# NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION INFORMATION EXCHANGE FOR MARINE EDUCATORS JANUARY 2009

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 <a href="http://mpa.gov/helpful\_resources/education\_training.html">http://mpa.gov/helpful\_resources/education\_training.html</a>. 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**

#### Field Guide to Tidal Wetland Plants

The University of Massachusetts Press has just published "Field Guide to Tidal Wetland Plants of the Northeastern US and Neighboring Canada". The book emphasizes plant identification and provides simple, easy-to-use keys and descriptions for identifying over 700 species found in the region's salt and brackish marshes, tidal freshwater marshes and swamps, tidal flats, rocky shores (including dominant algae), beaches, and coastal ponds. It is illustrated with line drawings of approximately 550 species. The guidebook also contains a brief introduction to coastal wetland ecology and overviews of coastal wetlands in each state (Maine through Maryland) and maritime province and Quebec, including figures showing the general distribution of coastal marshes in these areas and a list of places to explore these wetlands.

http://www.umass.edu/umpress/spr\_08/tiner.htm

#### **SocMon Global Report**

SocMon is an initiative aimed at helping coastal managers better understand and incorporate the socioeconomic context into coastal management programs. The initiative is being implemented at the global and regional levels. The new SocMon Global Report synthesizes data from close to 14,000 household interviews in 29 countries. The downloadable report highlights dependence on coral reefs by local communities in developing countries, provides information on perceived threats to coastal resources, and points to the inability of coastal managers to effectively implement decades-old recommendations as a significant barrier to coral reef protection. <a href="http://www.reefbase.org/socmon/">http://www.reefbase.org/socmon/</a>

#### WEBSITE OF THE MONTH

#### Bilko

Supported by UNESCO, Bilko is a system for learning and teaching remote sensing image analysis skills. Current lessons teach the application of remote sensing to oceanography and coastal management, but Bilko routines may be applied to the analysis of any image in an appropriate format, and include a wide range of standard image processing functions. Bilko is available to registered users for free. The website offers PC-based software, tutorials, thematic modules, and more. http://www.noc.soton.ac.uk/bilko/

#### MESSAGE FROM THE BRIDGE

#### What's New in the New Year?

With so much happening in the marine science education realm in 2009, stay current by joining Scuttlebutt, the Bridge website's marine science education email discussion list. This no cost, international listserv provides a forum for educators and scientists to informally discuss marine education ideas, issues, and questions, and allows ocean science programs from across the globe to advertise summer and year-round opportunities for educators and students, as well as countless new classroom resources. With over 1000 members in 15 countries, Scuttlebutt is monitored by the Bridge staff, which assists in locating experts to answer posted questions when needed. All educators and scientists interested in learning about marine science education opportunities and resources when they are first announced are invited to subscribe. <a href="http://www.marine-ed.org/bridge">http://www.marine-ed.org/bridge</a>

#### REQUESTS

#### Become a Reviewer for the NCATE/NAAEE EE Standards

Now that NAAEE has environmental education standards for college education programs, the colleges will need to explain how they meet them during their National Council for Accreditation of Teacher Education (NCATE) review. NAAEE will need a cadre of volunteers well trained in the standards to help with these reviews, which help determine whether a college's education program is accredited. http://www.naaee.org/

#### **Comments Requested**

Supported by NOAA in collaboration with the West Coast Governors' Agreement on Ocean Health, West Coast Sea Grant programs have been collaborating to assess the marine research and information needs of the West Coast of the United States. The primary goal of the process is to identify research and outreach that would help the region move toward an ecosystem-based approach to ocean and coastal management. The comment period runs through January 16, 2009. http://seagrant.oregonstate.edu/research/RegionalPlanning/index.html

#### Seeking High Definition Coral Footage

The NOAA Coral Reef Conservation Program is in the beginning stages of creating multi-media content for their website and other outreach products. They will be producing at least four, 3-5 minute videos covering the following areas: Overview of Coral Reefs and their Threats, Land-based sources of Pollution and Corals Reefs; Adverse Impacts of Fishing and Coral Reefs; and Climate Change and Corals. In addition to the videos, footage may be included in educational kiosks, local PSAs, content for cruise lines and hotel channels, YouTube, etc. If you are a budding or professional videographer and have High Definition footage that you would like to donate to NOAA, your contributions would be acknowledged and greatly appreciated. Contact Maria Barry at maria.barry@noaa.gov

