

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
INFORMATION EXCHANGE FOR MARINE EDUCATORS

JUNE 2008

This update is provided with support from NOAA's Office of Education and 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 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.

CONFERENCE OF THE MONTH

NMEA 2008: One World, One Water

The Georgia Association of Marine Education invites you to spend a week in coastal Georgia with marine education professionals from across the nation and around the world, July 21-24, 2008 in Savannah, Georgia, for the 2008 National Marine Educators Association Conference. *NMEA 2008: One World, One Water* will team cutting-edge research with innovative education. Plunge into The International Year of the Reef, Ocean Literacy, fisheries, and southeastern estuarine ecosystems. Check out the website for conference schedule, field trips, and more.

<http://www.nmeaweb.org/savannah2008/index.htm>

WEBSITE OF THE MONTH

WeirdFins

WeirdFins is a NOAA Fisheries Service website and weekly podcast about strange or bizarre creatures that inhabit the sea. Each podcast is only two minutes long and is packed with interesting information. The website also invites visitors that have heard of or seen a weird sea creature that they would like to see featured, to contact WeirdFins. The website includes a text of the podcast in addition to the audio. Note: some of the links may not work properly at the moment, but this website is worth looking at even before it's perfected. You've got to check these out and listen!

<http://www.nmfs.noaa.gov/rss/podcasts/weirdfins/>

MESSAGE FROM THE BRIDGE

End of Year Ideas from the Bridge

As we end another school year, now is a perfect time to incorporate the oceans into those last minute class projects. Find science fair-style project ideas in the Bridge's Guiding Students section, walk your students through one of our Data Analysis Teaching Activities, or take them on a virtual ocean expedition to the Antarctic. Information on local aquaria and research institutions is also available to schedule that end-of-year field trip. Perhaps have your students research one of the many marine habitats and tie in some of the biology, chemistry, physics, or geology concepts they learned this year in class. Whatever projects you choose, why not include some great ocean science resources from the Bridge?

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

REQUESTS

Environmental Experiences Survey

An Environmental Experiences survey is being conducted by the Wildlife Conservation Society and Antioch University New England in order to capture a broad spectrum of reactions and feelings to working with environmental issues. The survey results will be posted as a link on the website, http://www.wcs.org/our_mission/institute/publicresearch. The survey may still be active; results will be posted by August 15, 2008.

<http://www.zoomerang.com/Survey/survey-intro.zgi?p=WEB227TRYL628P>

Seeking Input on Garden's Quest for Safe Water

Global Water is a nonprofit organization focused on building safe water, sanitation, and hygiene-related facilities for rural villages and schools in developing countries. Global Water staff created a children's story about water that includes hydrological and biological concepts, as well as the concept currently being debated today known as the "human right to water." They seek environmental educators to review this new manuscript, by June 30, 2008, to help craft the science descriptions appropriate for grades 3-5.

Contact Ted Kuepper at info@globalwater.org

Seeking Underwater Video Footage

The IUCN Climate Change and Coral Reefs Working Group is preparing short videos on coral reef resilience for the IUCN Conservation Congress in October of this year. This is a high-profile conservation event, and the videos will be viewed by a varied audience

from around the world. They are calling for people who have footage to contribute this to for use in the videos.

For information, contact Gabriel Grimsditch at ggrimsditch@iucnus.org or David Obura at dobura@cordioea.org

GRANTS AND OPPORTUNITIES

Advertise Your Cause Media Challenge

The By Kids For Kids youth empowerment company and DoSomething.org announce the Advertise Your Cause Media Challenge, which encourages young people, ages 5-19, to discover what cause matters most to them and then "Do Something" to propel their cause into the public eye. The competition will reward the cleverest and most powerful new Public Service Announcement campaign idea that will also have the broadest impact. The deadline for submission is August 31, 2008.

<http://www.bkfk.com/Modules/Competition/Competition.aspx?section=sayit>

Digitize Marine Ecosystems Data

The deadline for the second Inter-American Biodiversity Information Network (IABIN) Ecosystems Thematic Network Request for Proposals to digitize marine ecosystems data, both in English and Spanish, is July 1, 2008.

