth Visioning for Island Living Art Contest

Small islands face special challenges, ranging from rising sea levels and fragile ecosystems to limited economic opportunities and loss of island cultures. Young people from small islands have an opportunity to convey their vision of how they want their islands to develop through the 2004 Youth Visioning for Island Living Art Contest. This contest is sponsored by the United Nations Cyberschoolbus and UNESCO's Coastal Regions and Small Islands Platform and Section for Youth. For more information, check out <http://cyberschoolbus.un.org/> .

INTERNSHIPS AND TEMPORARY OPPORTUNITIES

Environmental Education Internship

SoundWaters' mission is to educate children and adults about the wonders and beauty of Long Island Sound and its watershed. SoundWaters is recruiting interns for September, 2004 - June, 2005. The interns will teach environmental education programs to children and adults, help with curriculum development, and more. SoundWaters is a non-profit organization located in Stamford, CT. For more information, check out http://www.soundwaters.org/job_op.html .

CONFERENCES, WORKSHOPS, AND PROFESSIONAL DEVELOPMENT

Coastal Explorations Workshop – North Carolina

The North Carolina National Estuarine Research Reserve and Coastal Reserve programs will hold a free, accredited Coastal Explorations Workshop, September 10-11, 2004, Atlantic Beach, North Carolina. There are a few spaces available. This workshop targets activities for use in both the classroom and in the field. These activities are designed to increase awareness and understanding of the importance of estuaries. Both activity guides include a variety of activities and levels of information. Most activities can be utilized for grades k-12. For more information, check out <http://www.ncnerr.org/education/workshops/index.html> .

NAAEE Annual Conference – Early Bird Registration

Online registration has begun for NAAEE's 33rd Annual Conference, *Casting a Wider Net for Environmental Education*, November 6-10, 2004 in Biloxi, Mississippi. There will be two days of pre-conference workshops and field trips followed by three full days of concurrent sessions (symposia, hands on, presentations, interacts and posters), keynote speakers, and more. Early Bird registration discounts end September 30, 2004. For more information, check out www.naaee.org .

NSTA 2004 Regional Conventions

The upcoming regional National Science Teachers Association's conventions will be held:

- Midwest: Indianapolis, Indiana, November 4–6, 2004
- Northwest: Seattle, Washington, November 18-20, 2004
- Eastern: Richmond, Virginia, December 2-4, 2004

The conventions offer concurrent sessions, professional development certification, and short course options for in-depth exploration of specific topics. Early bird registration ends soon. For more information, check out <http://www.nsta.org/conventions> .

POW! Planning of Wetlands – Cape Lookout, North Carolina

This two-day course, September 10-12, 2004, at the Cape Lookout Environmental Education Center, North Carolina, is designed to guide educators in the construction, restoration, enhancement and monitoring of wetlands in or near schoolyards using natural and/or artificial sources of water. Participants will be guided through the steps of planning and designing a wetland using hands-on activities. Each participant will receive a copy of *POW! The Planning of Wetlands*. For more information, including the full schedule of professional development offered by Environmental Concern Inc., check out <http://www.wetland.org/educa.htm> .

Salish Sea Educator Sails - Washington

Salish Sea Expeditions is a Washington State-based non-profit organization that combines Inquiry-Based Learning with classroom scientific study and boat-based field research, enabling students to learn scientific principles and practice problem-solving skills while navigating the waters of Puget Sound. They are offering a chance for teachers to learn first-hand about their programs during free, three-hour, informal sails in September. You will have the opportunity to use oceanographic sampling equipment, help with sailing, talk with other teachers who have taken students out with Salish Sea Expeditions, and more. For more information, check out <http://www.salish.org/Teacher%20Sails%20031802.htm> .

Watershed Academy Distance Learning Program

The EPA provides an on-line Watershed Academy Distance Learning Program. The website offers a variety of training modules that present a basic and broad introduction to the watershed management field. There are six module themes:

- Introduction / overview
- Watershed ecology
- Watershed change
- Analysis and planning
- Management practices
- Community / social / water law

Individual modules take from ½ hour to 2 hours to complete. The program is also available on CD. For more information, check out <http://www.epa.gov/watertrain/> .

EDUCATIONAL RESOURCES

All About Birds

Brought to you by the Cornell Lab of Ornithology, this site includes an on-line guide to birdwatching, sound files of bird songs, a video gallery, and links to a variety of sites where you can report your observations. The conservation section highlights bird conservation success stories. Other information includes habitat management, an educator's guide to bird study, and how to get involved. For more information, check out <http://www.birds.cornell.edu/programs/allaboutbirds/> .

Aquarium of the Pacific Celebrates Halloween

Discover the creepy creatures lurking in the depths of the Pacific at the Scarium of the Pacific, October 23 and 24, 2004, Long Beach, California. Pick up the creepy creature map/scavenger hunt at the aquarium information booth to begin your haunted holiday. Enter the great Halloween of the Pacific, but watch out for the 88-foot creature hovering over you as you make your way to fangtastic activities, including creepy coloring and kooky crafts. The first 4,000 children through the door will receive a special Scarium of the Pacific souvenir. And while you're on the website, check out the Aquarium of the Pacific's many educational programs. For more information, check out http://www.aquariumofpacific.org/NEWS_EVENTS/10_04/scarium04.htm .

