

**NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION**  
**INFORMATION EXCHANGE FOR MARINE EDUCATORS**

**MAY 2011**

This update is supported by NOAA's Ocean Exploration and Research Program 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, 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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Archives of the information presented in past newsletters are available at <http://mpa.gov/resources/education/#exchange>. Contact the editor directly at [phyllis.dermer@noaa.gov](mailto:phyllis.dermer@noaa.gov), or by phone at (865) 932-5074, to discuss further enhancements or to contribute information for future issues.

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### **Notable Reference**

#### **Aquaculture Technologies Handbook**

A new handbook, *New technologies in Aquaculture: Improving Production Efficiency, Quality and Environmental Management*, reviews recent advances in improvements in aquaculture production, discusses key health issues, and more. Check out the summary and contents on this website.

<http://www.aquaculturehub.org/group/books/forum/topics/new-technologies-in>

## **PROGRAM OF THE MONTH**

### **Project Look Sharp**

Project Look Sharp, a media literacy initiative at Ithaca College, provides free classroom-ready curriculum materials for integrating critical thinking and media literacy into environmental studies and science curricula. Environment Curriculum Kits include Chemicals in the Environment, Endangered Species, Resource Depletion, and Global Warming. The materials can be downloaded from the website.

<http://www.ithaca.edu/looksharp/>

## **WEBSITES OF THE MONTH**

### **PEER Educator Materials**

The Partnership for Environmental Education and Rural Health (PEER) offers myriad science resources for middle and high schools, and the Lesson Plan Library can be browsed by category. There are Integrative Curricula, Life Science Curricula, and many more. Check out Ecosystems, Water's the Matter, and much more. This website is worth spending time exploring.

<http://peer.tamu.edu/default.asp>

### **SeaMonster**

SeaMonster is a blog about all things ocean - science and sports, creatures and ecosystems, conservation, and discovery. The website covers news in ocean sciences and the environment; oceans sports; plants, animals, and people that inhabit the oceans; ocean policy and conservation; and the funny, cute, crazy, scary, and weird. The site is designed to be educational with a mix of science content for all ages, focusing on stories with strong visuals. Future additions will see even more educational content, based around themes, including the impacts of climate change on the oceans, overfishing, and the value of marine ecosystems. In addition, upcoming blogs will be posted during research expeditions this summer to Cuba and the Galapagos. Spend some time checking this website out, and watch for added content.

<http://theseamonster.net/>

## **MESSAGE FROM THE BRIDGE**

### **New Bridge Blog Strand: Sand**

Have you visited the new Bridge Ocean Science Education Blog? In addition to conversations about the Deep Horizon oil spill, beach glass, and the recent tsunami, the Bridge blog now features information for those interested in teaching about, and using, sand with their students. Blog contributor Dr. Carol Hopper Brill, Marine Education Specialist with the Virginia Institute of Marine Science, shares some tips and resources for incorporating the study of sand into the classroom. For those interested in swapping sand with others around the globe, check out the sand swap information. Since contact information is shared here, it is password protected; please use the password: Arenophile, which is one who collects sand samples. If you are currently using sand with your students, or collect sand from your travels and friends, join in the conversation.

<http://bridge.blogs.wm.edu/sand/>

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

## REQUESTS

### Call for Papers – *Diversity*, Extended Deadline

There will be a special issue of the journal *Diversity* dedicated to coral reefs/ entitled *Coral Reef Diversity: Climate Change and Coral Reef Degradation*. The deadline for submissions has been extended to June 30, 2011. Note that this special issue will be fully Open Access.

[http://www.mdpi.com/journal/diversity/special\\_issues/coral\\_diversity/](http://www.mdpi.com/journal/diversity/special_issues/coral_diversity/)

### Ocean Scientist Audio and Video Statements Needed

The COSEE National Office is partnering with the Inner Space Center to develop the hardware, software, and related programming to connect U.S. oceanographic research vessels to informal science education institutions. They seek input from the ocean scientist community in the form of short audio and video segments featuring ocean scientists completing the sentence, "I explore the ocean because..."

<http://www.cosee.net/about/cnn/>

### Pilot Teachers Needed

Curriculum developers at the University of California, Berkeley's Lawrence Hall of Science and partners seek grades 6-8 teachers for field trials for the GEMS/MARE Ocean Sciences Sequence. Please complete the survey if interested.

<https://www.surveymonkey.com/s/OSS6-8>

### Pilot Teachers Needed

The Green Education Foundation is accepting applications for schools and classes interested in piloting its Green Building Program curriculum. The School as a Teaching Tool curriculum is available for K-8 classrooms in grade-level sets, and the Green Building Course Elective will be available for high school classrooms.

[http://www.greeneducationfoundation.org/index.php?option=com\\_content&view=article&id=889&Itemid=532](http://www.greeneducationfoundation.org/index.php?option=com_content&view=article&id=889&Itemid=532)

### Reviewers Needed

NSTA's peer-reviewed journal for elementary teachers, *Science and Children*, is seeking manuscript reviewers. The review panel evaluates submissions and helps craft them into the articles in each issue. Applicants need not be expert writers – they seek classroom and content expertise.

