

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
INFORMATION EXCHANGE FOR MARINE EDUCATORS

MAY 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 phyllis.dermer@noaa.gov, or by phone at (865) 932-5074

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

Notable Reference

Next Generation Science Standards

NSTA offers the final version of the Next Generation Science Standards. These standards establish learning expectations in science for K–12 students combining three important dimensions—science and engineering practices, disciplinary core ideas, and crosscutting concepts.

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

PROGRAM OF THE MONTH

Visual Ocean

Those interested in using ocean data in the classroom, or data visualization in general, should check out this community blog started by COSEE NOW. Visual Ocean explores

how educators and scientists can use real-time data and data visualization. The blog is new, but topics already include streamflow and flooding, buoy data, coastal population, and more. Subscribe to keep up-to-date with new postings.

<http://coseenow.net/visual-ocean/>

WEBSITE OF THE MONTH

Discover Your World with NOAA

This free activity book introduces The Essential Principles of Climate Science and will help users learn about Earth's climate system, the factors that drive and change it, and more. You can download the full activity book or individual activities. Sections focus on exploring, understanding, and protecting the earth. Check out Make Your Own Astrolabe, Woolly Magma, and Endangered Species Origami.

<http://celebrating200years.noaa.gov/edufun/book/#book>

REQUESTS

Pilot Test AZA Course

The Association of Zoos and Aquariums has designed a web-based course, Environmental Education: Designing Programs for Zoos and Aquariums. The course draws from EE practices in aquariums and zoos, EPA's environmental priorities, and the NAAEE Guidelines for Excellence, with a focus on underserved audiences. It incorporates examples from zoos and aquariums and guides users through using an eeEcology Map to develop new programs. The course is not linear; rather, users navigate through the menu items in whatever order is most conducive to their own learning. Please help pilot test this new course.

<http://eelinked.naaee.net/n/eelinked/posts/Help-Pilot-Test-AZA-Course>

GRANTS AND OPPORTUNITIES

Afterschool Awards

The Afterschool Awards contest spotlights after-school achievements for elementary and middle school students. Categories include community service, science, and more. The deadline for application is June 25, 2013.

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

Afterschool STEM Impact Awards

The Afterschool STEM Impact Awards are designed to recognize programs that demonstrate their impact on participants in grades 4-8, highlight the power of after-school programs as key partners in science, technology, engineering, and mathematics (STEM) education reform, and serve as best-practice models. The deadline for submission is May 15, 2013. See the website for complete details.

<http://afterschoolalliance.org/STEM-impactawards.cfm>

Amway's Who Cares Challenge: Youth Leadership Contest

Amway will honor ten youth changemakers ages 13 – 22 in the United States and Canada. The deadline for entry is June 5, 2013.

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

Be Big In Your Community Contest

Scholastic's Be Big Fund will help bring to life the winning Big Idea that helps make your community a better place. The deadline for submission is June 23, 2013.

<http://www.scholastic.com/cliffordbebig/contest/>

Best Buy Children's Foundation Community Grants

The Best Buy Children's Foundation awards community grants to local and regional nonprofit organizations that provide teens with places and opportunities to develop 21st century technology skills that inspire future education and career choices. The deadline for application is July 1, 2013. See the website for complete details.

<http://pr.bby.com/community-grants/>

Collaborative Fisheries Research Grants

Collaborative Fisheries Research West requests proposals to its small grants program. Interested parties must contact the Executive Director to discuss their plans prior to submitting a proposal and are strongly encouraged to do so no later than May 17, 2013.

http://www.cfr-west.org/CFR_West/Grants.html

Four-Year College & University Biology Awards

These two awards honor members of the National Association of Biology Teachers who demonstrate creativity and innovation in undergraduate biology teaching and in research that furthers our understanding of undergraduate biology teaching and education. The deadline for nomination is June 15, 2013.

<http://www.nabt.org/websites/institution/index.php?p=132#award6>

Get to Know Your Wild Neighbors Contest

The Get to Know Your Wild Neighbors Contest invites American youth (19 and younger) to develop a deeper appreciation for their neighbors of other species by getting outdoors and creating art, writing, digital photography, videos, and music. The goal is to engage the power of art to help youth feel more connected with nature. The deadline for submission is November 1, 2013.

<http://www.get-to-know.org/contest/us/>

Green Living Project Student Film Project

Green Living Project's Student Film Project is a filmmaking competition that encourages students, from middle school through college, to produce a short film telling a compelling story about a local or global sustainability-related project. The deadline for submission is May 30, 2013.