#### **GRANTS AND OPPORTUNITIES**

# **Atlanta Audubon Photography Contest**

The Atlanta Audubon Society invites all amateur photographers to enter the Atlanta Audubon Society Photography Contest. Entries must have been photographed since January 1, 2008 and must be received by February 23, 2009. http://www.atlantaaudubon.org/aaswww/events/2009photocontest/photocontest2009.htm

#### Amgen Award for Science Teaching Excellence

Amgen invites science educators of grades K-12 to apply for the Amgen Award for Science Teaching Excellence, an unrestricted cash award for educators in communities in which Amgen operates, who are elevating the level of science literacy through creativity in the classroom and motivation of students. The deadline for application is February 2, 2009. See the website for eligibility details. http://www.amgen.com/citizenship/aaste.html

#### B-Wet New England, Gulf of Mexico, and the Pacific Northwest Grants

The NOAA Office of Education and the Bay Watershed Education and Training Program are pleased to announce that the 2009 B-WET grant competitions in New England, the Gulf of Mexico, and the Pacific Northwest are now open. Applications are due January 26, 2009.

http://www.oesd.noaa.gov/BWET/BWET funding.html

#### **Christopher Columbus Awards**

Innovation Generation offers the Christopher Columbus Awards, a national, community-based science and technology program for middle school students. The program challenges the students to work in teams of three to four, with an adult coach, to identify a problem in their community and apply the scientific method to create an innovative solution to that problem. The deadline for submission is February 9, 2009.

#### http://www.christophercolumbusawards.com/

#### **Digital Wish Grants and Lesson Plans**

Digital Wish offers grants for digital camera hardware and software for your classroom. Register your classroom at Digital Wish and enter a lesson plan. Grants will be awarded on the 28th of every calendar month. While on the website, check out the Lesson Plan Library, with Digital Picture Water Source Hunt, Let's Rock and Roll, and much more. http://www.digitalwish.com/dw/digitalwish/grant\_awards

#### **Dr. Nancy Foster Scholarship**

The National Oceanic and Atmospheric Administration's Dr. Nancy Foster Scholarship Program recognizes outstanding scholarship and encourages independent graduate level research, particularly by female and minority students, in oceanography, marine biology and maritime archaeology. The deadline for application is March 31, 2009. <a href="http://www.fosterscholars.noaa.gov/">http://www.fosterscholars.noaa.gov/</a>

#### **Earthwatch Educator Fellowships**

Fellowships are available for educators to participate in international and U.S. Earthwatch Conservation Expeditions. The deadline for application is February 9, 2009. http://www.earthwatch.org/aboutus/education/edopp/edfelfund

# **Educational Partnership Program - Undergraduate Scholarship Program**

The Educational Partnership Program Undergraduate Scholarship Program offers scholarship opportunities for rising junior year students attending minority serving institutions who are majoring in disciplines relating to NOAA's mission. Competitive two year appointments will be awarded to students to facilitate hands-on research experience at approved NOAA offices and facilities. The deadline for application is February 2, 2009.

http://www.oesd.noaa.gov/epp\_uspa/

#### **Five Star Restoration Grant**

The Five Star Restoration Program brings together students, conservation corps, other youth groups, citizen groups, corporations, landowners, and government agencies to provide environmental education and training through projects that restore wetlands and streams. The program provides challenge grants, technical support, and opportunities for information exchange to enable community-based restoration projects. The deadline for application is February 16, 2009.

http://www.epa.gov/owow/wetlands/restore/5star/

#### **Fund for Teachers Professional Development Grants**

The Fund for Teachers Grant awards PreK-12 teachers with funds to support professional development activities. The deadline for application is January 30, 2009. <a href="http://www.fundforteachers.org/about.html">http://www.fundforteachers.org/about.html</a>

