# NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION INFORMATION EXCHANGE FOR MARINE EDUCATORS JUNE 2013

This update is funded by the National Marine Sanctuary Foundation in partnership with NOAA's Ocean Exploration and Research Program, with additional support from 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, 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.

To subscribe or unsubscribe to this list, send information to include in the newsletter, or discuss further enhancements, please contact the editor directly at <a href="mailto:phyllis.dermer@noaa.gov">phyllis.dermer@noaa.gov</a>, or by phone at (865) 932-5074

Collected archives and issues of the newsletter, past and present, are available at <a href="http://mpa.gov/resources/education/#exchange">http://mpa.gov/resources/education/#exchange</a>.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### **Notable References**

# **MPA Network Planning Process Lessons**

The March 2013 special issue of the *Ocean & Coastal Management* journal provides articles about California's multi-year process to plan a coherent network of MPAs in its state waters. The process, the Marine Life Protection Act initiative, incorporated significant stakeholder input and resulted in an increase both in total MPA area and notake area coverage. Access to the articles is free.

http://www.sciencedirect.com/science/journal/09645691/74

# PROGRAM OF THE MONTH

#### **SciStarter**

This website is for teachers, parents, and kids of all ages who want to contribute to scientific work through recreational activities and research projects. Scientists share their work and citizens can get involved through projects that encourage tinkering, building, and exploring. Projects can be searched by topic, location, and more. Check out iSeeChange (climate experiences), Tag A Tiny, and more. http://scistarter.com/

# WEBSITE OF THE MONTH

# Sail the Book

Ira Bickoff, a former Teacher at Sea, offers this website to promote maritime literature and ocean literacy through art, history, and science. He has created Google Earth chapter tours for five classic maritime books, with chapters and activities for points of interest in the tours. The website also offers video tutorials and a user manual. Check this out, and check back as additional materials are added, including an art tour that will tie the Hudson River School of artists to the National Estuarine Research Reserves. Note that you must have Google Earth installed for the kmz files to load and will need the Google Earth settings for the ocean layer and info windows checked to get the most out of the material.

http://www.sailthebook.net/

# REQUESTS

#### **Invasive Species Course Survey**

Durrell Conservation Academy is considering developing a post-graduate level course in natural resource and invasive species management and would very much value your feedback as to whether or not you think such a development is a good idea. They are considering running it partly or fully on-line to enable invasive species managers working in isolated locations to be able to participate in the training, as well as enabling invasive species experts to share their experience and skills with these people. Please participate in a short questionnaire.

https://www.surveymonkey.com/s/R9GBGNS

# **GRANTS AND OPPORTUNITIES**

#### **CATES Scholars Program**

The Duke Environmental Leadership (DEL) Program offers the Coca-Cola Advancement in Teaching in the Environment Scholarship (CATES). This scholarship is available exclusively to informal, non-traditional, and classroom educators who wish to enroll in Executive Education courses or apply for the DEL-MEM (Masters of Environmental Management) program.

http://sites.nicholas.duke.edu/delnewsletter/2013/05/17/cates-program/

# **Do Something Seed Grants**

Do Something Seed Grants are given out every week, targeted towards project ideas and programs that are just getting started. The grants support community action projects. There is a rolling deadline, with notification within 2-3 months after submission. http://www.dosomething.org/grants/seedgrants

# **EECapacity State Consortia Grants**

The EECapacity Project announces a Call for Applications for Year 3 of the State Consortia grants. Up to four states can receive funding to develop capacity building and networking for EE and related practitioners within their state. Each state consortium must include at least 20 educators representing a diversity of organizations such as community based groups, government nature preserves, and others that are committed to learning from each other, exchanging perspectives, and participating in a series of workshops and online learning opportunities for a period of one year or longer. The deadline for application is June 15, 2013.

http://www.eecapacity.net/eecapacity-state-consortia-year-3-call-for-applications.html

# **Espoma Environmental Stewardship Awards for Home Gardeners**

The Espoma Environmental Stewardship Award is provided annually by the National Gardening Association to five home gardeners who voluntarily demonstrate outstanding environmental practices and initiatives. The deadline for application is July 31, 2013. http://www.garden.org/eesa/index.php?page=consumer

# **Everyday Young Hero Award**

The Everyday Young Hero program is awarded weekly to a young person, age 5-25, who exemplifies an extraordinary commitment to service. Nominations must come from a parent, teacher, or other adult mentor.

