

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
INFORMATION EXCHANGE FOR MARINE EDUCATORS

FEBRUARY 2014

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://marineprotectedareas.noaa.gov/resources/education/>.

Notable Reference

Games for Science

Scientists are using video games to tap the collective intelligence of people around the world, while doctors and educators are turning to games to treat and teach. Check out this article from The Scientist for a brief introduction to serious games.

<http://www.the-scientist.com/?articles.view/articleNo/33715/title/Games-for-Science/>

PROGRAM OF THE MONTH

Nature's Notebook

The U.S.A. National Phenology Program hosts Nature's Notebook, enabling citizen scientists, educators, and students of all ages to monitor the impacts of climate change on plants and animals in the United States. Participants use scientifically-vetted

observation guidelines developed for over 900 species, to ensure that data are useful to researchers and decision-makers.

https://www.usanpn.org/natures_notebook

WEBSITE OF THE MONTH

SeaHarmony

The NSF Center for Ocean Sciences Education Excellence, COSEE Island Earth hosts seaHarmony, an online collaboration tool that matches ocean science researchers, educators, managers, and traditional practitioners based on compatibility of interests and collaboration preferences. SeaHarmony is a social networking site for ocean science professionals, allowing members to find potential collaborators, post announcements, ask questions, and share resources about specific ocean science topics. A primary goal of seaHarmony is to help ocean scientists interested in broadening the impacts of their research find potential collaborators in education, management, or community engagement.

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

REQUESTS

Pilot KEEP Activity

Earn some cash for classroom resources by helping KEEP (Wisconsin K-12 Energy Education Program) pilot a new online activity designed to help students understand their energy consumption behaviors and take action to reduce consumption.

Contact Kelly at ksmith@uwsp.edu

Virtual Judges Needed for eCYBERMISSION Competition

eCYBERMISSION, a web-based science, technology, engineering, and mathematics competition for middle school students, is seeking individuals over the age of 18 with a background or interest in STEM to serve as a virtual judge for the program. Working online through the eCYBERMISSION website using structured judging criteria, volunteers will evaluate and score projects. The deadline for registration is March 1, 2014.

Contact Alexis Mundis at volunteerprogram@ecybermission.com and mention NSTA Express

Volunteers Needed – California

The Society for Science & the Public is seeking many interpreters, general volunteers, and judges for the Intel International Science & Engineering Fair 2014, May 11-16, 2014 in Los Angeles, California.

<https://student.societyforscience.org/volunteers>

GRANTS AND OPPORTUNITIES

5 Star Restoration Grant

The 5 Star Restoration Program brings together students, conservation corps, 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. Hurry - the deadline for application is February 5, 2014.

http://water.epa.gov/grants_funding/wetlands/restore/index.cfm

California Sea Grant – Call for Proposals - California

The California Sea Grant College Program is soliciting preliminary proposals for projects to begin on or after February 1, 2015. Faculty and academic staff from universities and scientists from research institutions throughout California are invited to apply. The deadline for submission is March 13, 2014.

<http://www.csgc.ucsd.edu/FUNDING/APPLYING/PRELIMINARY/IndxPrelim.html>

Champions of the Earth Award

UNEP's Champions of the Earth award recognizes outstanding visionaries and leaders in the fields of policy, science, entrepreneurship, and civil society action. The prize seeks to honor men and women whose actions and leadership have made a positive impact on the care of the environment while pursuing sustainable, low-carbon, inclusive development. The categories are Policy Leadership, Science and Innovation, Entrepreneurial Vision, and Inspiration and Action.

<http://www.unep.org/champions/news/2014-nominations-open.asp#sthash.hlvWS7oy.dpbs>

Connect4Climate

The goal of Connect4Climate is to create a participatory, open knowledge platform that engages the global community in climate change conversation to drive local action through advocacy, operational support, research, and capacity building. Record and submit your climate change story. The deadline for submission is April 1, 2014.

<http://connect4climate.org/>

Craig Tufts Environmental Education Fund

Family Summits, Inc. and partners offer the annual Craig Tufts Educational Scholarship Award, given to a young person 8-18 years old to attend a week-long, summer outdoor educational adventure camp with a parent or guardian. The deadline for application is March 28, 2014.

<http://www.familynaturesummits.org/scholarships/craig-tufts>

Davidson Fellows Scholarship

The Davidson Fellows Scholarship awards scholarships to youth, 18 and under, who have completed a significant piece of work in categories including science, technology, and "outside the box." The work must be recognized as an outstanding accomplishment by experts in the field and have the potential to benefit society. Hurry – the deadline for submission is February 12, 2014.

<http://www.davidsongifted.org/fellows/>

Doris Duke Conservation Scholars Program

The Doris Duke Conservation Scholars Program Collaborative offers 25 students in their sophomore year and enrolled or planning to enroll at one of the collaborating universities, training, support, mentorship, and more. See the website for details. The deadline for application is February 15, 2014.

<http://programs.ifas.ufl.edu/ddcsp/>

EarthEcho Expedition Small Grants

EarthEcho Expedition grants are now available for educators who are using or plan to use EarthEcho Expedition: Into the Dead Zone in their classrooms. Educators may apply for grants which support projects that mitigate the impacts of dead zones in local communities as inspired by the expeditions materials. The deadline for application is February 15, 2014.