IABIN website:

http://www.iabin.net/index.php?option=com_content&task=blogcategory&id=16&Itemid=36

Contact Rita Besana at rbesana@iabin.net or Vincent Abreu at Abreu@umich.edu for details.

Leave No Trace Grants

Leave No Trace offers a variety of grant and scholarship opportunities for individuals and organizations seeking Leave No Trace educational materials and/or training. The Packing with PEAK grant offers materials to youth-serving organizations and individuals. Connect Grants for Culturally-Diverse Communities provide direct support and training grants for organizations and people that serve culturally diverse communities. The organization also offers Tools for Teaching funds and Master Educator Scholarships. Check the website for details and deadlines.

<http://lnt.org/programs/grants.php>

National Wildlife Annual Wildlife Photography Contest

The editors of National Wildlife magazine invite photographers at least 13 years of age to enter National Wildlife's 2008 Photography Awards, its expanded annual photography competition. Photos submitted should show striking images of nature, creatures on land, and life beneath the water's surface from anywhere in the world. These images may show animal behavior, portraits of wildlife in natural habitat, plant life, natural landscapes, weather or people interacting with nature. The deadline for submissions is July 1, 2008.

<http://www.nwf.org/nationalwildlife/photocontestrules.cfm>

Outdoor Classroom Grants - Tennessee

Project CENTS (Conservation Education Now for Tennessee Students) offers Outdoor Classroom Grants for any preK-12 school, for use in establishing or enhancing an outdoor learning area on school grounds. The deadline for application is July 15, 2008.

<http://www.eeintennessee.org/net/content/go.aspx?s=68637.0.114.37935>

Outstanding Young Educator Award

The Association for Supervision and Curriculum Development offers a yearly Outstanding Young Educator Award. The award recognizes a teacher under the age of 40 who demonstrates excellence in his or her profession. Criteria include a positive impact on students, creativity in the classroom, and leadership in his or her school or district. The deadline for nomination is August 1, 2008.

<http://www.ascd.org/portal/site/ascd/menuitem.b00b3d3ab9fd959d8716b710e3108a0c/>

Patagonia Environmental Grants

Patagonia provides funding to organizations that identify and work on the root causes of problems and that approach issues with a commitment to long-term change. The company supports small grassroots activist organizations working on multi-pronged campaigns that are action-oriented; build public involvement and support; are strategic; focus on root causes; and accomplish specific goals and objectives. Grants can be requested year-round from individual stores; the next deadline for non-store submission is August 31, 2008.

<http://www.patagonia.com/usa/patagonia.go?assetid=2942>

Richard C. Bartlett Environmental Education Award

The National Environmental Education Foundation offers the Richard C. Bartlett Environmental Education Award honoring an outstanding educator who has successfully integrated environmental education into his or her daily education programs. The deadline for nomination is June 30, 2008.

<http://www.neefusa.org/bartlettaward.htm>

Rivers, Trails, and Conservation Assistance Program

The National Park Service provides up to two years of staff assistance to locally-led natural resource conservation and outdoor recreation projects through the Rivers, Trails, and Conservation Assistance (RTCA) Program. RTCA staff work in communities to help applicants conserve rivers; preserve natural areas; and develop trails, greenways, and blueways. Staff help with partnership-building to achieve community-set goals, organizational development, assessing resources, developing concept plans, public education and participation, and identifying potential sources of funding. Applicants are strongly encouraged to discuss their project with RTCA staff before sending in an application; check the website for local contact information. The next deadline for application is August 1, 2008.

<http://www.nps.gov/ncrc/programs/rtca/>

Schmied Scholarship

The Schmied scholarship will enable at least one student to participate in the upcoming Gulf and Caribbean Fisheries Institute (GCFI) meeting, November 10-14, 2008 in Guadeloupe, French West Indies. Selection will be based on demonstrated involvement with recreational fisheries topics and/or issues, level of achievement, innovation, and financial need as demonstrated in their letters of application. The deadline for application is August 1, 2008.

