NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION INFORMATION EXCHANGE FOR MARINE EDUCATORS JULY 2009

This update is funded by the National Marine Sanctuaries Foundation in partnership with NOAA's Ocean Exploration and Research Program, with additional support from the Office of Education and 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 mention that you learned about it from NOAA's Information Exchange.

The information included here has been compiled from many different sources, including EE-NEWS@NAAEE, EEinGEORGIA, CREEC, the Scout Report, edinfo at FREE, scuttlebutt, NSTA Express, and others. We have verified web addresses, but make no guarantee that they will remain active. The Department of Commerce/NOAA does not necessarily endorse or promote the views or facts presented on these sites.

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Collected archives of the information presented in past newsletters are available at http://mpa.gov/helpful_resources/education_training.html. Contact the editor directly at phyllis.dermer@noaa.gov, or by phone at (865) 932-5074, to discuss further enhancements or to contribute information for future issues.

Notable Reference

Earth Science Literacy Initiative

The Earth Science Literacy Initiative, funded by the National Science Foundation, has gathered and codified the underlying understandings of Earth sciences into a succinct document, which establishes the "Big Ideas" and supporting concepts that all Americans should know about Earth sciences. The resulting Earth Science Literacy framework will also become part of the foundation of a larger geoscience Earth Systems Literacy effort, along with similar documents from the Oceans, Atmospheres and Climate communities. http://www.earthscienceliteracy.org/

SURVEY OF THE MONTH

America, the Ocean, and Climate Change

New public opinion research, *America, the Ocean, and Climate Change: New Research Insights for Conservation, Awareness, and Action*, commissioned by The Ocean Project in collaboration with Monterey Bay Aquarium and National Aquarium, surveyed over 22,000 Americans on a comprehensive range of ocean- and environment-related topics. The website offers downloadable files, including the executive summary, a PowerPoint presentation, key findings, and more.

http://www.theoceanproject.org/resources/America_the_Ocean_and_Climate_Change.p

WEBSITE OF THE MONTH

Northwest Center for Sustainable Resources

The Northwest Center for Sustainable Resources is a national clearinghouse for natural resource curriculum materials used by college faculty and high school science teachers. Materials cover major subject areas of environmental science and natural resources, including fisheries, forestry, wildlife, and more. All instructional materials are provided in a classroom-ready format. The materials stress a science-based instruction approach to develop an accurate understanding of the principles of ecosystem-based resource management and sustainability and feature lecture-discussion, laboratory, and field-based teaching and learning approaches. Guides for developing community-based or place-based instruction for middle and secondary science courses are also available. Topics include fire ecology and management, interconnectedness in ecosystems, aquatic ecology, and much more. The Center offers professional development institutes covering environmental topics are offered for faculty and teachers. You can also subscribe to the newsletter or read it online; it is published three times a year. All materials are available free of charge.

http://www.ncsr.org/

MESSAGE FROM THE BRIDGE

Learn Something New This Summer

Now that school is out for the summer, why not learn something new about the ocean? In the Ocean Science Topics section of the Bridge, you will find resources in all disciplines of science that can be easily integrated into your biology, physics, chemistry and even English classes. Each discipline is broken down into fine levels of granularity to help you find exactly what you are looking for. The Bridge even includes a section on ocean literature for those teachers that work cross-curriculum with language arts and English teachers. All of the Bridge resources have been carefully reviewed by their team of teacher reviewers. The Bridge wishes all classroom teachers a well-deserved, restful summer.

http://www.marine-ed.org/bridge

REQUESTS

Coral Reef and Remote Sensing Management Survey

The Remote Sensing Working Group of the Coral Reef Targeted Research and Capacity Building for Management Program wishes to assess any change in approaches to

management of Coral Reefs that may have occurred over the past decade as a result of incorporation of remotely sensed information. The results of this survey will provide a similar benchmark for future surveys of coral reef management and also help direct the scope and focus of the work of the participants of the working group over the next few years.

http://www.polardata.ca/survey/

Thresholds in Education Journal Call for Manuscripts

The Thresholds in Education journal invites manuscripts related to topics addressing school-based programs that get students outside and engaged in educational or recreational activities as part of the planned curriculum. The theme of an upcoming issue is *No Child Left Inside: School-based Responses to Nature-Deficit Disorder.* The overall objective of the issue is to showcase the broad-based application of theory and/or practice in K-12 private and public educational settings. Articles should discuss theory and practice that include or extend beyond conventional environmental education or science-based activities. The deadline for submission is August 1, 2009. http://www.cedu.niu.edu/lepf/foundations/thresholds/index.html