#### **Garden Club of America Wetlands Scholarship**

The Garden Club of America offers an annual award for a one-year scholarship for graduate studies in coastal wetlands and support of field-based research. The goals of the Garden Club are to promote wetlands conservation through the support of young scientists in their fieldwork and research. The deadline for application is February 1, 2009.

http://ccrm.vims.edu/education/garden\_club/index.html

#### **Graduate Sciences Program**

The Graduate Sciences Program is aimed primarily at increasing opportunities for students in NOAA-related fields to pursue research and educational training in atmospheric, environmental, remote sensing, and oceanic sciences at minority serving institutions when possible. The deadline for application is January 30, 2009. http://www.epp.noaa.gov/ssp\_grad\_sciences\_page.html

#### **Hollings Undergraduate Scholarship Program**

NOAA's Ernest F. Hollings scholarship program provides selected undergraduate applicants with awards that include academic assistance for full-time study; a 10-week, full-time internship position during the summer at a NOAA or partner facility; and, if reappointed, academic assistance during a second academic year. The internship provides hands-on, multi-disciplinary educational training experience involving students in NOAA-related scientific, research, technological, policy, management, and education activities. The deadline for application is January 30, 2009. http://www.oesd.noaa.gov/Hollings\_info.html

#### **Hutton Junior Fisheries Biology Program Summer Scholarship Awards**

The Hutton Junior Fisheries Biology Program is designed to stimulate interest in careers in fisheries science and management among groups underrepresented in the fisheries professions, including minorities and women. Students in grades 10-12 spend 8 weeks in the summer working alongside their mentor who is a fisheries professional in their local community. The deadline for application is February 15, 2009. http://www.fisheries.org/afs/hutton.html

# **ING Unsung Heroes Awards**

The ING Unsung Heroes program helps K-12 educators and their schools fund innovative classroom projects. At least one award will be granted in each of the fifty states, provided one or more qualified applications are received from each state. The deadline for applications is April 30, 2009.

http://www.ing-

usa.com/us/aboutING/CorporateCitizenship/Education/INGUnsungHeroes/index.htm

# Jenny's Heroes Program

The Jenny's Heroes program awards grants to individuals who submit the best ideas for tangible, lasting community projects. The program's focus is primarily on smaller communities where fundraising can be difficult. http://www.jennysheroes.com/

#### **Living on the Ocean Planet Video Contest**

The National Ocean Sciences Bowl (NOSB) is hosting its first video competition in conjunction with the 2009 NOSB Finals Competition. The goal is to showcase a student-developed original video that will educate the general public about biodiversity within our oceans and will address the Essential Ocean Literacy Principles. The theme for the video is "Living on the Ocean Planet," highlighting why biodiversity in the oceans is important using, one or more of the Seven Principles of Ocean Literacy. The deadline for entry is March 2, 2009.

http://www.eeintennessee.org/net/content/go.aspx?s=78696.0.0.37935

#### **Mapping Opportunity**

The Department of Environment and Coastal Resources, Ministry of Natural Resources, Turks and Caicos government has secured funds to support bids for the Terrestrial Habitat Mapping Project for the Turks and Caicos Islands. Detailed maps of habitat, vegetation, threatened species distribution, developed areas, protected areas and areas under pressure will be prepared and will be fed into the national GIS. Aerial imagery of all islands is available. The deadline for application is January 31, 2009. Contact Wesley Clerveaux at <a href="www.wvclerveaux@gov.tc">wvclerveaux@gov.tc</a>

#### **Marine Wildlife Photo Contest**

The Ocean Conservancy invites entries in the 2009 Marine Wildlife & Seascape Photo Contest. Share your visions of our ocean and send your best ocean seascape and marine wildlife images. The deadline for entry is January 31, 2009. http://www.oceanconservancy.org/site/PageServer?pagename=photoContest

#### National Schoolyard Birding Challenge

The National Schoolyard Birding Challenge is a monthly bird watching contest open to students in all public and private schools in North America. Student participants work together to observe, identify, and record various bird species found on their school grounds. Teams compete for prizes each month and will be entered to win monthly drawings.