<http://gcfi.org/Conferences/61st/Gosier.html>

INTERNSHIPS AND TEMPORARY OPPORTUNITIES

Beam Reach Killer Whale Studies - Washington

Beam Reach Marine Science and Sustainability School in Seattle Washington offers a 10-week student marine field research opportunity. Students will study the southern resident killer whales, their marine environment, and what it will take to save them. The fall program runs August 24-November 2, 2008.

<http://www.beamreach.org/angered-killer-whales.html>

CONFERENCES, WORKSHOPS, AND PROFESSIONAL DEVELOPMENT

Alliance of Natural Resource Outreach and Service Programs

Alliance of Natural Resource Outreach and Service Programs requests presentations for their national conference *Diverse Practices by Natural Resource Outreach & Service Programs*, on September 9-11, 2008, in New Braunfels, Texas. This conference is for professionals who coordinate, administer, or intend to develop training and volunteer programs in natural resource conservation, education, and outreach. The deadline for submission is June 30, 2008.

<http://www.nralliance.org/>

Approaches to Scientific Inquiry - Washington

The Port Townsend Marine Science Center presents Approaches to Scientific Inquiry: Science Beyond the WASL (Washington Assessment of Student Learning), a workshop for teachers, grades 3-8, August 17-20, 2008, in Port Townsend, Washington. Tuition is free and covers instruction, instructional materials, and accommodations at the Fort Worden Conference Center.

<http://www.ptmsc.org/education/teacher.html>

Aquaculture Center for Training, Education and Demonstration

The mission for the Aquaculture Center for Training, Education and Demonstration division of Harbor Branch Oceanographic is to educate and develop a highly skilled workforce, through practical education and training that will support competitive and sustainable aquaculture industries. Education and training programs include intensive courses, degree programs, customized training, secondary school field trips, and teacher workshops. Upcoming workshops include Recirculating Aquaculture Systems, Fish Hatchery Techniques, and more. They also offer field trip experience for middle and high school students along with teacher workshops.

<http://www.hboi.edu/aqua/education.html>

Awareness of Coastal Habitat - Texas

The Nature Conservancy offers the workshop, Awareness of Coastal Habitat, June 11-13, 2008, starting in Collegeport, Texas. Teachers will study and compare the flora and fauna of the mid coast of Texas, including freshwater and salt marsh wetlands and prairies at Mad Island Marsh Preserve. Participants will also spend time on Matagorda Island, studying organisms of the barrier island beach, sand dunes, grasslands, and back-bay habitats.

Contact Cathy Porter at cporter@tnc.org

Biomimicry: Using Nature's Design to Revitalize Your Science Curriculum - New York

Biomimicry borrows nature's ideas to derive more sustainable designs for human existence. This biomimicry workshop, August 4-6, 2008 in Westchester County, New York, is aimed at middle school science teachers and will help guide educators in incorporating biomimicry into their own curricula. Check out the website for lesson plans, brief case studies, and more.

<http://www.biomimicryinstitute.org/>

Birch Aquarium's MARE Summer Workshop for Teachers - California

Scripps Institution of Oceanography campus and the Birch Aquarium offer the 2008 MARE Ocean Immersion Summer Workshop for teachers, July 28-August 1, 2008 in La Jolla, California. Participate in classroom and field experiences highlighting Southern California's marine habitats. Ocean science content and hands-on activities from University of California, Berkeley's Marine Activities, Resources and Education (MARE) curriculum includes: inquiry-based science teaching strategies; reading literacy through science instruction; addressing the needs of English language learners; and effective field-based activities for students. Participants gain skills to effectively implement more inquiry-based science instruction in their classroom. Scholarships are available.

http://aquarium.ucsd.edu/Education/For_Schools/For_Teachers/Professional_Development/