GRANTS AND OPPORTUNITIES

4imprint One by One Grants

4imprint accepts applications for its one-by-one charitable giving program on a rolling basis. The online and catalog promotional products retailer awards an in-kind grant every business day, to charitable organizations in the United States or Canada. Applications are due two months before the requested donation is needed. http://onebyone.4imprint.com/default.aspx

College Course Materials Rental Initiative

The Fund for the Improvement of Postsecondary Education supports innovative grants and cooperative agreements to improve postsecondary education. This grant supports projects that propose innovative efforts to increase opportunities for students to rent college course materials. The deadline for application is August 3, 2009. http://www.ed.gov/legislation/FedRegister/announcements/2009-2/061809d.html

Delaware Coast Day Contests

The University of Delaware's Coast Day, October 4, 2009 in Lewes, Delaware, introduces thousands of people each year to the wonders of the sea and the importance of Delaware's marine and coastal resources. They are offering two contests: The Crab Cake Cook-off, with an entry deadline of August 7, 2009, and a High School Video Contest, with an entry deadline of September 11, 2009. http://www.ocean.udel.edu/coastday/

Foster's Community Grants

Foster's Community Grants program support community projects with a focus on wellness, culture, and environment. The deadline for application is July 6, 2009. http://www.fosters.com.au/about/fosterscommunitygrants.htm

Funky Nests in Funky Places

The Cornell Lab of Ornithology encourages people of all ages to submit photos, artwork, or stories about Funky Nests in Funky Places. The deadline for submission is July 31, 2009.

http://www.birds.cornell.edu/celebration/challenge/funkv-nests-in-funkv-places

Graduate Fellowship for Coral Reef Ecosystem Research

The International for Reef Studies offers funding to support up to two Graduate Fellowships for Coral Reef Ecosystem Research in 2009. The fellowship is available to students worldwide, who are already admitted to a doctoral program at an accredited university. The deadline for application is July 10, 2009. http://www.thesciencejobs.com/jobs/4282

Great American Teachers Awards

The Ron Clark Academy celebrates exemplary teaching that is challenging, innovative, and creative. They are accepting nominations for the Great American Teacher Awards, honoring teachers who best demonstrate these qualities. The deadline for nomination is September 1, 2009.

http://www.ronclarkacademy.com/great-american-teachers-awards.aspx

Leave No Trace Connect Grants for Culturally Diverse Communities

The Leave No Trace Center for Outdoor Ethics is an educational, non-profit organization dedicated to the responsible enjoyment and active stewardship of the outdoors by all people worldwide. Connect Grants provide direct support and training grants for organizations and people that serve culturally diverse communities. The next deadline for application is August 15, 2009.

http://lnt.org/programs/connect_grants.php

Mysteries in Science

The 11th International Digital Print Open Competition/Exhibition, *Digital'09: Mysteries in Science*, will be held October 3, 2009–January 31, 2010 in New York, New York. The Art & Science Collaborations, Inc. invites artists to share their digital prints about mysteries or intrigues in science. There must be computer manipulation or computer enhancement during the image-making process. Note that there is an entry fee. The deadline for entry is August 3, 2009. Check out the images from previous exhibitions. http://www.asci.org/artikel1041.html

NASA Climate Change Education Funding

NASA offers the *Global Climate Change Education: Research Experiences, Teaching & Learning* program. Proposals are solicited to improve teacher competency for Global Climate Change Education; use NASA Earth System data and models to strengthen teaching and learning about Global Climate Change; and provide Global Climate Change Science Research Experiences for undergraduate or community college students and pre- or in-service teachers, including those in non-traditional teacher licensure programs. Hurry - Notices of Intent to propose are due July 2, 2009, and full proposals are due August 3, 2009.

http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={6950C 5E7-9903-AFEA-2AB0-A839C6F510B4}&path=open

Ocean in Focus Conservation Photography Contest

The Marine Photobank and Project AWARE Foundation invite you to participate in the Ocean in Focus Conservation Photography Contest. Submit your compelling photos that engage viewers in pressing marine issues and solutions that address the rapid decline of our ocean's health. The two contest categories, Species of Concern/Ecosystem Decline and Humans and the Ocean: Impacts and Solutions, will help researchers, educators, and non-governmental organizations depict and address ocean issues. The deadline for submission is August 27, 2009. Interesting prizes include carbon offsets through NativeEnergy.