<http://www.greenlivingproject.com/studentfilmproject/>

High School Student Scholarship Program

Samsung Digital Partners offers scholarships to winning high school students for essays about technological advancements and how they will change the way we learn in the future. The deadline for entry is May 15, 2013.

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

International Student Carbon Footprint Challenge

Teachers and others who work with high school students can participate in the International Student Carbon Footprint Challenge. The program helps students measure their own carbon footprint using a calculator designed specifically for students. Students

can join international climate change discussions on the Einztein social learning network. Sessions run through May 10, 2013.

<http://footprint.stanford.edu/>

Khaled bin Sultan Living Oceans Foundation Fellowships

The Khaled bin Sultan Living Oceans Foundation sponsors graduate fellowships for doctoral students and post-doctoral researcher applicants from around the world with a career interest in coral reef science and/or management. The deadline for application is May 31, 2013.

http://www.livingoceansfoundation.org/index.php?option=com_content&view=article&id=138&Itemid=245

MASNA Scholarship

The Marine Aquarium Societies of North America offers the MASNA Scholarship to one full-time undergraduate and graduate student seeking a degree in the marine science field. The deadline for application is June 21, 2013.

<http://www.masna.org/AboutMASNA/MASNAScholarship.aspx>

Mazda Foundation Grants

The Mazda Foundation awards grants to programs promoting education and literacy, environmental conservation, cross-cultural understanding, social welfare, and scientific research. The deadline for application is July 1, 2013.

http://www.mazdafoundation.org/Grant_Guidelines.html

North Coast Marine Protected Areas Baseline Program RFP

California Sea Grant announces a Request for Proposals for California's North Coast Marine Protected Areas Baseline Program. The deadline for submission is August 14, 2013.

<http://www.csgc.ucsd.edu/FUNDING/APPLYING/NorthCoastMPA2014-15.html>

Odebrecht Award for Sustainable Development

The Odebrecht Award for Sustainable Development gives U.S. students a chance to highlight their best ideas for sustainable development. Projects may be undertaken individually or in a group of no more than three students, and must be supervised by an advising professor. Students pursuing an undergraduate degree in engineering, chemistry, and other areas are eligible. The deadline for application is May 31, 2013.

<http://www.odebrechtaward.com/AwardsPage.html>

People Magazine's Teacher of the Year Award

People magazine is looking for PreK-12 teachers who are changing the lives of their students, improving their communities, and paving the way for a new generation of leaders. The deadline for application is June 7, 2013.

<http://www.people.com/people/article/0,,20679786,00.html>

Popular Science Science Fair

Popular Science and Delta[®] Faucet are hosting a nationwide contest for the best original science projects in the category of sustainability. The competition is open to elementary, middle school, high school, and college students. The deadline for submission is May 30, 2013.

<http://www.popsoci.com/sciencefair>

Presidential Awards for Excellence in Science, Mathematics, and Engineering Mentoring

The Presidential Awards for Excellence in Science, Mathematics, and Engineering Mentoring recognizes citizens and organizations that have demonstrated excellence in mentoring individuals from underrepresented groups in STEM education and career paths. The deadline for nomination is June 5, 2013.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504887&org=HRD&from=home

Rachel Carson Sense of Wonder Contest

The EPA and partners announce this 7th annual poetry, essay, photo, and dance contest. Contestants work across generations to share their own interactions with and reflections about the sense of wonder. Songwriting has been added to the categories of artistic expression. The deadline for entry is June 10, 2013.

<http://www.epa.gov/aging/resources/thesenseofwonder/index.htm>

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, 2013.

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

State Farm Good Neighbor Student Achievement Grants

The State Farm Companies Foundation, through Youth Service America, offers grants to enhance student achievement through service-learning in K-12 public schools. The grant engages participating teachers and students in a service and learning program that promotes academic achievement, workplace readiness, and stronger communities.

Note: the grant requires a 12-14 week Semester of Service™. The deadline for application is June 23, 2013.

<http://www.ysa.org/goodneighbor>

Student Achievement Grants

The NEA Foundation provides Student Achievement Grants to educators for proposals that engage students in critical thinking and problem-solving that deepens their knowledge of standards-based subject matter. The deadline for application is June 1, 2013.