http://www.fledgingbirders.org/challenge.html

#### **NEA Learning and Leadership Grants**

The NEA Foundation Learning and Leadership Grants support public school teachers, public education support professionals, and/or faculty and staff in public institutions of higher education. Grants to individuals may fund participation in professional development experiences such as summer institutes or action research, while grants to groups fund collegial study, including study groups, action research, lesson study, or mentoring experiences for faculty or staff new to an assignment. All professional development must improve practice, curriculum, and student achievement. Grants are awarded three times each year; the next deadline for application is February 1, 2009. <a href="http://www.neafoundation.org/programs/Learning&Leadership Guidelines.htm">http://www.neafoundation.org/programs/Learning&Leadership Guidelines.htm</a>

#### **Purpose Prize**

The Purpose Prize provides awards to exceptional individuals over 60 who are taking on society's biggest challenges, including education and the environment. The deadline for nomination is March 9, 2009.

http://www.purposeprize.org/index.cfm

#### **Reef Check Singing Contest**

Reef Check Foundation is sponsoring an international singing contest featuring "The Year of the Reef Song," as a strategy to engage the world's youth in reef conservation. The deadline for entry is January 31, 2009.

http://www.reefcheck.org/video/video\_contest.php

#### **RESTORE: Children and Nature**

RESTORE: Children and Nature, a collaborative project funded by EPA's Office of Children's Health and Environmental Education, will establish partnerships with the US Fish and Wildlife Service to enhance the FWS Schoolyard Habitat program with teacher professional development and Earth Partnership for Schools' (EPS) K-12 curriculum.

The project will focus on biodiversity, ecological restoration, pollution prevention, and ecological literacy. The deadline to apply to become an EPS Center is February 15, 2009 – contact Cheryl Bauer-Armstrong at <a href="mailto:cherylbauer@wisc.edu">cherylbauer@wisc.edu</a> for information. <a href="http://uwarboretum.org/news/singlePost.php?id=298&origin=foa&activeCategory=13">http://uwarboretum.org/news/singlePost.php?id=298&origin=foa&activeCategory=13</a>

#### Write On! Wetlands Challenge

This competition, celebrating American Wetlands Month in May, challenges students to create a book written and illustrated by kids for kids. The contest, hosted by Environmental Concern Inc, asks students in grades 6-8 to write a children's book with a wetland theme. The winning entry will be illustrated by students in grades k-5 and published by Environmental Concern Inc. This year's theme is The Case of the Wetland Mysteries! All entries must be in the form of a mystery story. The deadline for entry is March 1, 2009.

http://www.wetland.org/education\_writeon.htm

#### INTERNSHIPS AND TEMPORARY OPPORTUNITIES

# **Biology in the Bahamas**

Shedd Aquarium offers the Teacher Field Experience: Biology in the Bahamas program. Teachers will learn about marine science including oceanography, coral reef ecosystems, fish adaptations, and more while conducting their own research project in the Bahamas. The deadline for application is February 28, 2009. http://www.sheddaguarium.org/teachers.html

#### **Graduate Fellowships**

The California Sea Grant College Program is seeking applications for the 2009 National Marine Fisheries Service – Sea Grant Joint Graduate Fellowship Programs in Population Dynamics and Marine Resource Economics. The deadline for application is January 20, 2009.

http://www.csgc.ucsd.edu/EDUCATION/SeaGrantFellows.html

#### Park Flight International Internships in U.S. National Parks

The National Park Service Park Flight Migratory Bird Program works to protect migratory birds that share their habitat between national parks and protected areas in the U.S., Canada, Latin America, and the Caribbean through bird monitoring, education and outreach programs, and opportunities for technical assistance and cooperation. Working through the NPS International Volunteers in Parks Program, biologists and educators from other Western Hemisphere countries assist with Park Flight efforts in U.S. national parks. These international internships give the opportunity for an exchange of knowledge and experience including science, culture and language. For 2009, the Park Flight international internships will be open to qualified candidates from Latin America (Mexico, Central, and South America) and the Caribbean. The internships will begin from April to August 2009, and will last from two to six months. The deadline for application is January 31, 2009.