http://www.ysa.org/awards/hero

# **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, 2013.

http://www.cies.org/us scholars/us awards/

# **Funky Nests in Funky Places**

The Cornell Lab of Ornithology encourages people of all ages to submit photos, artwork, or stories about Funky Nests in Funky Places. The deadline for submission is June 15, 2013.

http://celebrateurbanbirds.org/community/challenges/funky-nests-2013/

#### **NAAEE Affordability Scholarships for Environmental Educators**

The North American Association for Environmental Education is offering a limited number of scholarships for professional environmental and community educators to attend its annual conference, October 9-12, 2013 in Baltimore, Maryland. The deadline for application is June 17, 2013.

http://eeintennessee.org/resource/about.aspx?s=109398.0.0.37935

# **National Service Impact Awards**

The Corporation for National and Community Service offers the 2013 National Service Impact Award. Recipients exemplify the best in national and community service in key

issue areas including education, environmental stewardship, and more. The deadline for submission is June 30, 2013.

http://2013serviceimpact.challenge.gov/

# **Project Learning Tree GreenWorks! Grants**

These student-driven projects enable students to take what they learn in the classroom and apply it to the real world. The GreenWorks! program is open to any Project Learning Tree-trained educator in the U.S. The deadline for application is September 30, 2013.

http://www.plt.org/apply-for-greenworks-environmental-education-grant

# **Rivers, Trails and Conservation Assistance Program**

The Rivers, Trails and Conservation Assistance (RTCA) program assists with community-led natural resource conservation and outdoor recreation initiatives. RTCA staff provide guidance to communities so they can conserve waterways, preserve open space, and develop trails and greenways. The notice of intent to apply is due by July 1, 2013; the deadline for application is August 1, 2013. See the website for complete details.

http://www.nps.gov/ncrc/programs/rtca/contactus/cu apply.html

# Sea Turtle Conservation RFP

The National Fish and Wildlife Foundation is soliciting conservation grant proposals for sea turtle research and conservation. The deadline for submission of two-page preproposal applications is June 14, 2013 (this is an extension over the posted June 3 deadline).

http://www.nfwf.org/seaturtles1/STC Fall 2013 RFP To%20Post.pdf

# **Sprint Local Giving Program**

The Sprint Local Giving Program supports programs that provide a meaningful impact in the areas of youth development (including mentoring, leadership and academic achievement), arts and culture, and environmental stewardship. To be eligible, organizations must be located in the Atlanta, Dallas/Fort Worth, New York, or Denver areas. The deadline for application is June 14, 2013.

http://www.sprint.com/responsibility/ourcommunities/community\_investment\_infrastructure/community-grant-programs.html?ECID=vanity:localgiving

# **Women of Worth Volunteerism Awards**

Ten Women of Worth will each receive a donation from L'Oréal Paris for the nonprofit of their choice for their volunteer efforts in a variety of categories, including strengthening educational programs. The deadline for application is June 14, 2013. <a href="http://www.womenofworth.com/award/about.aspx">http://www.womenofworth.com/award/about.aspx</a>

#### **World We Want Foundation Grants**

The World We Want Foundation promotes and supports youth making positive social change in their communities and around the world. The foundation works with and through the partner organizations and mentors that applicants provide; helps young people design and conduct meaningful Social Action Projects; provides micro-grants to support their projects; and more.

http://www.theworldwewantfoundation.org/

# INTERNSHIPS AND TEMPORARY OPPORTUNITIES

# **Educators on Board Expedition Program – Great Lakes**

Pangaea Explorations will embark from Cape Cod, Massachusetts through the Bay of Fundy and on to the Great Lakes for a summer of adventure, research, and professional development. Check out Educators On Board and One Water Story. http://www.panexplore.com/great-lakes-expedition

# **National Child Awareness Month Ambassador Program**

The National Child Awareness Month Youth Ambassador Program is a project of Youth Service America and the Festival of Children Foundation. The year-long ambassadorship will help youth (ages 16-22) combat critical issues facing young people today. 51 ambassadors will be selected. The deadline for entry is June 16, 2013. <a href="http://www.ysa.org/grants/NCAM">http://www.ysa.org/grants/NCAM</a>

# CONFERENCES, WORKSHOPS, AND PROFESSIONAL DEVELOPMENT

#### **CEUs for Annenberg Courses - Online**

In addition to graduate credit for Annenberg Learner professional development and content courses, Annenberg Learner and Colorado State University will begin offering continuing education units (CEUs) for teachers, beginning with the 10 most popular math and science courses. Teachers will be able to register for either graduate credit or noncredit continuing education units and then be able to access the course materials available on a rolling schedule throughout the year. (Scroll down to the bottom of the page for CEUs).