http://www.marinephotobank.org/resources/OceaninFocusPhotoContestHome2009.php

Marine Mammal Commission Request for Proposals

The National Fish and Wildlife Foundation, in partnership with the U.S. Marine Mammal Commission, announces the availability of grant funding in five research and conservation areas. All persons, organizations, and agencies are eligible to apply, including parties within and outside the United States. The deadline for submission of pre-proposals is August 5, 2009.

http://www.nfwf.org/AM/Template.cfm?Section=Charter Programs List&TEMPLATE=/C M/ContentDisplay.cfm&CONTENTID=12857

Promoting Postbaccalaureate Opportunities for Hispanic Americans

Two grants are currently posted to improve graduate level educational opportunities for Hispanic students. The deadlines for application are July 20, 2009 and August 3, 2009. http://www.ed.gov/legislation/FedRegister/announcements/2009-2/061809e.html

STEMester of Service Grants

Youth Service America will implement the STEMester of Service program to support middle school science teachers and service-learning coordinators to strengthen their classroom practices through service-learning, a teaching method that combines meaningful service with curriculum or program-based learning. The deadline for application is July 15, 2009.

http://tinyurl.com/mwchwp

United Nations/The Nippon Foundation of Japan Fellowship Programme

The Division for Ocean Affairs and the Law of the Sea of the United Nations offers the 2010-2011 United Nations - The Nippon Foundation of Japan Fellowship Programme. The major objective of the program is to provide funded opportunities for advanced training in the field of ocean affairs and the law of the sea, or related disciplines, to government officials and other mid-level professionals from developing coastal States so that they may obtain the necessary skills to assist their countries in the formulation of comprehensive ocean policies and to implement the legal regime set out in the United Nations Convention on the Law of the Sea and related instruments. The deadline for application is August 15, 2009.

http://www.un.org/depts/los/nippon/

INTERNSHIPS AND TEMPORARY OPPORTUNITIES

California Sea Grant State Fellowship

The California Sea Grant College Program is soliciting applications for the 2009-2010 California State Fellowship Program. The State Fellow Program offers an educational opportunity for graduate students who are interested both in marine resources and in the policy decisions affecting those resources. The program matches highly motivated and qualified graduate students with state or federal agencies in California for a 9-month paid fellowship. The deadline for applications is August 3, 2009.

http://www.csgc.ucsd.edu/EDUCATION/STATEFELLOW/StateFellow_current.html

SEA Summer Seminars and Fall Semester

Sea Education Association still has some spots available for their 3-week High School Summer Seminars as well as the Fall 2009 undergraduate SEA Semesters. Based out of Woods Hole, Massachusetts, SEA educates students about the world's oceans through an accredited study abroad program combining the sciences, humanities, social sciences, and public policy. Intense coursework and preparation during a shore component is followed by the immediate application of students' newfound knowledge during a sea component. Financial aid and scholarships are available. http://www.sea.edu/home/index_flash.asp

CONFERENCES, WORKSHOPS, AND PROFESSIONAL DEVELOPMENT

Across the Sciences - Online

Across the Sciences, a 16-week online graduate course designed for grade 9-10 teachers, is a new course offered by Oregon Public Broadcasting and Biological Sciences Curriculum Study in cooperation with the National Teachers Enhancement Network of Montana State University. Through online video, computer simulations, assessments and reflective activities, teachers will gain content knowledge and teaching strategies in biology, physics, chemistry, astronomy, and earth science. The course offers graduate credits and enhanced content knowledge to high school science teachers who are teaching out of their field of endorsement. Thirty teachers will be chosen for the fall 2009 pilot program.

https://www.rmccorp.com/ATS/

Climate Literacy: Essential Principles for Teachers - Online

This online course, July 6-28 from the University of Colorado at Boulder, will serve educators seeking knowledge about our scientific understandings of Earth's climate, historical climate change, and recent climate change. Educators will also explore pedagogical approaches to incorporating climate science and related topics into their classrooms and programs. All Colorado middle school and high school teachers are eligible for an 80% scholarship.

http://conted.colorado.edu/programs/sustainable-practices/additional-opportunities/climate-literacy-essential-principles-for-teachers/