http://www.nps.gov/oia/topics/flight/flight.htm

# CONFERENCES, WORKSHOPS, AND PROFESSIONAL DEVELOPMENT

#### **Earth Expeditions**

The Cincinnati Zoo and Botanical Garden, in partnership with Miami University's Project Dragonfly, offers Earth Expeditions, tuition-free graduate courses open to educators from all disciplines and settings. Different courses and field expeditions are offered and offer inquiry-driven, community-based learning for the benefit of ecological communities, student achievement, and global understanding. The new Global Field Program is a master's degree from Miami University offered entirely through tuition-waived Field Expeditions experiences worldwide, with coursework in web-based learning communities. Students complete the master's part-time from anywhere in the U.S. or abroad. The deadline for application for the 2009 Field Expeditions graduate courses is January 28, 2009.

http://www.earthexpeditions.org/

# **Eonfusion 4D Analysis Tool Webinar - Online**

The Ecosystem-Based Management (EBM) Tools Network will host a web-based demonstration of Eonfusion, January 14, 2009. Eonfusion is a new software tool that provides 4D analysis and visualization of time-varying spatial data. It allows users to streamline the integration of large and diverse data sets, explore relationships among multiple variables, and communicate complex results. Eonfusion makes data exploration and analysis easier through an intuitive graphical 'data flow' environment, and users can customize data processing methods within a user coding environment. For those who cannot make the presentation, a recording of this presentation will be made available on the EBM Tools Network a few days after the presentation. <a href="https://www1.gotomeeting.com/register/146610135">https://www1.gotomeeting.com/register/146610135</a>

http://www.ebmtools.org/tools\_training/presentations.html

#### **Learning Ocean Science through Ocean Exploration - Various**

NOAA's Ocean Exploration Program and partners will offer introductory and follow-up Learning Ocean Science through Ocean Exploration professional development workshops for science teachers. Participants will receive the curriculum with CD-ROM's, certificates of participation, and more. Contact the noted educator for registration and more information.

- Maryland with the National Aquarium in Baltimore, April 4, 2009. The deadline for registration is March 20, 2009. Contact Joe Harber at <a href="mailto:jharber@aqua.org">jharber@aqua.org</a>
- Oregon with the Oregon Museum of Science & Industry, a follow-up Professional Development Workshop for Teachers, April 4, 2009. The deadline for registration is March 20, 2009. Contact Nancee Hunter at nancee.hunter@oregonstate.edu
- Illinois with the John G. Shedd Aquarium, a follow-up Professional Development Workshop for Teachers, April 18, 2009. The deadline for registration is April 3, 2009. Contact Amy Christiansen at <u>AChristian@sheddaquarium.org</u>
- Louisiana with the Audubon Aquarium of the Americas, a follow-up Professional Development Workshop for Teachers, April 18, 2009. The deadline for registration is April 3, 2009. Contact Tricia LeBlanc at <u>tleblanc@AudubonInstitute.org</u>

#### **National Conference on Science Education**

Celebrate the Year of Science at the National Conference on Science Education, March 19-22, in New Orleans, Louisiana. Join more than 10,000 science educators in New Orleans for the most prominent and comprehensive NSTA conference. http://www.nsta.org/conferences/2009new/?lid=con

# National Conservation Training Center Courses - West Virginia

The U.S. Fish and Wildlife Service offers professional development courses at the National Conservation Training Center campus in West Virginia. For more information about a specific course, contact the individual identified below.