http://www.online.colostate.edu/onlinedistance/graduate-programs/annenberg

# **Chesapeake Classrooms Summer Courses – Chesapeake Bay**

Join the Chesapeake Bay Foundation for a five-day adventure on the Bay or one of its tributaries in June, July, or August, 2013. Teachers can earn recertification or graduate credit while they learn how to integrate the environment into their classroom and help students achieve success as environmentally literate leaders. There are courses in Maryland, Pennsylvania, Virginia, and Washington, D.C. See the website for complete details. A scholarship may be available.

http://www.cbf.org/join-us/education-program/professional-development/summer-courses

#### Citizen Science Webinars - Online

OpenChannels.org and the EBM Tools Network are hosting two webinars with coastal and marine citizen science experts.

- June 4, 2013, Effective Citizen Science for Coastal and Marine Environments: Reef Check California, COASST, and MPA Watch.
- July 17 and July 18, 2013, Effective Citizen Science for Coastal and Marine Environments: Latest Research, Redmap Australia, Reef Watch, and Feral or In Peril.

http://www.ebmtools.org/

# **Climate Change Activities - Massachusetts**

The New England Aquarium is hosting a free climate change training, June 21, 2013 in Boston, Massachusetts. The workshop is aimed at classroom teachers and informal

educators hoping to engage students and adults around the topic of climate change. The activities are from Climate Interpreter. The deadline for registration is June 18, 2013.

http://climateinterpreter.org/resource-topic/traininghttp://www.surveymonkev.com/s/BCL6KHJ

# **Climate Science Academy for Teachers - Delaware**

The MADE CLEAR (Maryland and Delaware Climate Change Education Assessment and Research) Climate Academy, July 14-19, 2013 in Lewes, Delaware, is designed for Maryland and Delaware middle and high school science teachers. The academy will provide guidance around the implementation of the Next Generation Science Standards, Environmental Literacy Standards, and existing science standards. <a href="http://www.madeclear.org/climate-academies/">http://www.madeclear.org/climate-academies/</a>

# **Exploration Science Master's Degree - Florida**

The University of Miami's Abess Center for Ecosystem Science and Policy and the Rosenstiel School of Marine and Atmospheric Science have launched a new Master's degree in Exploration Science. The goal of the program is to combine field skills, the use of digital media and technology, outreach strategies, and citizen science approaches to research into a comprehensive degree program preparing students for work in a variety of areas such as managing field stations and marine biological labs, working in educational outreach programs, and more. The deadline for application for Fall 2013 is July 15, 2013.

http://mps.rsmas.miami.edu/degree-program/exploration-science/

# **Global Conference on Land Oceans Connections**

The Second Global Conference on Land Oceans Connections (GLOC-2) will take place October 2-4, 2013, in Montego Bay, Jamaica. The GLOC-2 will also serve as Partnership Forum for the Global Partnership on Nutrient Management, the Global Partnership on Marine Litter, and the Global WASTEWATER Initiative. The deadline for both poster submissions and for travel award application is July 1, 2013. http://www.gpa.unep.org/index.php/gloc-2

# **Grant Writing for Conservation – West Virginia**

This course from the U.S. Fish & Wildlife Service, September 17-19, 2013 in Shepherdstown, West Virginia, will help participants interweave the grant proposal writing process and strategic thinking for successful grant management once awarded. Learn how to cultivate the human personal relationships with partners or other funding organizations to support projects that promote and maintain conservation and natural resource management. The grant development planning process will engage participants in how to undertake pre-project planning, where to go to seek alternative funding sources, and how to write the essential elements of a solid grant proposal. <a href="http://nctc.fws.gov/NCTCWeb/catalog/CourseDetail.aspx?CourseCodeLong=FWS-CLM8116">http://nctc.fws.gov/NCTCWeb/catalog/CourseDetail.aspx?CourseCodeLong=FWS-CLM8116</a>

# **Great Lakes Academy – New York**

The Great Lakes Academy 2013 summer workshops for educators, July 29-August 2, 2013 in several New York locations, will focus on aquatic activities and water resources, and include a workshop for early childhood educators. A stipend may be available. <a href="http://eelinked.naaee.net/n/eelinked/posts/2013-Great-Lakes-Academy">http://eelinked.naaee.net/n/eelinked/posts/2013-Great-Lakes-Academy</a>