Environmental Science Summer Teacher Institute - Maryland

The Potomac River and Chesapeake Bay Issue Investigation: Hands on Science in Action, July 20-31, 2009 in Accokeek, Maryland, is a professional development opportunity for grades 4-6 teachers in the Chesapeake Bay Watershed. Teachers will actively explore the Hard Bargain Farm Environmental Center curriculum and field

studies by participating in hands-on activities, models, and conducting in depth field study investigations amid diverse habitats.

http://www.fergusonfoundation.org/hbf/teacher_training.html

Fundamentals of Environmental Education - Online

The University of North Carolina Wilmington will offer the Fundamentals of Environmental Education online course August 19-December 2, 2009. The course is appropriate for both classroom teachers and for non-formal educators who work with students and/or teachers. For general information about the course, check out the EETAP website; for specifics about enrollment, contact UNCW.

http://www.uwsp.edu/natres/eetap/fee course page.aspx

Contact the Environmental Studies Department at evs@uncw.edu

International Beachcombing Conference

The International Beachcombing Conference will take place November 7-8, 2009 in Annapolis, Maryland. Learn about paleontology, anthropology, ethics, and climate change during conference lectures and panel discussions. The conference includes workshops, field practica, and artifact identification sessions designed for all levels of experience.

http://www.beachcombingconference.com/

NAAEE Conference

The 2009 North American Association of Environmental Educators' Conference, October 7-10, 2009 in Portland, Oregon offers the theme, *The Power of Partnerships – Creative Leadership in Environmental Education*. There will be twelve conference strands and a two-day Research Symposium. The earlybird registration rates are in effect until August 15, 2009. The conference schedule is now available on the website. http://www.naaee.org/conference/

Water Conference for Educators - Texas

The 6th annual water conference for educators, *Water: A Living Lesson,* July 7-10, 2009 in San Antonio, Texas is an opportunity for formal, non-formal, and public agency educators to learn innovative, interactive, and tested methods of teaching water subjects to K-12 students. Note that the conference is free. Workshops and field trips feature hands-on activities, resources, and strategies for developing comprehensive water lessons to take into the classroom, lab, or field.

http://www.wateralivinglesson.org

EDUCATIONAL RESOURCES

Classroom and Field Activity Resources

This website from the University of Florida Sea Grant hosts activities which have been created by or suggested by Florida marine educators. Topics include aquarium maintenance and activities, field sampling, and much more. While you're on the website, check out all the links to other materials and information, including marine debris, sea oats, educator slideshows and activities, and much more. http://stjohns.ifas.ufl.edu/Sea/activities.html

Climate Change: Fitting the Pieces Together

The Meteorology Education and Training website provides a wide range of resources pertaining to climate change. The Climate Change module discusses climate change, particularly as it is currently being affected by increasing concentrations of greenhouse gases emitted by human activities. It also covers signs of climate change, how scientists study climate, the current thinking on future changes, and what can be done to minimize the effects. Free registration is required.

http://www.meted.ucar.edu/broadcastmet/climate/

Climate Program

NOAA's Climate Program Office education website offers links to a variety of climate change materials, including presentations; the guide from AAAS, Communicating and Learning About Global Climate Change: An Abbreviated Guide for Teaching Climate Change; and more.

http://climate.noaa.gov/index.jsp?pg=/education/edu_index.jsp&edu=literacy

ConserveOnline

ConserveOnline is an online public library, created and maintained by The Nature Conservancy in partnership with other conservation organizations. The library makes conservation tools, techniques, and experience available to a broad community of conservation practitioners. ConserveOnline offers an open forum for sharing successes and failures, and for connecting scientific research with field-based conservation practice. They welcome anyone with documents, data, maps, or images relevant to the science and practice of conservation to make these resources publicly available through ConserveOnline, and to share their expertise through the discussion groups. http://conserveonline.org/

Ecolibary

The EcoLibrary is a source for free photographs useful for illustrating concepts in ecology, conservation biology, and the environment. The website currently contains several hundred annotated photographs that illustrate key concepts and as the site grows, maps, sounds, panoramas, and interactive exercises will be added. Check out the pictures associated with the themes under the Lessons section. http://ecolibrary.cs.brandeis.edu/index.php

Expedition: Blue Planet

Expedition: Blue Planet highlights a journey across 5 continents to explore critical water issues, focusing both on water itself and our connection to water issues around the world. The website includes blogs, photos, and more. http://www.alexandracousteau.org/