- OUT8101: Public Public Outreach and Education: Overview and Program Planning, March 30-April 3, 2009; the deadline for registration is January 19, 2009 (after deadline, call for availability). Contact Sandy Spakoff at Sandy Spakoff@fws.gov.
- OUT8113: Developing and Working with Friends Organizations, May 27-29, 2009; the deadline for registration is March 18, 2009 (after deadline, call for availability). Contact Laura Jones at Laura Jones@fws.gov.
- OUT8119: Advanced Partnerships: Building Sustainable Revenues, May 12-14, 2009. This is an advanced course for federal agency and non-profit partners engaged in an active partnership. There is no charge for FWS, NPS, or BLM federal employees' tuition. Contact Laura Jones at <a href="mailto:laura\_jones@fws.gov">laura\_jones@fws.gov</a>.
   http://training.fws.gov/documents/Section1\_NCTC\_Sponsored\_Courses.pdf

#### **National Marine Educators Association Conference**

The National Marine Educators Association Conference, June 29-July 3, 2009 in Pacific Grove, California, offers the theme, One World Conserving One Ocean. From preconference and field-based workshops to evening events, concurrent sessions and keynote speakers, NMEA09 will provide you with a chance to connect with colleagues, learn new teaching strategies, and get in on the most up-to-date ocean research. Explore beautiful Monterey Bay and be inspired by the insights and experiences of those committed to the ocean. Proposals for one hour presentations are now being accepted; the deadline for submissions is February 15, 2009. http://209.232.236.13/nmea2009/

#### **Professional Development Weekends - California**

http://sanctuarysimon.org/monterey/posters/

Camp Ocean Pines is offering two professional development opportunities this winter in Cambria, California. *All About Abalone* is a weekend conference with tour and dinner, January 29-February 1, 2009. *Humpback Whales* is a weekend conference, January 23-25, 2009.

http://campoceanpines.org/

#### Sanctuary Currents Symposium - Call for Research Posters - California

The 2009 Sanctuary Currents Symposium, *Back to the Future - Preserving the Sanctuary by Exploring its Past*, will be held April 18, 2009 in Monterey, California. Proposals for the research poster session are being accepted; abstracts that address the theme of the symposium are especially encouraged, however, submissions may be from all types of coastal and marine research in the central California area. The deadline for submission is February 20, 2009.

#### **EDUCATIONAL RESOURCES**

#### **Antarctic Summer**

Two young scientists spending six months in Antarctica will share their experiences and different perspectives with students and teachers. Alex's blog is focused on the science they're doing (he recently got his Ph.D. in oceanography), while Elizabeth (a registered nurse by training) is blogging more about life in Antarctica. The website includes an initial set of teacher resources, including an introductory presentation you can use in your classrooms and a real-time data activity. They are also looking for volunteer educators to help develop new activities and lesson plans in whatever subjects or grades that interest you.

http://coseenow.net/forum/?wpforumaction=viewforum&f=4.0 http://rucool.marine.rutgers.edu/antarctica/

#### **Build a Squid**

Nothing but fun! Build your own squid, set it free, and then check out what yours and all the other squids have been up to.

http://squid.tepapa.govt.nz/build-a-squid/interactive

# **Coral Reef Activity Book**

The Coral Reef Activity Book is the first in a series of thematic activity books from NOAA's National Centers for Coastal Ocean Science. This book includes fun and informative activities about the coral reefs and its inhabitants. These books are for grades K-5 and highlight the organisms and issues relevant to coral reefs. The book includes information on the reefs, fun facts, drawings to color, connect-the-dots, find-aword puzzles, mazes, and other activities. The book can be downloaded from website, as can each of a series of regional ocean activity books. Hard copies can be requested by contacting Susan Baker at <a href="mailto:susan.Baker@NOAA.gov">Susan.Baker@NOAA.gov</a>. <a href="mailto:http://www.coastalscience.noaa.gov/education/">http://www.coastalscience.noaa.gov/education/</a>

#### **Coral Reef Videos**

The Hawaii Coral Reef Initiative is committed to educating all types of audiences about the value of coral reefs through a wide range of media. In order to reach a broader audience, HCRI has expanded its use of the video-sharing websites YouTube and TeacherTube, and includes instructional videos for children on coral genetics and coral community connections, animations, and more.