<http://www.classroomearth.org/node/22582>

Winning Grant Proposal Competition

GrantStation is running a competition for winning grant proposals with a compelling narrative, a strong, workable plan ready to implement, and a succinct, complete, and engaging executive summary. The deadline for submission is May 15, 2013.

http://www.grantstation.com/Winning_Grant_Proposal.asp

Young Birder of the Year Contest

The American Birding Association sponsors the Young Birder of the Year, an annual contest for youth ages 10-18. Completed projects are due by October 1, 2013, but youth must register by June 15, 2013.

<http://www.aba.org/yby/>

INTERNSHIPS AND TEMPORARY OPPORTUNITIES

Beach Sister Program Fellowship - Massachusetts

The Northeastern University Marine Science Center has an opening for an Americorps volunteer through the Massachusetts Promise Fellowship. The Fellow will be responsible for developing and coordinating a new program, Beach Sister, with school-aged girls at a non-profit center in neighboring Lynn, Massachusetts. The deadline for application is May 24, 2013.

<http://www.northeastern.edu/marinescience/pdf/2013mpf.pdf>

Coastal Studies for Girls - Maine

Coastal Studies for Girls is actively seeking students for the Fall 2013 or Spring 2014 semester. The program is a residential marine science and leadership semester school just for 10th grade girls, located on the coast of Freeport, Maine. The program offers hands-on marine and environmental science and outdoor leadership adventures in the classroom, laboratory, and along the coast.

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

Semester by the Sea: Marine Sciences – New York

Offered by the School of Marine and Atmospheric Sciences at Stony Brook University, Semester by the Sea is designed for undergraduate students to spend a fall semester immersed in marine studies while in residence at the Stony Brook Southampton campus in New York. The program uses an experiential learning approach, taking advantage of the Southampton Marine Science Center, its research vessels, its waterfront marine lab facilities, and the campus location on the shores of Shinnecock Bay for direct access to estuaries, bays, and the Atlantic Ocean.

http://www.stonybrook.edu/southampton/sea_marine.shtml

CONFERENCES, WORKSHOPS, AND PROFESSIONAL DEVELOPMENT

Blue Vision Summit

The Blue Vision Summit, May 13-16, 2013 in Washington, D.C., will include a Celebration of the Seas, Panel Discussions, and more.

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

Capitol Hill Ocean Week – Washington, D.C.

The 2013 Capitol Hill Ocean Week will take place June 4-6, 2013 in Washington, D.C. Check out the agenda, including How Vulnerable Are We? A Timeline for the Changing Coast; The New Normal: Adapting to Coastal Risks; and more.

<http://www.nmsfocean.org/CHOW-2013>

CHNEP Environmental Education Program - Florida

The Charlotte Harbor National Estuary Program in partnership with Mote Marine Laboratory offers this free environmental education program, September 6, 2013 in Sarasota, Florida. Topics include Incorporating New Media into Environmental Education, NWS Weather Ready Nation: Ecology and Environmental Pilot Project, and much more. Sign up if you're in the area.

<http://chnep-enved9-6-13.eventbrite.com/#>

Climate Change Interpretation Study Circles

The National Network for Ocean and Climate Change Interpretation is implementing a study circle for interpreters or communicators who focus on ocean or coastal issues. The deadline for application is May 17, 2013. See the website for complete details.

http://support.neaq.org/site/PageNavigator/prof_level_study_circle.html

Climate Change and the Practices of Science - California

This professional development opportunity, July 22-23, 2013 in Berkeley, California, focuses 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.

<http://lhsgems.org/gemsworkshops.html>

ESIP Teacher Workshop – North Carolina

The Federation of Earth Science Information Partners workshop for teachers of grades 6-12, July 9, 2013 in Chapel Hill, North Carolina, will offer an overall theme of Earth Science Education with an integral strand dedicated to climate change education. Registration is limited to 20 participants.

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

GLOBE Virtual Student Conference - Online

The GLOBE Virtual Student Convention, May 6-31, 2013, allows GLOBE students to showcase their research projects for peer and scientific review. These projects will be available for comments, questions, and viewing; the public is invited to visit the website to view the projects and leave comments.

<http://www.globe.gov/web/scrc/virtual-conference/2013-virtual-student-conference>

Great Lakes Educator Day - Indiana

Topics at the 56th Annual Conference on Great Lakes Research, June 2-6, 2013 in West Lafayette, Indiana, will include climate change, fish and fisheries, aquatic invasives, and more. A special educator day will be held June 3, 2013.