Canadian Environmental Literacy Project

The Canadian Environmental Literacy Project (CELP) promotes environmental literacy by making it easier to teach relevant subjects. CELP is developing a series of Canadian-focused educational modules, available to instructors free of charge on the CELP website. The modules, oriented to introductory classes in environmental studies and environmental science in universities, colleges, and senior high-schools, include lectures, calculation exercises, and materials in support of discussion-type seminars. The modules can be used "as is," or modified by the instructor to suit individual needs. CELP currently has two modules with a marine focus which look at the ecological sustainability of aquaculture on both the East and West Coast of Canada. The program is seeking experienced educators to act as advisor; if you are interested in reviewing or preparing modules, please contact them at celp@dal.ca. For more information, check out <http://www.celp.ca> .

Cold Water Corals

The International Coral Reef Initiative website has created a new discussion area, Cold-water coral ad-hoc committee, on the ICRIForum. You can access this new area directly at <http://www.icriforum.org/router.cfm?show=List/Postings.cfm?CONFID=80> . In addition, the ICRI website links to two cold-water coral publications and provides additional useful links. For more information, check out <http://www.icriforum.org/> .

The Columbia River Virtual Field Trip

Learn about the Columbia River Watershed, including its history, geology, the headwaters region, First Nations and Native Americans culture, current issues and challenges to the river. Make educational connections and provide glimpses of sustainability about the future of the river with readings on the river from multiple perspectives. The materials are designed for middle and high school students and teachers. For more information, check out <http://cbi.wsu.edu> .

Coral Data

The newly updated Coral Reef Information System (CoRIS) website is designed to be a single point of access to NOAA coral reef information and data products. The data includes a searchable spreadsheet file of over 3,000 scientific names of coral ecosystem

biota, reef names and locations, and lots more. Be sure to spend some time looking through the maps, and pull up some of the many aerial photos. For lots of data, check out <http://www.coris.noaa.gov/welcome.html> .

The Caribbean Coastal Data Centre is the data archiving and management unit of the Centre for Marine Sciences at the University of the West Indies, Mona. The center provides a variety of monitoring data archives, including Reef Check, fish survey, and the annual Caribbean Coastal Marine Productivity (CARICOMP) monitoring data on coral reef communities, seagrass ecosystems and mangrove ecosystems. For more information, check out <http://www.ccdc.org.jm/mission%20statement.htm> .

From Shore to Sea: Exploring California's Channel Islands

Using multimedia tools and access to leading scientists, The JASON Project combines scientific expeditions, standards-based classroom curriculum, and accredited professional development for teachers to engage students in science, math, and technology, and to deliver measurable gains in student achievement. *From Shore to Sea* focuses on the Channel Islands and the surrounding sea, and beckons you to explore and discover the shores of southern California. Monitor change with standards-based lesson plans covering geography, natural history, culture, watersheds, kelp forests, marine conservation and much more. Investigate several digital labs, including one on marine reserves. Local teachers also have an opportunity to nominate students for the Channel Islands Argonauts Program, where 5th – 8th grade students work hand-in-hand with scientists conducting fieldwork. For more information, check out <http://channelislands.noaa.gov/edu/shoretosea.html> .

Lehigh Earth Observatory's EnviroSci Inquiry

The LEO EnviroSci Inquiry website is an inquiry-based earth and environmental science website aligned to a variety of education standards. LEO EnviroSci Inquiry can be used by primary, middle school, and upper secondary students with different levels of ability. A main goal is to present science to K-12 students in a historical perspective by engaging in a detailed study of the Lehigh River watershed. The focus on this watershed presents learners with an opportunity to observe how industry has impacted the environment over time. Be sure to look through Coastal Explorations under Geology, the Educator's Guide, and the GIS data. For more information, check out <http://www.leo.lehigh.edu/envirosci/index.html> .

Oceanography Section of National Academies Website

The Earth and Life Studies Division of the National Academies focuses on the intersection of science and policy. The website features news, reports, projects, and upcoming events. The Ocean Studies topic area section posts recent reports and projects in ocean research and policy. There is also an electronic newsletter. For more information, check out <http://watson.nap.edu:8080/gateway-dels/dels/subjectNews.jsp?subject=69> .

Phytopia: Discovery of the Marine Ecosystem

This educational CD-ROM, developed by Bigelow Laboratory for Ocean Sciences, University of New England, and NASA's Jet Propulsion Laboratory, is available for the price of shipping. The CD provides a window to the world of the oceans' microscopic life. Phytopia consists of three major modules: "Phyto Files," "Phyto Factors," and "Special Topics." Other features include an image-based glossary and summaries of relevant topics.