Fishy Newsletter

The May/June 2009 issue of the Long Island Sound Study newsletter, *Sound UPDATE*, focuses on fish populations in the Long Island Sound watershed, the methods for managing these populations, programs that encourage watershed residents to go fishing, and simple ways people can help keep Long Island Sound and its fisheries healthy. The newsletter can serve as a good introduction to many issues surrounding fisheries, including outreach, management, monitoring, and more. http://www.longislandsoundstudy.net/pubs/news/spr09.pdf

Forces of Change

This website from the Smithsonian's National Museum of Natural History explores climate change, ecological change, and cultural change. Drawing on a wide range of research, the site looks at how different types of changes are affecting life on earth. Some of the processes covered include El Nino, volcanic eruptions, and changes in the atmosphere. The website includes interviews, interactive features, research reports, and more, and includes a special educators' section. http://forces.si.edu/index.html

Global Change Research Program

The U.S. Global Change Research Program coordinates and integrates federal research on changes in the global environment and their implications for society. The program is a consortium of government agencies, major universities, and research institutions. The website hosts links to publications, including an online catalog, reports, and more. The website also includes links to regional and sectoral climate information. The recently released scientific study, *Climate Change Impacts*, was expressly written in plain language so that its findings are readily accessible to the public, the media, and decision makers. You can view key findings or download the full report. Check out the Resources section, and the Climate Change Wildlife and Wildlands Toolkit for formal and informal educators.

http://www.globalchange.gov/

Inside Birding

More from the Cornell Lab of Ornithology: Inside Birding is a new video series designed to provide birders with the information they need to improve their skills and make their experience more rewarding. The video series is made up of four, ten-minute video segments covering bird size and shape, color, behavior, and habitat. This series can serve as a primer for those interested in watching and identifying birds. The videos are a bit choppy for slow connections, but the wait can be worthwhile. http://www.allaboutbirds.org/NetCommunity/Page.aspx?pid=1270

Interactive Shipwrecks Website

The Ventura County Star newspaper hosts this website featuring coastal shipwrecks of the Channel Islands. The website links to an overview article and underwater views highlighting dives on several of the wrecks.

http://www.venturacountystar.com/special/shipwreck/

Marine Conservation Agreements Toolkit

The Nature Conservancy, with the assistance of partners, offers a Practitioner's Toolkit for Marine Conservation Agreements. The website includes a field guide, descriptions of field projects, and more. Be sure to check out the resources, which include funding databases and sample proposals, sample legal documents, contacts, and much more. http://www.mcatoolkit.org/

Migratory Species Resources

The Rainforest Alliance has developed the bilingual (English and Spanish) Western Hemisphere Migratory Species Initiative Pathway. Supporting the initiative's goal of conserving migratory species through international cooperation and communication as a means to share valuable project information and best practices across geographic and language barriers, the website features resources related to migratory species

conservation. Materials include lessons learned, monitoring and evaluation, and an Eco-Initiative of the month.

http://www.eco-index.org/migratory/

Nature Rocks Activity Finder

Nature Rocks is a national program to inspire and empower families to play and explore in nature. The Nature Rocks Website offers ideas for outdoor explorations keyed to time available, location, age, and more.

http://www.naturerocks.org/find-activities.aspx

Nature Video Archive

This website from Nature, the International Weekly Journal of Science, is designed to complement selected articles and letters from their print magazine. These videos feature analysis and commentary from Nature editors and selected scientists. Video topics include ancient tsunamis, deep sea biodiversity, and more. http://www.nature.com/nature/videoarchive/

Nicholas Institute for Environmental Policy Solutions

The Nicholas Institute for Environmental Policy Solutions currently focuses on the areas of climate, energy, coasts and oceans, and water. Downloadable files include policy briefs, working papers, commentary, and more. Reports cover climate change, ecosystem services, offsets, and much more.

http://www.nicholas.duke.edu/institute/products.html

Polar Visions

Polar Visions is an educational film about the effects of changing climates on humans and ecosystems, particularly in polar regions. The film contains seven stand-alone segments appropriate for use in classrooms and informal settings from the middle level through college, and was developed to align with the National Science Education Standards across all science subjects. You can watch the first episode or download it from the website, or contact Tina Arthur for a copy and standards alignment information https://www.denveropenmedia.org/project/polar-visions

Contact Tina Arthur at tina.arthur@colorado.edu

Resources for Learning

The American Museum of Natural History offers Resources for Learning, an online collection of activities, articles, and more, for educators, students and anyone interested in teaching or learning about science. There are over 1000 resources to choose from, browsable by topic, keyword, and special collection. Topics include earth science and biology; special collections include water, climate change, and Ology, the museum's website for kids.