Capitol Hill Ocean Week – Washington, DC

The purpose of Capitol Hill Ocean Week, June 3-5, 2008, is to provide a neutral forum where a diverse spectrum of ocean science and management expertise, stakeholders, and policy makers can come together to discuss, examine, and exchange information about the key issues affecting the health of our oceans and marine resources. Through interaction, challenges and recommendations are identified and shared with the greater ocean community and public at-large. Check the website for events and information.

http://www.nmsfocean.org/chow_index.asp

Coral Reef CSI

The International Coral Reef Initiative has created a committee on Coral Reef Enforcement and Natural Resource Investigation to facilitate the development of standards and protocols for training field investigators in investigative, forensic and rapid ecological assessment techniques, to ensure accurate assessment and data collection and maximize prosecution, mitigation, or negotiation success. Regional training workshops will take place based on the tool kit components to train coral reef resource managers and enforcement personnel on its use, and to better coordinate and communicate investigative and enforcement actions and educate the public and decision makers for enhanced resource protection and management capabilities. Check the website for proposed training opportunities and more information.

<http://www.icran.org/action-csi.html>

Explore Costa Rica

Join Mid-Atlantic Marine Education Association (MAMEA) members on a trip to Costa Rica, September 27-October 5, 2008, to experience the diverse terrain of the tropics. Highlights include lowland rainforests, active volcano, and transitional coastal ecosystems. Experience whitewater rafting, snorkeling, and much more.

<http://www.holbrooktravel.com/MAMEA>

For more information, contact Debbie Sturdivant at debbie@holbrooktravel.com or Terri Kirby Hathaway at terrikh@csi.northcarolina.edu

International Coral Reef Symposium

The 11th International Coral Reef Symposium, Reefs for the Future, will be held July 7-11, 2008 in Fort Lauderdale, Florida. Natural scientists, resource managers and users, conservationists, economists, and educators will meet together to better understanding of coral reef ecosystems and effective conservation and management strategies. The Education Center will feature exhibits and displays of educational research and information on coral reefs. There will also be demonstrations throughout the day. These will include talks on coral reef health monitoring and educational activities about the coral reef ecosystem.

<http://www.nova.edu/ncr/11icrs/index.html>

International Pacific Marine Educators Network Conference

Marine educators---using the widest sense of the word---who are interested in the health of the Pacific Ocean and the communities who depend on it are invited to participate in the International Pacific Marine Educators Network (IPMEN) 2008 conference, October 16-21, in Townsville, Australia, and virtually on the web through the College of Exploration. The conference theme is *Sustaining the Pacific: Learning from Elders, Listening to Youth*. Strands will focus on education for ocean literacy (key note: Craig Strang, Center for Ocean Sciences Education Excellence--California), sustainability education in the Pacific (keynote: Greg Manning, Department of Environment, Water, Heritage & the Arts, Australia), linking the Pacific (keynote: John Sibert, Pelagic Fisheries Research Program, Hawaii) and capacity building (keynote: Joeli Veitayaki, University of the South Pacific, Fiji). Special guest Charlie Veron, author of *A Reef in Time: The Great Barrier Reef from Beginning to End*, will provide a dinner presentation in recognition of the International Year of the Reef. In keeping with its focus on the environment and sustainability, the conference aims to be green, with carbon neutral goals, by limiting consumption and focusing on local food. Those flying or driving to the conference will have an opportunity to support a coral mitigation project in Fiji equivalent to the estimated negative impact of their travel to coral reefs. There will be direct links with the 2008 International Youth Coastal Conference, field trip opportunities, and workshops to further develop IPMEN. The deadline for the call for papers and scholarship applications is June 30, 2008. For more information, visit the website or email Harry Breidahl at nautilused@optusnet.com.au or Sylvia Spalding at sylvia.spalding@noaa.gov.

<http://www.ipmen.net/default.htm>

<http://www.coexploration.org/ipmec/>

Invasive Species Education - Michigan

The Inland Seas Education Association is offering aquatic invasive species education opportunities on Lake Michigan from the Grand Traverse Bay area. Tuition for these courses is paid by scholarship funds with partial funding provided by a grant from the EPA.