# **International Congress for Conservation Biology**

The Society for Conservation Biology is seeking proposals for symposia, workshops, focus groups, and short courses for the International Congress for Conservation Biology, July 21-25, 2013 in Baltimore, Maryland; the call for oral and poster presentations will come out later in the year. The congress theme is *Connecting Systems, Disciplines and Stakeholders*.

http://www.conbio.org/mini-sites/iccb-2013

#### **JASON's National Educators Conference**

The JASON Project will hold the 2013 National Educators Conference June 27-29, 2013 in Ashburn, Virginia. The goal of the conference is to increase academic performance in STEM for all students through a combination of hands-on workshops, targeted breakout sessions, networking opportunities, and more,

http://jason.pinnaclecart.com/professional-development-training/2013-national-educators-conference/

# **New England Aquarium Workshops - Massachusetts**

The New England Aquarium in Boston, Massachusetts offers a variety of professional development courses for teachers. Upcoming opportunities focus on watershed investigations, ocean science for early elementary educators, and more. The deadline for registration is June 28, 2013.

http://www.neaq.org/education\_and\_activities/teacher\_resources/professional\_development/workshops/index.php

#### **NMEA 2013**

The theme of the annual conference of the National Marine Educators Association, July 22-26, 2013 in Mobile, Alabama, is *Sea the Gulf Join the Roux*. Register, check out the schedule, sign up for field trips, donate items for the auction, and more. <a href="http://nmea.disl.org/">http://nmea.disl.org/</a>

#### Ocean Sciences Sequence for Grades 6-8 - California

This professional development opportunity offered by the University of California, Berkeley's Lawrence Hall of Science, July 22-23, 2013 in Berkeley, California, will focus on the science of climate change and how to provide middle school students with opportunities to gather evidence and use scientific argumentation to make evidence-based explanations. A limited number of scholarships are available. http://www.regonline.com/Register/Checkin.aspx?EventID=1239360

# Original Classroom Series: Headwaters to Baywaters - Texas

The Environmental Educators Exchange and Get Outdoors Houston! offer field experiences and classes for educators designed to help educators connect with local ecosystems and their cultural, economic, and agricultural stories in June and July, 2013. Continuing education unit credits are available. See the website for details. <a href="http://getoutdoorshouston.com/page/original-classroom">http://getoutdoorshouston.com/page/original-classroom</a>

# Science and Civic Issues - Virginia

SOLstice: Summer of Learning: Science Teachers Investigating the Chesapeake Environment, July 2013 online and in Virginia, brings together university faculty, practicing middle-school and upper elementary teachers, and pre-service teachers to work collaboratively as teacher-researchers. The Chesapeake Bay is the context in

which these teacher-researchers will conduct research and consider curricular linkages. See the website for complete details. A stipend may be available. http://www.longwood.edu/liberalstudies/33955.htm

# **Sea Turtle Biology and Conservation Symposium**

The 34th Annual Symposium on Sea Turtle Biology and Conservation, April 10-17, 2014 in New Orleans, Louisiana, will encourage discussion; debate; and the sharing of knowledge, research techniques, and lessons in conservation to address questions on the biology and conservation of sea turtles and their habitats. The deadline for abstract submission is October 16, 2013; registration fees must be paid before an abstract can be submitted.

http://iconferences.seaturtle.org/

# SeaPerch/NOAA Ocean Exploration Workshop - Louisiana

The U.S. Naval Academy, NOAA's Office of Ocean Exploration and Research, and the Audubon Aquarium of the Americas will offer a professional development workshop for educators of grades 5-12, June 24-25, 2013 in New Orleans, Louisiana. Participants will learn how to build a SeaPerch underwater robot to start a SeaPerch program in your classroom or after school program, and be introduced to the NOAA Ship Okeanos Explorer Education Materials Collection, How Do We Explore?. The deadline for registration is June 14, 2013.

Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org

# **EDUCATIONAL RESOURCES**

#### Alliance for Climate Education

ACE – the Alliance for Climate Education – is dedicated to educating America's high school students about the science behind climate change and inspiring them to do something about it. The website includes information about the ACE Assembly: Presenting climate science that sticks; Student Action Program: Kickstarting climate projects; and more. The website has been moved to this new location; check out the lesson plan links.

http://www.acespace.org/

# **American Trails International Trails Symposium**

The educational sessions at the American Trails International Trails Symposium covered the world of trails, from concepts to construction to promotion. The symposium included in-depth Core Tracks, Featured Workshops, Mobile Workshops, Concurrent Sessions, and more. Read about sessions, presenters, and view some of the presentations online. http://americantrails.org/2013/concurrent.html

# **Annenberg Learner Spotlight for Summer**

The June-July issue of the *Annenberg Learner Update* focuses on the learning that happens while enjoying all that summer has to offer, including a Walk Along the Ocean, Connecting Learning with Pollinators Week (June 17-23, 2013), and more. <a href="http://www.learner.org/about/news/updates/junjul13.html">http://www.learner.org/about/news/updates/junjul13.html</a>

# Climate in the Parks

The Institute at the Golden Gate's publication, *Climate in the Parks: Innovative Climate Change Education in Parks*, highlights how the National Park Service and other park

agencies in the U.S. and around the world are taking action on climate change through planning mitigation strategies and adaptation responses to local environmental changes, and how educators and interpreters are using this as an opportunity to engage the public on this critical issue.

http://gappc.convio.net/site/MessageViewer?dlv\_id=46161&em\_id=22901.0

#### **EDGE of Existence**

The EDGE of Existence program focuses on threatened species that represent a significant amount of unique evolutionary history. Using a scientific framework to identify the world's most Evolutionarily Distinct and Globally Endangered (EDGE) species, the program aims to put these species on the map and catalyze conservation action to secure their future. The website offers a brief overview, distribution, background information, and more for each species.

http://www.edgeofexistence.org/about/default.php

#### **Fishinars**

REEF continues to add new material to this series of short, free webinars to help teach the finer points of identifying fish and invertebrates underwater. Upcoming topics include Diving the Northeast, Safety Stop Survey, and more. Archived episodes are available. Free registration is required.

http://www.reef.org/resources/webinars

#### **FloodSafe**

This online game created by Australia's Victoria State Emergency Service can show kids exactly what might be lurking in flood waters. Players are challenged to find the dangers hiding under the water where they might otherwise want to wade. The game is quick and easy to play, and there are lessons and classroom activities to go along with the game.

http://www.ses.vic.gov.au/kids/floodsafe-game

#### Killer Tornado Map

Using NOAA data, Slate has created a visual representation mapping all the U.S. tornadoes since 1950 that have killed one person or more, including representations of each tornado's size and start and ending coordinates. Users can zoom in or out and pan across the map.

http://www.slate.com/articles/news and politics/map of the week/2013/05/map charts killer tornadoes in u s since 1950.html?wpisrc=newsletter jcr:content

#### **NSDL** on iTunes U

The free National Science Digital Library iTunes U offers a different multimedia resources on a range of subjects including Physical Science and Technology, Life Science, and Earth and Environmental Science. The Beyond Campus section includes museums, public radio and television stations, and other non-profit educational providers.

http://nsdl.org/page/iTunesU/

#### **Ocean Conservation Careers**

The Speak up for the Blue website hosts weekly videos with tips on building a career in ocean conservation, interviews with industry professionals, and more. http://www.speakupforblue.com/category/ocean-conservation-careers

#### Ocean for Life

The Ocean for Life program brings together students of diverse cultures and backgrounds to discover marine science, conservation, and how the ocean connects us all. A two-week field study will be hosted by Channel Islands National Marine Sanctuary and the University of California Santa Barbara's Marine Science Institute in Santa Barbara, California and on Santa Cruz Island from June 22-July 4, 2013. Thirty high school students will be immersed in ocean science activities focused on kelp forest ecosystems, marine life of the Santa Barbara Channel, rocky intertidal monitoring, and much more. Follow along on the Ocean for Life Facebook page.

https://www.facebook.com/oceanforlife

http://oceanforlife.org

http://sanctuaries.noaa.gov/education/ofl

# Okeanos Explorer ROV Shakedown Cruise

NOAA's Office of Ocean Exploration and Research website hosts educational materials about the Okeanos Explorer ROV Shakedown Cruise May 13-June 6, 2013. This cruise marks a milestone with the unveiling of the 6,000m Remotely Operated Vehicle (ROV). With this new vehicle, the Okeanos Explorer Program will be able to access the vast majority of the seafloor. Check out the mission plan, lessons, and more. http://oceanexplorer.noaa.gov/okeanos/explorations/ex1302/welcome.html

# **Open Knowledge Repository**

The World Bank Open Knowledge Repository is the World Bank's official open access repository for its research outputs and knowledge products. Currently, there are over 9.200 works online.