http://www.amnh.org/education/resources/

Science Nation

The National Science Foundation offers Science Nation, a weekly series of video programs examining breakthroughs and the possibilities for new discoveries. Each program features a two-minute and five-minute version. Current videos include extremophiles, tornadoes, and more.

http://www.nsf.gov/news/special_reports/science_nation/index.jsp

Sea Turtles

The Caribbean Conservation Corporation has updated the Sea Turtle Information section of their website. This includes an expanded section on threats to sea turtles, educational animations, additional sea turtle habitat information, and interactive sea turtle nesting site maps powered by Google Maps. http://www.cccturtle.org/seaturtles

Sponge Guide

The Sponge Guide is a web-based, fully searchable pictorial guide to Caribbean sponges, a photographic guide to over 170 species of sponges found on Caribbean coral reefs and associated rocky and lagoon environments. The simple search can be by color, consistency, and/or morphology. http://www.spongeguide.org/

Teacher Booklets

The National Aquarium in Baltimore offers downloadable Teacher Booklets containing pre- and post-visit activities on a variety of subjects for students of all grades. While the booklets are designed to complement aquarium programs, they also work as standalone pieces in any classroom. Topics include adaptations (grades 2-4), wetland monitoring (grades 9-12), squid (grades 6-12), and many more. http://www.aqua.org/teachers/booklets.html

World Database on Marine Protected Areas

The World Database on Marine Protected Areas (WDPA-Marine) is dedicated to providing the most comprehensive set of marine protected areas data available. This website allows users to view information on marine protected areas in their web browser, to visualize them in Google Earth, to download data, and more. http://www.wdpa-marine.org/

INITIATIVES, JOURNALS, and MORE

Aguarist Journals Online

Advanced Aquarist and Reefkeeping are online magazines for marine aquarists, offering articles for aquarists from beginners to advanced. Check out Reefkeeping's Top Ten. http://www.advancedaquarist.com/
http://reefkeeping.com/

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

Climate of the Past

The open access journal *Climate of the Past* is published under the auspices of the European Geosciences Union and is dedicated to the publication and discussion of

research articles, short communications, and review papers on the climate history of the Earth.

http://www.climate-of-the-past.net/

Conservation Resources for the Houston Metro Area

Sounds like a good idea: The Houston Intramet website is designed to introduce private landowners and others to local conservation resources. The website covers the 8-county Houston metro region providing tools and resources to support wildlife habitat, open space, and energy efficiency.

http://www.houtonintrament.org

Florida Circumnavigational Saltwater Paddling Trail

Beginning at Big Lagoon State Park near Pensacola, extending around the Florida peninsula and Keys, and ending at Fort Clinch State Park near the Georgia border, the Florida Circumnavigational Saltwater Paddling Trail is a 1,515-mile sea kayaking trail. The trail includes every Florida coastal habitat type, from barrier island dune systems to salt marsh to mangroves. Several historical sites and points of interest are accessible by kayak along with both fishing communities and urban centers. A non-profit statewide support group, the Florida Paddling Trails Association, is the steward of the Circumnavigational Trail. Their website offers information about campsites, launches, sights to see, and facilities along the trails. The Florida Department of Environmental Protection's website has downloadable maps, recommendations, and more. http://www.floridapaddlingtrails.com/

http://www.dep.state.fl.us/gwt/paddling/saltwater.htm

Learning Barge

The non-profit Elizabeth River Project is building a floating wetland classroom, The Learning Barge, powered by sun and wind. The Learning Barge will traverse the polluted and urbanized Elizabeth River. Educational spaces and interactive exhibits will provide hands-on education about the tidal estuary ecology, restoration and remediation technologies, human impact on this ecosystem, sustainable practices, and the importance of environmental stewardship. Read about the project as it nears completion.

http://www.arch.virginia.edu/learningbarge/

NMEA News Online

NMEA News, the National Marine Educators Association's newsletter, keeps members up-to-date with news from regional chapters and committees, information about professional development opportunities, and communications from NMEA leadership. NMEA News is being published exclusively online, and will be posted four times each year, in mid-March, mid-June, mid-September, and mid-December. http://www.marine-ed.org/

Thoreau's Legacy: American Stories about Global Warming

This new online anthology from the Union of Concerned Scientists and Penguin Classics offers personal stories and reflections on global warming. http://www.ucsusa.org/americanstories/