Contact Linda Froschauer at [fro2@mac.com](mailto:fro2@mac.com); include your CV

### Seeking a Teacher for a Gulf Coast Research Cruise

One Gulf Coast teacher can participate in a research cruise, July 30-August 19, 2011 from Gulfport, Mississippi, that will collect data regarding the Hypoxic Zone in the Gulf of Mexico. If interested, send email with your 1) name, 2) email, 3) school name and address 4) student age, 5) subject taught, with "Cruise" in the subject line.

Contact Jessica Kastler at [Jessica.Kastler@usm.edu](mailto:Jessica.Kastler@usm.edu)

## GRANTS AND OPPORTUNITIES

### 50 States for Good Grant

Tom's of Maine 50 States for Good is a national initiative to support the goodness behind grassroots community projects. The deadline for entry is June 21, 2011.

<http://www.tomsofmaine.com/community-involvement/living-well/project-sponsorships>

### **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, and programs pertaining to academic or curriculum development that emphasize innovative educational methods and techniques. The foundation seeks programs that are scientific, creative, humanistic, innovative, and more. Grants are awarded on a quarterly basis, with deadlines of February 1, May 1, August 1, and November 1 each year.

<http://corporate.honda.com/america/philanthropy.aspx?id=ahf>

### **Bay Gazer Photo Contest**

Focus your lens on Galveston Bay views, wildlife, and recreation in the Bay Gazer Photo Contest, open to students and adults from grade 6 and up. Finalists will be displayed at Bay Day to be voted on by the public. The deadline for entry is May 10, 2011.

[http://galvbay.org/photo\\_contest.html](http://galvbay.org/photo_contest.html)

### **Best Buy @15 Community Grants**

The Best Buy Children's Foundation's goal is to provide positive experiences that will help young teens excel in school, engage in their communities, and develop leadership skills. The grants are open to non-profits; schools are not eligible to apply. Applications are accepted July 1-August 1, 2011.

[http://www.bestbuy-communityrelations.com/community\\_grants.htm#](http://www.bestbuy-communityrelations.com/community_grants.htm#)

### **Captain Planet Foundation Grants**

The Captain Planet Foundation provides grants to school and community groups to support hands-on environmental projects for youth in grades K-12. The objective of the foundation is to encourage innovative programs that empower youth around the world to work individually and collectively to solve environmental problems in their neighborhoods and communities. The deadline for application is May 31, 2011.

<http://www.captainplanetfoundation.org/default.aspx?pid=3&tab=apply>

### **Caribbean Islands Biodiversity Hotspot Call for Proposals**

The Caribbean Natural Resources Institute (CANARI) is inviting proposals through the Critical Ecosystem Partnership Fund to help protect biodiversity hotspots in the Dominican Republic. There are five strategic directions and investment priorities. The deadline for submission for small grants is May 31, 2011; for large grants, June 10, 2011.

<http://www.canari.org/documents/CEPFDRCallEngApril11.pdf>

### **Clif Kid Backyard Game of the Year Contest**

Kids ages 6-12 are encouraged to use their imaginations and reconnect with outdoor playtime by creating an original game. The deadline for submission is June 30, 2011.

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

### **Coastal America Awards Program**

The Coastal America Awards Program recognizes outstanding efforts and excellence in leadership for protecting, preserving, and restoring the nation's coastal resources and ecosystems. Awards include Partnership, Special Recognition, and Spirit Awards. The deadline for nomination is August 1, 2011.

[http://www.coastalamerica.gov/index.php?option=com\\_content&view=article&id=1052&Itemid=141](http://www.coastalamerica.gov/index.php?option=com_content&view=article&id=1052&Itemid=141)

### **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.

Connect Grants provide direct support and training grants for organizations and people that serve culturally diverse communities. The deadline for application is August 1, 2011.

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

### **FishAmerica Foundation Grants**

The American Sportfishing Association's FishAmerica Foundation offers grants for projects to restore marine, estuarine, and riparian habitats important to marine and anadromous fish species. Projects must involve community participation through an educational or volunteer component tied to the restoration activities. The deadline for application is May 16, 2011.

<http://www.fishamerica.org/grants/>

### **Fulbright U.S. Scholar Core Program**

The Fulbright U.S. Scholar Core Program offers teaching, research, or combined teaching/research awards in environmental studies and other disciplines. The deadline for application is August 1, 2011.

[http://www.cies.org/us\\_scholars/us\\_awards/](http://www.cies.org/us_scholars/us_awards/)

### **Giving the Land a Voice**

The U.S. Fish and Wildlife Service and the National Wildlife Refuge Association are asking young people ages 15-24 to be part of the vision process, *Conserving the Future: Wildlife Refuges and the Next Generation*. The Giving the Land a Voice multi-media contest will help ensure youth have a voice in informing a new strategic vision for the National Wildlife Refuge System. The deadline for submission is May 27, 2011.