- Advanced Invasive Species Field Course for Teachers, July 17-18, 2008
- Invasive Species Research Course for High School students, July 2-3, 2008
- Invasive Species Field Course for Teachers and Environmental Professionals, July 28-30, 2008.

<http://www.schoolship.org/schoolship/?id=669>

MarineLab Courses - Florida

MarineLab offers three teacher workshops, July 27-August 3, 2008 in Key Largo, Florida. *Introduction to Coastal Marine Ecology* is an overview of the marine habitats of the Upper Keys; *Restoring the Habitats of the Keys* includes learning and observing current restoration efforts in the Everglades, seagrasses, and coral reefs; and *ReefCheck* is a workshop using SCUBA to gather data as part of the global REEFCHECK program. All workshops are field based and content oriented; participants spend the majority of their time on board boats or in the water, snorkeling or diving. Meals and accommodations are included.

http://www.marinelab.org/Teacher_Workshops.html

New York State Marine Education Association Conference – New York

The theme for the 32nd New York State Marine Education Association Annual Conference, June 8, 2008 in New York, New York, is Seafood, Sea Turtles, and a Sea Legacy. Join them with their host, the American Museum of Natural History, for an enriching experience in marine science.

<http://www.nysmea.org/con08/NYSMEA08.htm>

North American Association for Environmental Education Conference

The registration for the 37th North American Association for Environmental Education (NAAEE) Annual Conference, October 15–18, 2008 in Wichita, Kansas, opens June 2, with the early bird deadline of August 15, 2008. Conference strands include Conservation Education; Energy Education; Environmental Justice, Environmental Health, and Climate Change; and more.

<http://www.naaee.org/conference>

NSTA Fall Conferences on Science Education

The registration for the National Science Teachers Association Area Conferences is now open. Take advantage of earlybird rates.

- Charlotte, North Carolina October 30-November 1, 2008
- Portland, Oregon, November 20-22, 2008
- Cincinnati, Ohio, December 4-6, 2008

<http://www.nsta.org/conferences/>

Teacher Workshops – North Carolina

The North Carolina Aquarium is offering teacher workshops, July 14-18, 2008 in Kure Beach, North Carolina; all workshops are free of charge. The workshops introduce K-12 teachers to pre- and post-visit activities designed to enhance an aquarium field trip as well as integrate ocean awareness in the classroom across disciplines.

- **Aquarium Teacher Workshops**, July 14; aquarium education staff help participants become familiar with on-site activities and resources through a series of selected experiences.
- **Incorporating Environmental Education into the Humanities**; July 15; participants create their own journal and practice the art of papermaking, creative writing, and drawing from nature.
- **Art and Nature**; July 15; this North Carolina Museum of Art's workshop investigates the artist's use of nature as a subject that reflects and addresses cultural attitudes and beliefs about the importance of the environment.

- **Project Learning Tree**; July 16; the workshop uses trees as windows into natural and built environments, helping people gain an awareness and knowledge of the world around them and their place within it.
- **Project WET**; July 17; the workshop provides water education curriculum for K-12 teachers.
- **Plants That Bite Back**; July 18; the workshop focuses on activities and resources for the middle grades to teach about carnivorous plants. For this workshop, contact Martha Flanagan at martha.flanagan@ncmail.net.

To register, or for more information, contact North Carolina Aquarium staff at ncaff.registrar@ncmail.net.

Teacher Trainings - Alaska

Explore Alaska's natural and cultural heritage with the Alaska Geographic Institute. Accredited teacher trainings and field seminars are hands-on experiences set in remote locations throughout Alaska. Courses in 2008 include Recovering the Sound: After the Exxon Valdez; Seals, Ice, and the Wilderness Idea; Whales of Icy Strait, and more. All courses are offered in partnership with Alaska's national parks, forests, and refuges. <http://www.alaskageographic.org/static/169/teachers>