<http://www.iaglr.org/iaglr2013>

Hurricanes & Climate Change – New Jersey and Online

The final event of Rutgers Institute of Marine and Coastal Sciences' 2012-13 Ocean Lecture & Educators' Night Series will be May 13, 2013 in New Brunswick, New Jersey on Hurricanes and Climate Change. Enjoy the lecture in person or online; free registration is required. Educator resources will be available.

<http://coseenow.net/mare/opportunities-resources/ocean-lecture-educators-night/2012-2013/ocean-lecture-vecchi/>

Ocean Exploration 2020: A National Forum

Ocean explorers from around the globe will gather July 19-20, 2013 at the Aquarium of the Pacific in Long Beach, California, to define a National Ocean Exploration Program and build a strategy to launch the program. Project leaders are soliciting your input as they move forward to this forum. Participate through social media to help shape forum discussions, identify opportunities for future collaboration, and more. Check out the sponsoring partners for the forum.

<http://oceanexplorer.noaa.gov/oceanexploration2020/participate/welcome.html>

Ocean Exploration Workshops – Various

NOAA's Ocean Exploration Program and partners offer the Okeanos Explorer Education Materials Collection, How Do We Explore? Professional Development Workshop for Educators. Participants will receive curriculum with CD-ROM's, certificates of participation, and more. Contact the noted educator or check out the website for registration and more information.

- June 1, 2013 with Birch Aquarium at Scripps, San Diego, California. The deadline for application is May 17, 2013. Contact Adrienne Marriott at Creec9a@hotmail.com
- July 20, 2013 with Hatfield Marine Science Center, Newport, Oregon. The deadline for application is June 28, 2013. Contact Tracy Crews at tracy.crews@oregonstate.edu
- August 10, 2013 with Nauticus, the National Maritime Center (hosted at Old Dominion University), Norfolk, Virginia. The deadline for application is July 19, 2013. Contact Tammie Weitzman at Tammie.weitzman@norfolk.gov

<http://oceanexplorer.noaa.gov/edu/development/development.html>

Oceanography for Educators Course - Ohio

Stone Lab, Ohio State's Island Campus on Lake Erie, is accepting applications for Principles of Oceanography for Educators, July 28-August 3, 2013 in Put-in-Bay, Ohio, an Earth Sciences course specifically designed for teachers wanting to include Great Lakes geologic principles into their classroom. Stone Lab courses are hands-on and include multiple field trips to various Lake Erie locations to observe lecture topics in the wild. Hurry – the deadline for application for credit ends soon.

<http://stonelab.osu.edu/courses/educator>

Resources for Designing and Implementing Effective EE Programs - Online

NAAEE offers this webinar, May 8, 2013 to help participants find resources that can help them design and implement effective environmental education programs. This introduction to the National Project for Excellence in Environmental Education will explain the Guidelines for Excellence, how they are being used, and more.

<http://www.surveymonkey.com/s/guidelines2013>

Seminars on Science - Online

Registration is open for the Summer II and Fall 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, Water, Earth: Inside and Out, and more. See the website for course dates and registration and discount deadlines.

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

Summer Teacher Workshop - TOTE – Massachusetts

The Waquoit Bay National Estuarine Research Reserve will offer the research and field-based teacher training program called Teachers on the Estuary (TOTE) for middle and high school science and math teachers, August 12-15, 2013 in Waquoit, Massachusetts, with a focus on Salt Marshes and Climate Change. This program is designed to improve teachers' and students' understanding of the environment using local research examples. There will be a follow-up session on November 16, 2013.

<http://www.waquoitbayreserve.org./index.aspx>

Teachers on the Estuary - Maine

The Wells National Estuarine Research Reserve's summer professional development workshop, TOTE: Climate Stewards in Action, July 22-25, 2013 in Wells, Maine, is geared towards middle and high school science teachers. Content is focused on climate change, ecosystem services, estuaries, and more. The deadline for application is May 27, 2013.

<http://www.wellsreserve.org/blog/5-teachers-on-the-estuary-climate-stewards-in-action>

Water Education Conference

The 16th Annual Water Education Conference, August 7-9, 2013 in Denver, Colorado, aims to increase the knowledge and capacity of conference participants to effectively reach children, educators, and others with water education. The deadline for submission is June 15, 2013.