http://www.teachertube.com/uvideos.php?UID=174264 http://www.youtube.com/hcrirp

#### Earth Partnership for Schools

The Earth Partnership Program, from the University of Wisconsin-Madison Arboretum, focuses on ecological restoration as a way of establishing a positive relationship between people and the land. The program assists teachers in establishing restoration projects on school sites and providing the tools for building a curriculum that incorporates restoration into almost any subject area. The program includes a two-week institute in the summer and ongoing support from UW-Madison Arboretum staff to help schools with restoration planning and curriculum development. Check out the resources under *Tools for Teachers*.

http://uwarboretum.org/eps/

#### **Educational Resources from Busch Gardens and Sea World**

SeaWorld, Busch Gardens, and Discovery Cove offer career resources; a Fun Zone with coloring books, song books and more; teacher resources with downloadable classroom activities, teacher guides; and much more. Take time to explore this website. http://www.swbg-animals.org/index.asp

#### **EXPLO.TV**

This website is the video component of the Exploratorium: Museum of Science, Art and Human Perception in San Francisco. This site offers webcasts, podcasts, and video clips, with many in the Ice Stories series - dispatches from polar scientists. You can browse by subject, category, and much more.

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

#### **Greenhouse Gas Equivalencies Calculator**

The greenhouse gas equivalency calculator can help us understand just what reducing carbon dioxide emissions by 1 million metric tons means in everyday terms. This equivalency calculator may be useful in communicating your greenhouse gas reduction strategy, reduction targets, or other initiatives aimed at reducing greenhouse gas emissions.

http://www.epa.gov/cleanenergy/energy-resources/calculator.html

#### **National Archeological Database Reports Module**

The National Archeological Database, Reports module, is an expanded bibliographic inventory of over 350,000 reports on archeological investigation and planning, mostly of limited circulation. This "gray literature" represents a large portion of the primary information available on archeological sites in the U.S. Since a majority of the publications in the database are unpublished, uncataloged, and have limited circulation, it is important to know where a copy of the report can be found. Therefore, two Results Types are available for search results. The Standard results type formats each citation in the style of the American Antiquity journal. The Expanded results also includes the location of the report and the name of the lead agency that sponsored the project. Since some of the contact information for the report location changes over time, you can check the websites for the State Historic Preservation Offices and the State Archaeologists. <a href="http://www.cast.uark.edu/other/nps/nadb/nadb.mul.html">http://www.cast.uark.edu/other/nps/nadb/nadb.mul.html</a>

#### **National Ocean Economics Program**

The National Ocean Economics Program provides a full range of the most current economic and socio-economic information available on changes and trends along the U.S. coast and in coastal waters. The program is funded by federal, state, university, and private grants and contracts. Check out this updated website. <a href="http://noep.mbari.org/">http://noep.mbari.org/</a>

#### **Right Whale Game**

The Ocean Conservancy partnered has created a website devoted to right whales. The site offers an interactive right whale game where you can navigate the right whale safely through trash, lobster traps, and ships; right whale information; a coloring page, and more.

http://www.oceanconservancy.org/site/PageServer?pagename=OceanHall

# **Semester of Service Strategy Guide**

Youth Service America's (YSA) Semester of Service Strategy Guide provides instructions on planning and implementing semester-long service-learning projects. The guide is designed to complement the many other resources available from YSA, including the Service-Learning Curriculum Guide, Project Planning Toolkit, Classroom Poster, and more.

http://www.semesterofservice.org/

#### Wetlands & Wonder Video: Reconnecting Children with Nearby Nature

This 14-minute video was produced by the U.S. Environmental Protection Agency discusses the loss of wetlands and the effect that the loss of natural areas closest to us has on our connection to the natural world. The video includes streaming text for the hearing impaired.

http://www.epa.gov/owow/wetlands/education/wetlandsvideo/

# **INITIATIVES, JOURNALS, and MORE**

# **Eco-Friendly Holiday Tips**

According to Use Less Stuff, Americans throw away 25% more trash during the Thanksgiving to New Year's holiday period than any other time of year. The extra waste amounts to 25 million tons of garbage. Check out this webpage for links to tips for trimming your holiday wasteline.

http://www.eeingeorgia.org/net/content/go.aspx?s=15483.0.68.4863