<http://americaswildlife.org/youth-contest/>

### **Judith A. Towle Environmental Studies Fund – Virgin Islands, St. Kitts and Nevis**

Applications are now being accepted by the Community Foundation of the Virgin Islands for the Judith A. Towle Environmental Studies Fund. The fund supports activities that address environmental concerns which transcend the boundaries of a single island or island state, particularly in the U.S. and British Virgin Islands and in the dual-island state of St. Kitts and Nevis. Any individual who is a resident of, or a not-for-profit institution based in, the U.S. or British Virgin Islands or in the Federation of St. Kitts and Nevis may submit a grant application. Graduate students whose research focuses on the Virgin Islands or St. Kitts and Nevis may also submit grant applications. The deadline for application is May 31, 2011.

<http://www.cfvi.net/docs/APRIL2011/PR2011JAT.pdf>

### **Kodak American Greenways Program**

The Kodak American Greenways Awards Program provides seed money to stimulate greenway, blueway, and trail planning and design. Schools are welcome to apply. The program is a partnership project of the Eastman Kodak Company, The Conservation Fund, and the National Geographic Society, and provides small grants to stimulate the planning and design of greenways in communities throughout America. In 2011, the program anticipates awarding up to 50% of the grants to projects that demonstrate the

convergence of economic prosperity and the environment. The deadline for application is June 15, 2011.

[http://www.conservationfund.org/kodak\\_awards](http://www.conservationfund.org/kodak_awards)

### **Mitsubishi Corporation Grants**

Mitsubishi Corporation Foundation for the Americas promotes environmental causes throughout the Americas, encompassing both the physical and social environments in which we live. They support projects in Biodiversity Conservation, Sustainable Development, Environmental Justice, and Environmental Education. Proposals are accepted year-round; ideal timing for proposals is during the first quarter of the calendar year.

<http://www.mitsubishicorp.com/us/en/csr/foundation.html>

### **Mazda Foundation Grants**

The Mazda Foundation awards grants to programs promoting Education and literacy, Environmental conservation, Cross-cultural understanding, Social welfare, and Scientific research. Applications are accepted May 1-July 1 each fiscal year.

<http://www.mazdafoundation.org/grantguidelines.html>

### **NASA Seeks Education Partners**

NASA seeks partners to help achieve its strategic goals for education, including informal education done at museums, science centers, and planetariums. NASA seeks unfunded partnerships with organizations to engage new or broader audiences on a national scale. The agency will work collaboratively to leverage partners' unique resources. The deadline for submission is December 31, 2011.

[http://www.nasa.gov/offices/education/about/NASA\\_Seeks\\_Collaborators.html](http://www.nasa.gov/offices/education/about/NASA_Seeks_Collaborators.html)

### **Pepsi Refresh Project Grants**

The Pepsi Refresh Project awards grants for innovative ideas with the most votes. New ideas will be accepted during the first five days of each month. Free registration is required for voting.

<http://www.refresheverything.com/index>

### **Ramsar Small Grants Fund**

The Ramsar Small Grants Fund assists developing countries and those with economies in transition, in implementing the Ramsar Convention on Wetlands and to support the conservation and wise use of wetland resources. Funds may also be used to provide emergency management assistance for Ramsar Sites under threat and to provide assistance to allow non-contracting parties to progress toward accession. The deadline for application is June 30, 2011.

[http://www.ramsar.org/cda/ramsar/display/main/main.jsp?zn=ramsar&cp=1-63-68-159\\_4000\\_0](http://www.ramsar.org/cda/ramsar/display/main/main.jsp?zn=ramsar&cp=1-63-68-159_4000_0)

### **Ramsar Wetland Conservation Awards**

The Ramsar Wetland Conservation Award honors individuals, organizations, and governments around the world for actions that have significantly contributed to long-term conservation and sustainable use of wetlands. Categories are management, wetland science, and education. The deadline for nomination is May 31, 2011.

[http://www.ramsar.org/cda/en/ramsar-activities-awards/main/ramsar/1-63-67\\_4000\\_0](http://www.ramsar.org/cda/en/ramsar-activities-awards/main/ramsar/1-63-67_4000_0)

### **Research Coordination Networks Funding**

The goal of the Research Coordination Networks program from the National Science Foundation is to advance a field or create new directions in research or education. Groups of investigators will be supported to communicate and coordinate their research, training, and educational activities across disciplinary, organizational, geographic, and international boundaries. The program provides opportunities to foster new collaborations, including international partnerships, and address interdisciplinary topics. See the website for complete details and deadlines.

[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=11691](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=11691)

### **Science, Entertainment, and Education Grant**

The Science & Entertainment Exchange of the National Academy of Sciences seeks proposals to establish collaborative partnerships among scientists, entertainment industry professionals, and educators to develop educational products or services that effectively leverage the resources of the entertainment community (including film, television, and video games) to improve educational outcomes in science classrooms. The deadline for submission is May 16, 2011.