<http://events.r20.constantcontact.com/register/event?oeidk=a07e6zm08iud62a63dd&llr=68kelrcab>

EDUCATIONAL RESOURCES

60-Second Science

Scientific American offers these minute-long introductions to a wide range of science-related topics and investigations. New podcasts are added every weekday. Visitors can sign up to learn about new additions via RSS feed or iTunes.

<http://www.scientificamerican.com/podcast/podcasts.cfm?type=60-second-science>

Art in the Park Guide

The Art in the Park Guide on the Get To Know website is a toolkit for educators and program leaders. There are 27 art-based activities designed to engage youth with nature, both directly - through outdoor activities, and indirectly - through activities which can be carried out anywhere that get youth thinking about their connection to the environment.

<http://www.get-to-know.org/blog/best-practices/2013/4/8/80-art-in-the-park-guide/>

Coastal Planning Advisor

The NOAA Coastal Services Center's Coastal Planning Advisor is an online tool that helps users ask the right questions during planning for different coastal management issues, ranging from climate change to wetland restoration. The questions can be customized to users' situations and can be shared online through an easy link. The tool also includes case studies, NOAA resources available for each issue, and more.

<http://csc.noaa.gov/digitalcoast/training/coastalplanningadvisor/>

Connecting the Global Oceans to Inland Audiences

The focus of Exploring Connections between the Global Oceans and the Inland Southwest is to illustrate the importance of the ocean to regional weather and climate, as well as to explore how inland populations affect the global oceans. The lectures are archived on the website, and teachers can request a CD with lesson plans. Topics include Global Patterns of Scientific Data, Water and Populations Patterns, and more.

<http://cires.colorado.edu/education/outreach/cosee/>

Coral Reefs of the World

Coral Reefs of the World is a series of publications presenting the status of knowledge of the world's coral reefs authored by leading scientists. The volumes are organized according to political or regional oceanographic boundaries. Emphasis is on providing authoritative overviews of biology and geology, explaining the origins and peculiarities of coral reefs in each region. All volumes are available in paper as well as e-books, and institutions with subscriptions to Springer journals usually have access to the contents electronically.

<http://www.springer.com/series/7539>

Deepwater Canyons 2013: Pathways to the Abyss

NOAA's Office of Ocean Exploration and Research invites formal and informal educators to follow along with an ocean exploration mission to deepwater canyons off the mid-Atlantic coast aboard the NOAA Ship *Ron Brown*. From April 30-May 19, 2013, scientists will be using the Jason II remotely operated vehicle to explore the canyon walls of Norfolk and Baltimore canyons as they seek to understand more about the connectivity of deep-sea canyon organisms, their associated microbiology and food webs, and the physical, chemical and geological conditions associated with each canyon ecosystem. Shipwrecks found in these areas will also be explored. The website offers mission logs, multimedia, educational materials, and more.

<http://oceanexplorer.noaa.gov/explorations/13midatlantic/welcome.html>

EarthViewer

Howard Hughes Medical Institute offers the free EarthViewer App for iPads which allows users to explore the science of the Earth's history by scrolling through billions of years of continental development, changes in the atmosphere, temperature, biodiversity, and more.

<https://itunes.apple.com/ios/app/earthviewer/id590208430?mt=8>

Eco-Schools USA Climate Change Connections

National Wildlife Federation's Eco-Schools USA and NASA offer this comprehensive high school curriculum using NASA Earth Observing Satellites data. Students use environmental audits, action planning, data collection, and more to experience the Earth system as a whole.

<http://www.nwf.org/Eco-Schools-USA/Become-an-Eco-School/Pathways/Climate-Change/What-is-Climate-Change-Connections.aspx>

EcoGeek and EcoGeezers Series

This online monthly series from the Guana Tolomato Matanzas National Estuarine Research Reserve discusses how technology and environmental protection collide. Check the website or follow along on social media for information about upcoming episodes.

<http://www.gtmnerr.org/EcoGeek-Series.php>

Get To Know

The Get to Know Society's mandate is to promote environmental education in order to raise a generation of Canadians who are inherently aware of their impact on the environment and how their positive interaction with their local wildlife can help preserve our natural wonders for generations to come. The website offers webinars, a contest, and more.

<http://www.get-to-know.org/>

Global Schoolyard Bioblitz

Project Noah is once again teaming up with the National Environmental Education Foundation and National Geographic Education for the Global Schoolyard Bioblitz campaign. Teachers and students document the wildlife encountered in and around their school sites. The National Geographic website offers tools for any bioblitz, and students can upload their data to the Project Noah website. Be sure to check out the educator resources.