https://openknowledge.worldbank.org/

#### **Reconstructing the Past Climate of Central Alaska**

Join PolarTREC teacher Ken Williams and researcher Seth Campbell and team on an expedition to the slopes of Mt. Denali in central Alaska. The goal of the team's research is to develop a past climate and precipitation record of central Alaska over the past 1000 years. Check out the journals, photos, and more.

http://www.polartrec.com/expeditions/reconstructing-the-past-climate-of-central-alaska

#### **Response and Restoration Education**

NOAA's Office of Response and Restoration (OR&R) offers educational materials to explore efforts to protect and restore the nation's waters from pollution. Find experiments and information about oil behavior and beach sediments, ecological recovery, oil spills, and more.

http://response.restoration.noaa.gov/training-and-education/education-students-and-teachers

#### **Sanctuary Videos**

Flower Garden Banks National Marine Sanctuary offers short videos about the coral reefs and other aspects of the sanctuary, targeting upper elementary and middle school students. Topics include coral spawning, sharks and rays, and more. The videos are available in both English and Spanish.

http://flowergarden.noaa.gov/image\_library/video.html

#### **Science Matters**

The Environmental Protection Agency publishes the *Science Matters* newsletter about its research and activities. The newsletter covers green chemistry, renewable energy, and much more. The Ask a Scientist feature profiles a different EPA scientist in each issue.

http://epa.gov/research/sciencematters/

#### Science NetLinks

Science NetLinks is a K-12 science education resource produced by the American Association for the Advancement of Science. The website offers free teaching tools, interactives, podcasts, hands-on activities, and more. Categories include lessons, collections, tools, science news, and afterschool. The materials are searchable by grade, theme, and content. Check this out.

http://sciencenetlinks.com/

#### **SECORE**

The SECORE Foundation is a global network of scientists, public aquarium professionals, and local stakeholders. It uses a multidisciplinary strategy combining research, education, outreach, and active reef restoration for the conservation of coral reefs. The website offers background information about corals along with project information.

http://www.secore.org/site/home.html

# **Severe Thunderstorms and Tornadoes in the United States**

The Congressional Research Service offers this report which outlines possible strategies for mitigation, forecasts and warning improvements, as well as the role of the National Weather Service. The report discusses possible links between severe weather and climate change, as well as what measures to mitigate climate change might reduce future losses from hazards such as tornadoes..

http://www.fas.org/sgp/crs/misc/R40097.pdf

# STEM Supplement to the Washington Post

The Washington Post published a special supplement on STEM Education, and it is available as a free download. Check out Adding STEAM to STEM, A Blossoming Career Field, and more.

http://project.mediaplanet.com/usa/stem\_education\_3\_12387/ads/wp\_stem\_web.pdf

# **Sustainable Consumption and Production Clearinghouse**

The United Nations Environment Programme has launched the Sustainable Consumption and Production Clearinghouse, a knowledge and cooperation hub dedicated to advancing Sustainable Consumption and Production (SCP) worldwide. The clearinghouse offers the opportunity to share and find information on SCP around the world including initiatives, news, events, publications, and more; build networks; identify partners; and strengthen capacities. Check out the library, form a working group, and more.

http://www.scpclearinghouse.org/

#### **Water Cycle Game**

NOAA's OR&R offers the Water Cycle Game which offers players the chance to roleplay as a water molecule of water to gain a better understanding for the complexity of the movement of water. Participants identify the states of water, where pollutants can enter the water cycle, and more.

http://response.restoration.noaa.gov/watercyclegame

# Winged Ambassadors: Ocean Literacy Through the Eyes of Albatross

Winged Ambassadors is a set of five lessons that use data from current research tracking albatross migrations and ocean plastic pollution. The lessons use inquiry based science instruction, aligned to standards for grades 6-8 with extensions for grades 9-12.

http://www.downloadwingedambassadors.org/

# **INITIATIVES, JOURNALS, and MORE**

# Field Trip Finder

Visit this website to help find educational field trips. It's easy to use and offers links to the websites of the field trip locations matching your selected criteria. http://fieldtripfinder.com/

# **Scholarly Repository**

The University of Miami provides open access to the scholarly works produced by its faculty and researchers through the Scholarly Repository. Articles can be searched by research unit, author, and more. Units include the Rosenstiel School of Marine and Atmospheric Science, and the School of Education. http://scholarlyrepository.miami.edu/