<http://seenas.ning.com/page/the-grant>

### **Sol Hirsch Education Fund Grants**

The National Weather Association awards grants to K-12 teachers to improve the study of meteorology. Selected teachers can use the funds to take accredited courses, attend workshops and conferences, or purchase materials for the classroom. The deadline for application is June 1, 2010.

<http://www.nwas.org/grants/solhirsch.php>

### **SPAW Small Grant Fund**

The SPAW (Specially Protected Areas and Wildlife) Small Grant Fund focuses on building capacity to effectively manage both marine protected areas (MPAs) and fisheries resources. The fund recognizes the critical contribution of MPAs in protecting and restoring fisheries and tourism resources, two main environmental services of coral reef and associated habitats in the wider Caribbean. The deadline for submission is May 15, 2011.

<http://campam.gcfi.org/SGF/SupportingDocs/SGFEng2011.pdf>

### **Teachers for Global Classrooms Program**

The Teachers for Global Classrooms Program provides a professional development opportunity for middle and high school teachers from the United States to participate in a program aimed at globalizing US classrooms. The program includes an online course, symposium participation, international fellowship, and more. The deadline for application is June 15, 2011.

<http://www.irex.org/project/teachers-global-classrooms-program-tgc>

### **Tread Lightly! Stewardship Grant Program**

Tread Lightly! offers members the Stewardship Grant Program to support volunteer clean-ups, trail maintenance work days, and other events that encourage volunteers to get involved in the stewardship of their favorite recreation areas. The deadline for application is May 18, 2011.

<http://www.treadlightly.org/page.php/stewardshipgrants/stewardship%20grants.html>

### **Vernier Technology Grant**

Vernier is providing grants to elementary/middle schools, high schools, and college/university departments to honor the important work of science educators. Applications will be judged on innovative ideas, concrete plans for implementation, and financial need. The deadline for application is June 1, 2011.

<http://www.vernier.com/30years/>

### **Water: Celebrate the Essential Video Contest**

Join American Water Works Association in celebrating water. Film a creative video highlighting how you celebrated Drinking Water Week, May 1-7, 2011, and post it to YouTube. The deadline for submission is May 30, 2011.

<http://www.awwa.org/Government/content.cfm?ItemNumber=44766&navItemNumber=3863&showLogin=N>

### **Wild Gift Wilderness Experience**

The Wild Gift is open to all students and young professionals, ages 21-30. It provides an experience in deep wilderness and encourages a commitment to a self-designed leadership project that will advance wildlands stewardship and the development of sustainable human community and lifestyle. The most important requirement is a record of accomplishment that reflects leadership talent. The deadline for application is June 1, 2011.

<http://www.wildgift.org/apply.php>

## **INTERNSHIPS AND TEMPORARY OPPORTUNITIES**

### **Ecology Project International**

Ecology Project International offers upcoming marine biology programs in Costa Rica, the Galapagos Islands, and Baja-Mexico. They offer discounted rates to new groups enrolling by June 31, 2011.

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

### **Intergenerational Conservation Camps**

Intergenerational camps let families share learning, time, and outdoor experiences. Others, including teachers and youth instructors, are also welcome to come and gain knowledge that can be used with the youth in their circles of influence. Continuing Education Units are available upon request. Camps include Wildlife, Fisheries, and Aquaculture, Basic Insect and Plant Ecology, and more.

[http://www.cfr.msstate.edu/wildlife/conservation\\_camp/](http://www.cfr.msstate.edu/wildlife/conservation_camp/)

### **Refuges Youth Job Opportunities**

Check out student employment opportunities and jobs at National Wildlife Refuges, available through program partners such as the Student Conservation Association (SCA) and AmeriCorps.

<http://www.fws.gov/refuges/about/youth.html>

### **SEA Summer Session**

Space and financial aid are still available for summer 2011 SEA Semester programs for undergraduate students looking for an intensive field-based experience focusing on marine and environmental studies. There are two cruise tracks. Check out the Spring 2012 offerings while on the website.



<http://www.sea.edu/academics/seasemestersummer.aspx>

### **Summer Internship - Florida**

American Conservation Experience is offering a two-month summer fisheries internship with Biscayne National Park for a bilingual (English/Spanish) college student or recent graduate enrolled in a program focusing in Marine Biology, Environment, or related fields. The intern will work with resource management and law enforcement staff to complete recreational fishing creel surveys up to five days per week, including weekends. The deadline for application is May 13, 2011.

Contact Vanessa McDonough at [vanessa\\_mcdonough@nps.gov](mailto:vanessa_mcdonough@nps.gov) with "Biscayne Fisheries Internship" as the subject heading of your email

### **Travel and Summer Opportunities for Educators**

A diverse selection of travel and learning opportunities for educators is available for educators. EEinGeorgia offers a short list of travel opportunities on this webpage, while the Bridge hosts multiple pages filled with summer opportunities.