Teachers in Geosciences - Online

The Teachers in Geosciences program at Mississippi State University provides an opportunity to earn a Master of Science degree through distance learning. All of the core courses are taught online. The program concludes with an 8- to 10-day capstone field course that is taught during the summer at a variety of locations including Western Lake Superior, the Outer Banks, the Bahamas, and more. The program includes courses in meteorology, geology, planetary science, oceanography, hydrology, and environmental geoscience. <http://www.msstate.edu/dept/geosciences/CT/TIG/Site.htm>

Teaching Environmental Issues - Online

This online EE Teacher's Institute, June 2-August 8, 2008 from the Colorado Alliance for Environmental Educator, is a professional development course designed to actively involve educators in facilitating the investigation and evaluation of environmental issues with their learners. It models a variety of EE strategies to assist learners in exploring and seeking responsible courses of action toward the resolution of environmental issues specific to their community. Hurry – note the starting date of June 2, 2008. <http://www.cae.org/development/online-ee-teacher-s-institute-1>

Water: Ecological Connections - Georgia

The Gwinnett Environmental and Heritage Center offers the Water: Ecological Connections workshop, July 21-22, 2008 in Buford, Georgia. Participants will learn how to incorporate the complex relationships between water, humans, and the environment into classroom activities. The deadline for registration is June 30, 2008. <http://www.gwinnettcounty.com/cgi-bin/gwincy/envhc/Sub.do?mypageid=ProgramsEvents|BookClub>

Whaling Heritage Symposium – Connecticut and Massachusetts

NOAA's Maritime Heritage Program, along with Mystic Seaport, New Bedford Whaling Museum, and New Bedford Whaling National Historical Park, will sponsor a whaling heritage symposium, June 16-18, 2008 in Mystic, Connecticut and New Bedford, Massachusetts. The symposium will feature cultural practitioners, authors,

archaeologists, historians, curators, marine resource managers, and others. The event will offer the opportunity to examine the broader cultural scope of historic whaling, the significance of specific events and geographic locations in the industry's history, and the ways we can continue to learn from our own whaling heritage.

<http://sanctuaries.noaa.gov/maritime/whaling/>

EDUCATIONAL RESOURCES

AUVfest 2008 – Online

AUVfest 2008 took place May 12-23, 2008, hosted by and based at The Naval Undersea Warfare Center in Newport, Rhode Island, co-sponsored by the Office of Naval Research and NOAA's Office of Ocean Exploration and Research. This was a unique opportunity to demonstrate and test the applications of autonomous underwater vehicles, or AUVs, for both mine countermeasures and archaeological research. Lesson plans have been developed for students in Grades 5-12 to complement the science, mathematics, marine archaeology, and maritime heritage focus of AUVfest 2008, and are posted on the website along with videos, background information, and much more.

<http://oceanexplorer.noaa.gov/explorations/08auvfest/welcome.html>

Coral Ecosystems

The NSTA Learning Center offers the archived NOAA Coral Ecosystems Seminar, focusing on impacts to coral reefs. Materials include the downloadable presentation in PowerPoint or pdf, along with an Elluminate Live! application for those with faster connections.

http://learningcenter.nsta.org/products/symposia_seminars/boston08/Corals/webseminar1.aspx

Earthwatch Education Lessons

Earthwatch is a program that connects volunteers with opportunities to participate in field research. More than 50 lesson plans from educators who have participated in expeditions are available on the website. Lesson plan topic classifications include aquatic; terrestrial life and ecosystem; environmental issues; and community, culture, and history.

<http://www.earthwatch.org/aboutus/education/edopp/lessonideas>

ECOCEAN Whale Shark Photo-identification Library

The ECOCEAN Whale Shark Photo-identification Library is a visual database of whale shark encounters and of individually catalogued whale sharks. The library is maintained and used by marine biologists to collect and analyze whale shark encounter data to learn more about these fish. Submitters can assist with whale shark research through photos and sighting information. The information will be used in mark-recapture studies to help with the global conservation of this threatened species. The website also includes background information about whale sharks, an interaction tutorial, and more.