<http://www.projectnoah.org/missions/10164691>

Impact: Earth!

This website from Purdue shows what would happen if a large meteorite or other object hit the Earth. Set your own parameters and see what would happen.

<http://www.purdue.edu/impactearth>

Know Your Earth 3.0, Local Connections

Know Your Earth 3.0, Local Connections is an educational partnership among 22 of NASA's Earth-observing missions focusing on educating students, teachers, and the public about NASA Earth science research. Each mission has selected a scientist or engineer who were featured on NASA websites throughout April 2013. Have your students check out what these scientists work on and get inspired.

<http://www.nasa.gov/topics/earth/earthmonth/KnowYourEarth.html>

NASA Wavelength

NASA Wavelength is a digital collection of Earth and space science resources for educators of all levels – from elementary to college, to out-of-school programs. The resources were developed through funding of the NASA Science Mission Directorate and have undergone a peer-review process through which educators and scientists ensure the content is accurate and useful in an educational setting. Topics include Earth processes, the nature of science, and more.

<http://nasawavelength.org/>

South Alaska Tectonics and Global Change

Follow along with the Consortium for Ocean Leadership's Deep Earth Academy and the Integrated Ocean Drilling Program (IODP) Expedition 341: South Alaska Tectonics and Global Change, May 29-July 29, 2013. Sign-ups are now open (first-come, first-served) for 45-minute live interactive broadcasts from the ship for your class, museum, camp group, professional development group, or special event.

<http://joidesresolution.org/node/2742>

The Story in the Ice: Glaciers and Climate Change

This climate change initiative offers the first set of lesson plans in a middle school curriculum being developed by the Earth Day Network and Extreme Ice Survey to educate, engage, and mobilize students around climate change. The two-day set of lessons are correlated to national learning standards and seek to engage students in interdisciplinary learning experiences.

<http://www.earthday.org/climatechange>

Sustainable Working Waterfront Toolkit

The Sustainable Working Waterfront Toolkit is an online suite of tools designed to help coastal communities develop policies that support business and job growth. The toolkit

offers a history of working waterfronts, an evaluation of ocean-related economic activity, case studies, and more.

<http://www.wateraccessus.com/toolkit.html>

Teachers' Guide to Videos

MindShift offers this downloadable Teachers' Guide to Videos with tips, video links for different subjects, websites to supplement the lessons, and more.

<http://blogs.kqed.org/mindshift/2013/03/teachers-ultimate-guide-to-using-videos/>

This American Land Lesson Plans

This American Land, a public television conservation newsmagazine series, features stories on America's landscapes, waters, and wildlife about conservation, science, and outdoor adventure. Several lesson plans have been developed corresponding to video clips from the program, highlighting conservation efforts. Full episodes can also be viewed, along with field notes and more.

<http://www.thisamericanland.org/Educators/lesson-plan-resources>

WetlandsLIVE - Online

WetlandsLIVE: A Distance Learning Adventure features a series of free live webcasts. Wetlands around the world will be used to show the functions and ecology of wetlands and their importance to people and wildlife. May is American Wetlands Month – sign up for the first webcast, May 9, 2013. Be sure to check out the lesson plans.

<http://wetlandslive.pwnet.org/>

INITIATIVES, JOURNALS, and MORE

Beall's List

Jeffrey Beall, a research librarian at the University of Colorado in Denver, has developed his own blacklist of potential, possible, or probable predatory scholarly open-access journals. Authors submitting articles to these journals may be charged a large fee following publication or encounter other unexpected problems.

<http://scholarlyoa.com/individual-journals/>

Migratory Connectivity Project

The Migratory Connectivity Project was created to facilitate development of new technologies and serve as a portal for gathering and disseminating information to advance the conservation and understanding of animals throughout their full life cycle by promoting the science of migratory connectivity. Note that this is a fairly new project.

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

World Environment Day

World Environment Day, June 5, was started in 1972 by the United Nations General Assembly, to stimulate worldwide awareness about environmental issues and their impact on humans. Learn more about this year's theme, Think. Eat. Save., download posters, and more.

<http://www.unep.org/wed/>

World Migratory Bird Day

World Migratory Bird Day is an annual awareness-raising campaign highlighting the need for the protection of migratory birds and their habitats. The theme for 2013 is Networking for Migratory Birds. Watch the trailer, register your event, and more.

<http://www.worldmigratorybirdday.org/2013/>