<http://eeingeorgia.org/core/item/page.aspx?s=93272.0.0.4863>

[http://www2.vims.edu/bridge/search/bridge1output\\_menu.cfm?q=teacher%20summer](http://www2.vims.edu/bridge/search/bridge1output_menu.cfm?q=teacher%20summer)

### **Turtles & Traditions of Mexico - Mexico**

Michoacán, Mexico is a nesting site for three species of sea turtles. Participants in this trip, October 29-November 6, 2011, will have the opportunity to learn more about the ecology of sea turtles and local conservation efforts; search for egg-laying females on the beach; and assist in recording data, relocating eggs, and/or releasing newborn turtles into the ocean. In addition, participants will visit a local school to see presentations by students explaining the traditions of a Mexican celebration taking place this time of year. The trip is limited to sixteen participants.

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

## **CONFERENCES, WORKSHOPS, AND PROFESSIONAL DEVELOPMENT**

### **Approaches to Inquiry: Shifting Classrooms toward Inquiry Learning - Washington**

Port Townsend Marine Science Center offers this teacher training for teachers of grades 5-10, August 14-18, 2011 in Port Townsend, Washington, with an additional fall follow-up meeting. The workshop explores the nature of inquiry using methods and materials from the Exploratorium's Institute for Inquiry, combined with field study applications from the center.

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

### **B-WET Shifting Baselines Teacher Institute - Mississippi**

The Shifting Baselines B-WET Project uses existing maps, aerial photographs, and Internet resources to teach watershed concepts along with science education standards to middle and high school classes. Dr. Jessica Kastler is seeking a team of two teachers from Alabama (preferably), Mississippi, or possibly independent teachers, to work to maximize environmental learning for students in grades 6 or above throughout their schools. There will be a free teacher institute, June 6-9, 2011 in Ocean Springs, Mississippi. Contact her by email, with "B-WET Shifting Baselines" in the subject line.

Contact Jessica Kastler at [Jessica.Kastler@usm.edu](mailto:Jessica.Kastler@usm.edu)

### **Beyond the Horizon: Creating a Network of Special Ocean Places – Florida**

This forum, May 11-13, 2011 in Sarasota, Florida, is being organized with the purpose of initiating discussions of a potential network of special ocean places to strengthen the ecology, economy, and culture of the Gulf of Mexico. Hurry – the deadline for registration is May 6, 2011.

<http://www.mote.org/index.php?src=gendocs&ref=BeyondtheHorizon&category=Marine%20Policy%20Institute>

### **Digital Coast Webinar Series - Online**

Developed and delivered by the NOAA Coastal Services Center, this free series of online webinars offered on the last Thursday of each month focuses on geospatial products and services. It introduces Digital Coast tools and data through demonstrations, case studies, and opportunities to engage with field experts and colleagues.

<http://www.csc.noaa.gov/digitalcoast/webinar/>

### **Educators Workshop at the NASA/Jet Propulsion Laboratory - California**

To celebrate the upcoming launch of the Aquarius/SAC-D satellite, the Center for Ocean Science Education Excellence – Ocean Systems will conduct a free workshop for K-12 educators, June 3-4, 2011 in Pasadena, California. Aquarius will employ advanced technologies to make space-based measurements of ocean salinity across the globe. This workshop will examine connections between the water cycle, ocean circulation, climate, and sea surface salinity.

<http://cosee.umaine.edu/programs/nasaaquarius/>

### **ESIP Teacher Workshop – New Mexico**

The Federation of Earth Science Information Partners teacher workshop for teachers of grades 6-12, July 12-13, 2011 in Santa Fe, New Mexico, will offer an overall theme of Earth Science Education with an integral strand dedicated to climate change education. Participating educators will learn about climate change science, climate resources, and ways to effectively communicate climate change topics. A stipend may be available; see the website for details.

<http://cimss.ssec.wisc.edu/teacherworkshop/esip/>

### **Green Teacher Webinars - Online**

Green Teacher offers free, one-hour webinars lead by experienced educators. Each session features a 20-30 minute presentation and a 30-40 minutes question and answer session. Upcoming webinars include Water Stewardship - From Source to Sea, Green Craft-Making, and more. Sign up to receive email notices of upcoming programs. Check out the archives of previous programs.

<http://greenteacher.com/webinars>

### **Gulf Lagniappe Workshops - Louisiana**

LUMCON's Gulf Lagniappe workshops are a series of educational sessions for those who would like to learn more about Louisiana's marine and coastal environments. The following topics will be covered in upcoming workshops in Cocodrie, Louisiana:

- Climate Change, May 14, 2011
- Salt Marsh Geology / Ecology, May 21, 2011
- Dead Zones, June 4, 2011

Workshops include a presentation by a LUMCON scientist, a trip aboard the R/V *Acadiana*, lab activities, and more; continuing education credit may be available. Pre-registration is highly recommended and appreciated.

<http://www.lumcon.edu/information/news/default.asp?XMLFilename=201011221024.xml>

### **National Youth Environmental Summit**

The Center for the Environment at Catawba College and the Rocky Mountain Institute will offer the *National Youth Environmental Summit: Redesigning our Future*, July 20-24, 2011 in Salisbury, North Carolina, for rising high school juniors and seniors. The summit is designed to engage students with interests and talents in disciplines that lie beyond the traditional environmental field and future environmental leaders.