<http://www.whaleshark.org/index.jsp?langCode=en>

Encyclopedia Smithsonian: Science and Technology

The Encyclopedia Smithsonian covers science and technology through materials drawn from different parts of the Smithsonian Institution. Topics include Biodiversity, Ecology, Fishes, and much, much more. Current highlights include Looking at Earth, Arctic: A Friend Acting Strangely, Bird of the Month, and more. Other links bring you to

Encyclopedia: History and Culture and Encyclopedia: Art and Design. It's easy to spend hours clicking through interesting and informative web pages through this site.

http://www.si.edu/Encyclopedia_SI/Science_and_Technology/default.htm

Exploratorium: Microscope Imaging Station

The Microscope Imaging Station from the Exploratorium offers a door to the wonder of the microscopic world. Visitors can view images from sea urchins, zebrafish, and more. Each feature includes images of the cells, along with complete background material on the work that is being done through the use of these high-powered images. The Gallery offers high-resolution images and movies created with research-grade microscopes. The website also includes classroom activities, printable flipbooks, and more.

http://www.exploratorium.edu/imaging_station/index.php

Global Wildlife Disease News Map

The Global Wildlife Disease News Map displays news articles from the Wildlife Disease News Digest that have been posted within the last 45 days and have a geographical reference. On it, users can see wildlife disease headlines both locally and globally.

<http://wildlifedisease.nbio.gov/wdinNewsDigestMap.jsp>

Greening of the Great Lakes

Michigan State University and Detroit's radio station WJR offer this website as an online resource for those interested in learning about the Great Lakes region, related environmental issues, and ways that they can protect the environment.

<http://www.greeningofthegreatlakes.com/>

Interactive Sea Turtle Activities for Kids

The Caribbean Conservation Corporation has a webpage of sea turtle games for kids. While you're on the website, check out the rest of their extensive offerings.

<http://www.cccturtle.org/turtleides.php?page=games>

IYOR Public Service Announcements and Messaging Campaign

The International Year of the Reef 2008 is a worldwide campaign to raise awareness about the value and importance of coral reefs and threats to their sustainability, and to motivate people to take action to protect them. NOAA and its many partners have supported the production and distribution of a series of 30 second TV public service announcements and a united messaging campaign to educate the US public concerning ocean-coral reef and coastal environmental education. Five PSAs and five print-ready downloadable ads (click the link to IYORcreative) are available for downloading.

<http://www.iyor.org/>

IYOR Web Seminar Series

The Australian Research Council offers downloadable presentations through their online seminar on coral reef futures, sponsored by the ARC Centre of Excellence for Coral Reef Studies. As part of its contribution to IYOR 08, the seminar series is designed to deliver scientific outcomes to the community in an informative and useful way. Topics include MPAs, climate change and coral reefs, adaptive management, and more.

<http://www.coralcoe.org.au/events/webseminar/iyorwebseminar.html>

Lesson Plans Inc.

Lesson Plans Inc. is a science curriculum resource for high school physical science and life science teachers. The website offers high school science teachers curriculum that

are aligned to California state standards. While the website isn't completely populated, check out the lesson plans on ecology, scientific method, and more.

<http://www.lessonplansinc.com/index.php>

Marine Debris Video and Slidepacks

The Offshore Operators Committee offers information about marine debris in both English and Spanish. The website has pdf, PowerPoint, and downloadable videos about marine debris. While geared toward people who work offshore on oil and gas production platforms, they offer good information and demonstrate how even simple actions can help.

<http://www.offshoreoperators.com/marinedebris/>

National Geographic Xpeditions Lesson Plans

The National Geographic Xpeditions Lesson Plans have been written by educators and tested in the classroom. Categories include the world in spatial terms, places and regions, environment and society, and more. A recent addition, Human Footprint, shows how everything we consume, use, and discard over a lifetime has an effect on our planet. Related classroom resources help students think about global population trends, consumption, and production, and how these affect the environment. Others include Wave Properties, River Sources and Stories, and more.