The Phyto Factors module promotes discovery of the ties between physical forcing and marine ecosystem response, focusing on how environment affects the chlorophyll content and species composition of the upper ocean. It also helps users connect ocean primary productivity patterns with environmental factors in several geographic areas. Innovative tools allow investigation of co-registered temperature, wind, current, nutrient, and ocean color data. For more information, check out <http://www.bigelow.org/phytopia/>.

Project Shark Awareness

The Florida Museum of Natural History presents Project Shark Awareness, shark education and outreach programming for educators. This outreach program is created to educate the public about the myths and realities of shark biology, behavior, and conservation. The targeted audience consists primarily of students at middle schools, high schools, youth organizations, and environmental centers. In addition, the project has received funding to hold professional development workshops for secondary school educators from the state of Florida. Please contact them for further details. For more information, check out <http://www.flmnh.ufl.edu/fish/education/psa/psa.htm> .

Rachel Carson Estuary Live

The Rachel Carson Component of the North Carolina National Estuarine Research Reserve site will hold their Estuary Live on September 21-22, 2004. This interactive internet field trip can be accessed from your computer in your classroom for free. Please sign up in advance. The sessions have been aligned with the North Carolina Science Standards for your convenience to help integrate into your curriculum, and will cover:

- General estuary information
- Cephalopods
- Fouling communities
- Sustainable seafood
- Boating
- Reptiles

For more information, check out www.estuarylive.org .

Respect the Beach

Respect the Beach is a coastal educational program that includes classroom lectures, handouts, video, hands-on projects, and more, designed to teach coastal watershed processes, shoreline ecology and coastal areas stewardship to K-12 students and community groups. The program is brought into classrooms by Surfrider members, who represent ocean environmentalism from the surfer's perspective, and who are role models that students can relate to. Programs include Beachology, Watershed Works, and the Snowrider Project. For more information, check out <http://www.surfrider.org/programs/respectthebeach.asp> .

Science Bulletin Website

The Science Bulletin website, sponsored by the American Museum of Natural History, highlights breaking news on astrophysics, earth sciences, and biodiversity. The bulletins present current science news stories through interactive videos (5- to 7-minute video stories that follow scientists into the field), photographs, graphics (using 3-D computer models), and interactive data visualizations (using NASA satellite data). These interactive features bring science alive for adults and children alike. Be sure to look

through *Jellies Down Deep*. For more information, check out this updated website at <http://sciencebulletins.amnh.org/> .

UN Atlas of the Oceans Newsletter

The UN Atlas of the Oceans newsletter provides a round-up of the latest activity on the website, including most recently added topics, content, and special happenings such as new partnerships or awards. Recent additions include information about arctic ecosystems. To subscribe, click on "join now" under the search function. For more information, check out <http://www.oceansatlas.org/> .

INITIATIVES and JOURNALS

International Coastal Cleanup

The International Coastal Cleanup, September 18, 2004, sponsored by the Ocean Conservancy, is the world's largest one-day volunteer effort on behalf of the marine environment. In 2003, more than 450,000 people from all 55 U.S. states and territories and over 90 countries around the world participated in the cleanup, collecting over 7.55 million pounds of marine debris. Volunteers also found 237 entangled animals last year, emphasizing the dangers that marine debris plays in the coastal environment. For more information, check out <http://www.coastalcleanup.org/index.cfm> .

National Ecological Observatory Network

The National Science Foundation, Directorate for Biological Sciences, has initiated the National Ecological Observatory Network (NEON) project, a continental scale research instrument consisting of geographically distributed infrastructure, networked via state-of-the-art communications. NEON will provide nationally networked research, communication, and informatics infrastructure for collaborative and interdisciplinary measurements and experiments on ecological systems. NEON will provide learning environments for students and foster integration of research and education through networking, partnerships, alliances, and collaborations. For more information, check out <http://www.nsf.gov/bio/neon/start.htm> ,

World Water Monitoring Day

America's Clean Water Foundation and the International Water Association invite your participation. On October 18, 2004 citizens of the global community will join in World Water Monitoring Day, a worldwide opportunity to positively impact the health of rivers, lakes, estuaries and other waterbodies. Volunteer monitoring groups, water quality agencies, students, and the general public are invited to test four key indicators of water quality: temperature, pH, dissolved oxygen, and turbidity. For more information, check out <http://www.worldwatermonitoringday.org/> .

Wyland Ocean Challenge Cleanup

The Wyland Foundation, PADI, and Project AWARE have joined together for a 15-state, 16-city Wyland Ocean Challenge Coastal Celebration and clean-up tour, to inspire over 1 million people to promote, protect and preserve the nation's marine habitats. The campaign will be conducting a 1,700-mile series of cleanups and festivals along the east coast of the United States. The campaign will feature music, celebrity speakers, family activities, prize giveaways, and community clean-up events. For more information, check out <http://www.wylandoceanchallenge.org/index.cfm?do=costalcleanindex> .