<http://www.centerfortheenvironment.org/redesigning-our-future.html>

### **Ocean Bound for History 2011 - Massachusetts**

Board the schooner *Harvey Gamage*, and sail along the New England coast August 11-17, 2011 from Gloucester, Massachusetts for this continuing education program by Ocean Classroom, for middle and high school teachers of history and literature. Studies are guided by maritime studies professors, with hands-on activities, direct exploration, formal readings, and discussions to give teachers an understanding of the role of maritime studies in history and literature, oceanography, environmental issues, and applied mathematics.

Contact Susan Hodder at [mail@oceanclassroom.org](mailto:mail@oceanclassroom.org)

### **Seminars on Science - Online**

Registration is open for the summer sessions of Seminars on Science from the American Museum of Natural History. Courses are co-taught by an experienced classroom teacher and a research scientist. Upcoming courses include The Ocean System, Diversity of Fishes, Climate Change, and more. The deadline for registration for summer session 1 (June 6-July 17, 2011) is May 23, 2011; for summer session 2 (July 4-August 14, 2011), June 20, 2011.

<http://www.amnh.org/learn/>

### **Susquehanna Aquatic Biodiversity Teacher Research Fellowships**

This fellowship based out of Wilkes-Barre, Pennsylvania, June 21-August 5, 2011, offers Middle and High School Teachers in the Chesapeake Watershed an introductory workshop, research fellowship, classroom follow-up, and additional professional development opportunities. Those who teach in the Chesapeake watershed will be given placement priority. Hurry – the deadline for application is May 6, 2011.

Contact Ann Faulds at 215-806-0894, [afaulds@psu.edu](mailto:afaulds@psu.edu)

### **Teacher Programs during ASP Meeting**

As part of the national education and public outreach meeting of the Astronomical Society of the Pacific (ASP), *Connecting People to Science*, July 30-August 3, 2011 in Baltimore, Maryland, ASP in partnership with the American Geophysical Union and the Space Telescope Science Institute, will offer a weekend workshop and short courses for teachers in grades K-12. These sessions are open to all teachers; participants do not have to register for the full conference. Some scholarship support is available to help with registration fees and travel expenses.

<http://www.smdeponews.org/programs-events/hands-on-programs-for-classroom-teachers-as-part-of-asp-meeting-july-30-aug-3/>

### **Voices of the Bay - California**

Monterey Bay National Marine Sanctuary is hosting Voices of the Bay: Fisheries Education, a free teacher workshop, June 20-22, 2011 from Monterey, California. The workshop introduces teachers to the Voices of the Bay Fisheries Education standards-based curriculum and explores the multiple stakeholders involved in the local fisheries. The deadline for application is May 16, 2011.

Contact Kristin Hunter-Thomson at [kristin.hunter-thomson@noaa.gov](mailto:kristin.hunter-thomson@noaa.gov)

### **WETMAAP Workshop - Alabama**

The Gulf Coast Research Laboratory offers a Wetland Education Through Maps and Aerial Photographs (WETMAAP) workshop, June 8, 2011 in Mobile, Alabama, for teachers interested in learning more about wetland changes near Mobile Bay. This workshop is open to all, but Alabama teachers who would like to receive professional development credit may request it at the STIPD website. Fall workshops will be held in Houston and Tampa/St. Petersburg.

Contact Jessica Kastler at [Jessica.Kastler@usm.edu](mailto:Jessica.Kastler@usm.edu) with "WETMAAP Workshop" in the subject line of the email.

## **EDUCATIONAL RESOURCES**

### **Caribbean Marine Etiquette PSA**

For the Sea Productions and NOAA have released a Public Service Announcement targeting tourists visiting the USVI and Puerto Rico. The seven-minute film addresses marine debris, illegal collecting, and more, and offers the viewer solutions on how to behave responsibly around marine environments. The video can be viewed online, in English or Spanish.

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

### **Coral Reef Conservation Program**

NOAA's Coral Reef Conservation Program offers different ways to stay up-to-date with coral news. The website homepage links to Corals in the News, and the Education and Resources pages offer many useful resources. Subscribe to their newsletter, like their Facebook page, get RSS feeds, and more.

<http://coralreef.noaa.gov/>

### **Deep Sea Coral Education**

NOAA's Coral Reef News from March, 2011 offers links to a variety of educational materials to help teach students about deep-sea corals, their ecosystems, and how scientists study them. Lessons include Deep Gardens, Who's New in the Deep Sea, and more.

<http://coralreef.noaa.gov/aboutcrp/news/newsletter/>

### **Deepwater Horizon: One Year Later**

NOAA's webpage, *Deepwater Horizon: One Year Later*, offers a compilation of video links, images, podcasts, and other information about the Deepwater Horizon spill and oil spills in general.