<http://www.nationalgeographic.com/xpeditions/lessons/>

Normal Faults in Sand in a Shoe Box

A great deal can be learned by observing a sand box, and this instructional resource is designed to help students use sandbox models to investigate the characteristics of normal faults and parameters that influence their development. The website includes an overview of the context in which the activity should be used, a complete set of notes for instructors, student handouts, and a list of supporting materials and references

<http://serc.carleton.edu/NAGTWorkshops/structure04/activities/3872.html>

NSDL Wiki

The National Science Digital Library (NSDL) offers NSDL Wiki, which provides a collaborative online environment where users can create educational content, organize project documentation, and submit and annotate educational resources in the NSDL Data Repository. It advances their work toward the goal of creating more connections and fewer barriers to getting high quality annotations and resources into the library. One of the first Classic Articles in Context is *Climate Change and Anthropogenic Greenhouse Warming: A Selection of Key Articles, 1824-1995, with Interpretive Essays*.

http://wiki.nsd.org/index.php/NSDL_Wiki

Once Upon a Tide

The Center for Health and the Global Environment at Harvard Medical School has produced a short educational film, Once Upon a Tide. The website offers the downloadable film, along with some links to complementary lesson plans and more.

http://chge.med.harvard.edu/programs/healthyceans/once_upon_a_tide/

The Search for Bonhomme Richard

The Ocean Technology Foundation offers this website in support of its June expedition to search for the *Bonhomme Richard*, flagship of American naval hero John Paul Jones, lost in the North Sea during the American Revolution. The website offers lesson plans focusing on ocean technologies, careers in marine technology, and surveying a

shipwreck site, appropriate for middle and high school levels and correlated with the NSES and Ocean Literacy Principles. There will be additional lessons created to continue the series. In addition, the website offers information about the expedition and the history of the battle.

<http://www.oceantechnology.org/BHR.htm>

Take a Cloud Walk

Take a Cloud Walk, a Take a Walk book by Jane Kirkland, is available as a free pdf download. In this full-color, 30-page book, readers learn the basic names and shapes of clouds, why they move, why they are white, how they affect climate change, the difference between weather and climate, and weather terms and conditions such as hail, lightning, and fog. Before downloading, browse the rest of the No Student Left Indoors website for other materials.

<http://www.nostudentleftindoors.com/>

Voyage of the Lonely Turtle

PBS/Nature aired the program, Voyage of the Lonely Turtle, based on one Loggerhead turtle's 9000 mile trip across the Pacific. The website offers information about turtle anatomy, navigation, a link to an interactive game, lesson plans, and more.

<http://www.pbs.org/wnet/nature/turtles/index.html>

Wetlands International

Wetlands International, a non-governmental organization, promotes the conservation and wise use of wetlands on the global, regional, and national levels. The website offers a brief introduction to wetlands, publications, a newsletter, and information about projects around the world.

<http://www.wetlands.org/>

INITIATIVES, JOURNALS, and MORE

LandScope America Preview

LandScope America is a collaborative project of NatureServe and the National Geographic Society. This website, with a planned full release in fall 2008, will be an online resource for the land-protection community and the public. The site will bring together maps, data, photography, and information about the environment from a variety of sources and present them in dynamic and accessible formats. The goal is to inspire and inform collaborative place-based conservation in the U.S. by increasing the pace and effectiveness of land-protection investments in every state. Check out the website preview, sign up for email updates, and consider contributing conservation success stories.

<http://www.landscape.org/preview/Home.html>

National Trails Day

American Hiking Society's trail awareness program, National Trails Day, June 7, 2008, inspires the public and trail enthusiasts nationwide to seek out their favorite trails to discover, learn about, and celebrate trails while participating in educational exhibits, trail dedications, gear demonstrations, instructional workshops and trail work projects.

Register your event through this website.

<http://www.americanhiking.org/NTD.aspx>

World Water Monitoring Day

World Water Monitoring Day is September 18, 2008. World Water Monitoring Day offers communities around the world a chance to positively impact the health of rivers, lakes, estuaries, and other waterbodies. Register your activities on this website or check out links to some of the information and monitoring going on in your area. Check out the water monitoring kits available through the website.

<http://www.worldwatermonitoringday.org/index.html>