<http://oceanservice.noaa.gov/news/features/apr11/dwh.html>

### **Earth Gauge**

Earth Gauge<sup>®</sup> is a free information service designed to make it easy to talk about links between weather and environment. Originally developed for weathercasters, the information is also available to the educators, students, and the general public. In keeping with National Environmental Education Week's 2011 theme, Ocean Connections, broadcast meteorologists from across the United States have contributed videos explaining the ocean's role in weather in their regions and posted them on the website. Note that material from the website is also available in Spanish.

<http://www.earthgauge.net/>

### **Earthquake Hazards Program**

The United States Geological Survey's (USGS) Earthquake Hazards Program offers information about earthquakes (past, present, and future), along with links to educational materials and other informative websites. The home page offers maps of earthquakes occurring within the past seven days in the U.S. and the world. The educator pages offer FAQ, a glossary, kids' activities, and many additional educational resources.

<http://earthquake.usgs.gov/earthquakes/>

### **EBM Tools Database**

The EBM Tools Network offers an online database of ecosystem-based management tools (EBM). The database is designed to help practitioners find resources for projects and share information about their own work with the broader EBM community. The database contains interlinked information on tools, projects, resources, organizations, and practitioners.

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

### **Endangered Species Day**

National Endangered Species Day is May 20, 2011. The Endangered Species Day website features a Teacher Resource Center with sample science and art lesson plans and more.

<http://www.stopextinction.org/esd.html>

### **Global Water Experiment**

Dow Chemical Company is supporting the Global Water Experiment, encouraging teachers and students to participate in a global experiment with students testing the water where they live and interacting with other students around the globe to share results. The results will be available on an interactive global data map throughout the experiment, which runs throughout 2011.

<http://water.chemistry2011.org/web/iyc>

### **Information Exchange Newsletter Archive**

Individual past issues of the *Information Exchange for Marine Educators* e-newsletter are now archived on the MPA Center website. These issues go back to 2004 (the individual documents from 2002-3 were lost in a computer crash). Topical archived information will continue to be posted as well.

<http://www.mpa.gov/resources/archives/#infoexchange>

### **Integrating Research and Education**

This website from Carleton College contains educational modules for use by teachers, students, and researchers. These collections offer numerous ways in which digital library technologies can be used to translate scientific discoveries into effective

instructional practice. Each project features key topics, discovery pathways, and activities for students, many of which make use of Internet resources and online databases. For educators, the instructional modules focus Earth System Science, Diversity in the Geosciences, and Using Geoscience Instrumentation, Databases, and the New Cyberinfrastructure. The modules include thematic collections of resources on topics of interest, tutorials on how to access geoscience databases, examples of how digital libraries can be used to aggregate community resources, and more.

[http://serc.carleton.edu/research\\_education/index.html](http://serc.carleton.edu/research_education/index.html)

### **LETSNet Science Lesson Units**

LETSNet – the Learning Exchange for Teachers and Students through the Internet - from Michigan State University College of Education and Ameritech offers curriculum units in a variety of subjects, including science. Science Units include Climate and Weather, Severe Weather, Global Warming, Investigating Environmental Legislation, and more. While on the website, check out other offerings by selecting the *Choose Your View* icon.

<http://commtechlab.msu.edu/sites/letsnet/noframes/Subjects/science/index.html>

### **Movebank**

Movebank is a free, public, online data repository and community for animal tracking and photo monitoring. Movebank acquires new data in real-time by linking data streams coming from satellites, cellphone networks, or other local area networks. In addition, historic animal movement databases are uploaded to the database. Movebank facilitates long-term comparisons of these data, making it possible to address questions such as the effects of global climate change and human-caused landscape change.

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

### **Nauticus Teacher Resources**

The Education Department at Nauticus, a maritime-themed science center, offer a variety of online educational resources, including the *It's Happenin' in Hampton Roads Harbor Teacher's Manual*, an interdisciplinary unit for third grade students, shark resources, weather activities, and more.

<http://www.nauticus.org/education/online-teacher-resources>

### **Ocean Life Map**

This map developed by Duke University researchers, in partnership with the Census of Marine Life and National Geographic Maps, provides a detailed overview of life in the world's oceans. The two-sided, poster-sized map, available online, is based on 10 years of data from the international Census of Marine Life and other sources.

<http://comlmaps.org/oceanlifemap/diversity-distribution-abundance>

### **Oceans and Human Health Initiative**

NOAA's Oceans and Human Health Initiative investigates the relationship between environmental stressors, coastal condition, and human health to maximize health benefits from the ocean, improve the safety of seafood and drinking waters, reduce beach closures, and detect emerging health threats. Check out the news, multimedia, and more, along with the link to three studies revealing connections between human health and climate change.

<http://oceansandhumanhealth.noaa.gov/>

<http://oceanservice.noaa.gov/news/weeklynews/mar11/ohh-climate.html>

### **Planet FOSS for Kids**

The Lawrence Hall of Science offers Planet FOSS (Full Option Science System) as a way to engage kids in science curriculum by getting them to observe the world through their own experiences and take and share photos. Sections include Diversity of Life, Weather & Water, and more. Check out the Populations & Ecosystems student worksheet.

<http://www.fossweb.com/planetfoss/>

### **Probing the Impact of Climate Change on Wildlife, Ecosystems**

NASA and partners have initiated new research and applications efforts that will bring the global view of climate from space down to Earth to benefit wildlife and key ecosystems through research investigating the intersection of climate and biological studies. Check out some of the links to project websites.

[http://www.nasa.gov/topics/earth/features/climate\\_partners.html](http://www.nasa.gov/topics/earth/features/climate_partners.html)

### **Project-Based Learning Resources**

Edutopia offers these free resources and tools for project-based learning. Check out the ten takeaway tips, assessment tools, sample projects, and more.

<http://www.edutopia.org/stw-replicating-pbl-resources>

### **Report in Brief Series**

The Division on Earth & Life Studies of the National Research Council produces expert consensus reports each year in such areas as agriculture, water and natural resource management, biosafety, disaster response, climate change energy, and environmental health. In addition, the division produces 4-page briefs about the reports' main findings and conclusions. The Report in Brief series offers the complete set of briefs for the years 2002-2010. The sets are being offered free through July 2011.

<http://dels.nas.edu/global/Report-in-Brief-Series>

### **SCUBAnauts International**

SCUBAnauts International is an informal marine education program focused on engaging youth (ages 12-18) in the marine sciences through research projects. The website offers downloadable presentations, publications, and more.

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

### **Seafloor Mapping Mission in the U.S. Caribbean**

From March 28-April 16, 2011, the NOAA ship *Nancy Foster* undertook a seafloor mapping mission in the U. S. Caribbean. Read about the mission, view daily logs, and meet the mission scientists.

[http://ccma.nos.noaa.gov/products/biogeography/usvi\\_nps/details.html](http://ccma.nos.noaa.gov/products/biogeography/usvi_nps/details.html)

### **SECOORA's Classroom**

As part of the Southeast Coastal Ocean Observing Regional Association's education and outreach efforts, SECOORA offers educational resources related to coastal and ocean observing for the Southeast on their website. Check out The Virtual Wave Classroom, Marine Scientist Interviews, and more.

<http://secoora.org/classroom>

### **Smithsonian Ocean Portal**

The Ocean Portal, developed by the Smithsonian National Museum of Natural History, is an interactive website that offers an introduction to ocean science, marine life, and a

history of the ocean. The website provides lesson plans, activities, and resources for educators; be sure to check out the educator pages. Sign up for the Ocean Portal newsletter to stay current on ocean news and learn about upcoming events.

<http://ocean.si.edu/>

### **Sustainability Education Clearinghouse**

The Green Education Foundation, along with the U.S. Green Building Council, support the Sustainability Education Clearinghouse, a free online tool that provides K-12 teachers with the opportunity to upload and share lessons focused on sustainability. Posted lessons can be selected by a variety of criteria or key word.

[http://www.greeneducationfoundation.org/index.php?option=com\\_sobi2&sobi2Task=search&Itemid=567](http://www.greeneducationfoundation.org/index.php?option=com_sobi2&sobi2Task=search&Itemid=567)

### **TIMSS Video**

The Third International Mathematics and Science Study (TIMSS) 1999 Video Study was a study of eighth-grade mathematics and science teaching in seven countries. It involved videotaping and analyzing teaching practices in more than one thousand classrooms. This website from UCLA and the Carnegie Foundation for the Advancement of Teaching make available to the public the 53 public use video lessons along with full English-translation subtitles for each lesson, a searchable transcript, and a set of resources collected with each lesson such as scanned text materials and teacher commentaries. Free registration is required.

<http://timssvideo.com/>

## **INITIATIVES, JOURNALS, and MORE**

### **America's WILD READ**

America's WILD READ is a virtual book club meant to engage and inspire participants to connect with the outdoors and nature. The goal is to bring together the interested conservation community, young adult readers, and the Fish and Wildlife Service around a common book and essays in order to deepen the conversation for the National Wildlife Refuge visioning process.

<http://wildread.blogspot.com/>

### **Go Green Commemorative Stamps**

In celebration of Earth Day 2011, the United States Postal Service, in partnership with the United States Environmental Protection Agency, issued Go Green Forever stamps. The Go Green stamps show 16 simple actions we can take to conserve natural resources and promote the health of our environment.

<http://www.usps.com/green/gogreenstamps.htm>

### **Google Map Maker**

Google Map Maker allows users to add names and descriptions of areas in their community, map various features such as pedestrian trails, parks, and more.

<http://www.google.com/mapmaker>

### **ParkFinder App**

The free Oh, Ranger! ParkFinder™ app for the iPhone and iPod Touch allows users to find parks and public lands throughout America, based on their favorite activities.

<http://www.ohranger.com/app/parkfinder>



**Student Videos Take on Climate Change**

UMass Lowell students and NASA unite! students have created five short films on climate change. Join this free event, May 9, 2011 in Lowell, Massachusetts, to see the featured presentations and take part in an open discussion.

<http://www.uml.edu/centers/climate-change/>