<http://earthecho.org/news/CPFGrant-021514>

Equator Prize

The Equator Prize recognizes 25 local sustainable development solutions for people, nature, and resilient communities. The deadline for nomination is March 22, 2014.

<http://www.equatorinitiative.org/index.php?lang=en>

Hilton Teacher Treks Travel Grant

Hilton Teacher Treks Program offers teachers the opportunity to go abroad for 2-3 weeks during the 2014 summer months to travel, explore, and experience culture firsthand through an itinerary of their own design. The deadline for application is February 26, 2014.

<http://www.iie.org/en/Programs/Hilton-Teacher-Treks-Program>

InvenTeam High School Invention Grants

Lemelson-MIT InvenTeams is a national grants initiative to foster inventiveness among high school students. Teams composed of high school students, teachers, and mentors are asked to collaboratively identify a problem that they want to solve, research the problem, and then develop a prototype invention as an in-class or extracurricular project. The deadline for early feedback is February 28, 2014..

<http://web.mit.edu/inventeams/>

JASON National Argonaut Team

Apply to join the JASON National Argonaut Team to explore oceanography. The JASON Project seeks a diverse, creative, and adventurous group of students and teachers to venture into the field with JASON scientists to perform cutting edge science explorations. Experience with the JASON program is required. The deadline for application March 7, 2014.

<http://www.jason.org/2014-argo-applications-now-online>

Keck Futures Communications Award

The Keck Futures Initiative is accepting nominations for its 2014 Communications Award, which recognizes authors who have clearly communicated issues of science, engineering, or medicine to the general public. Categories include authors of books; online works; magazine/newspaper; and film, radio, and television. Hurry - the deadline for nomination is February 7, 2014.

<http://www.keckfutures.org/awards/nominate.html>

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 has been extended and is now February 28, 2014.

<http://www.livingoceansfoundation.org/resources/for-educators/fellowship-program/>

Lend for America Fellowships

The Lend for America fellowship program trains students who are seeking to start microfinance organizations at their college campuses. Fellows receive a crash course in microfinance, a full-time paid summer internship with an existing microfinance group, and year-round support from Lend for America as they start their organizations on campus. The deadline for application is March 30, 2014.

<http://www.lendforamerica.org/fellowship/>

Purpose Prize

The Purpose Prize awards people over 60 who are taking on society's challenges, including education, the environment, and more. Hurry - the deadline for nomination is February 7, 2014.

<http://www.encore.org/prize>

REEL Science Communication Contest

NASA Earth science missions support this video contest asking high school-aged students to produce a two-minute video for middle school students communicating one of the following science concepts: How ice impacts climate and climate impacts ice; Forest fire effects on air quality; or Water of the water planet. The deadline for submission is February 21, 2014.

<http://aura.gsfc.nasa.gov/reelscience.html>

Russell Family Foundation Environmental Sustainability Program

The foundation focuses its grantmaking on Environmental Sustainability, Environmental Education, and Green Business focused on the Puget Sound. Hurry - the next deadline for submission of a letter of intent is February 5, 2014.

<http://www.trff.org/home/>

Saving Endangered Species Youth Art Contest

Students in grades K-12 are encouraged to participate in the 2014 Saving Endangered Species Youth Art Contest. The deadline for submission is March 15, 2014.

<http://www.endangered.org/campaigns/endangered-species-day/saving-endangered-species-youth-art-contest/>

Science Without Borders Challenge

The Khaled bin Sultan Living Oceans Foundation hosts the Science Without Borders Challenge; the theme this year is Protect our Coral Reefs. Participants (ages 14-19) should submit an original piece of poster art. The deadline for submission is April 28, 2014.

<http://www.livingoceansfoundation.org/resources/for-educators/gis/>

Sea Grant Aquaculture Research Program

This competition aims to fund new FY 2014 marine aquaculture research projects. Search for Funding Opportunity Number NOAA-OAR-SG-2014-2003987. The deadline for pre-proposals is February 21, 2014.

<http://www.grants.gov/web/grants/search-grants.html>

Voyage to Discovery Essay Contest

This contest, hosted by the National Marine Sanctuary Foundation, encourages middle and high school students to research and learn about African-American contributions to the maritime history of the United States. Applicants should submit an essay on an

African-American individual or group who made a significant contribution to U.S. maritime history. The deadline for application is April 4, 2014.

http://www.voyagetodiscovery.org/essay_contest.htm

World of Children Awards

The World of Children Award provides funding and recognition to support life-changing work for children. The World of Children Humanitarian Award is for education, social, and humanitarian services. The World of Children Youth Award is for a young person under the age of 21 who is providing exceptional services/support to other children. The deadline for nomination is April 1, 2014.

<http://www.worldofchildren.org/nominate/>

Youth Preparedness Council – Call for Applications

FEMA is looking for youth leaders who are dedicated to public service, who are making a difference in their communities, and who want to expand their impact as national advocates for youth disaster preparedness. Youth ages 12-17 engaged in individual and community preparedness, or who have experienced a disaster that has motivated them to make a positive difference in their community, may apply to serve on the Youth Preparedness Council. The deadline for application is February 24, 2014.

<http://www.ready.gov/youth-preparedness-council>

INTERNSHIPS AND TEMPORARY OPPORTUNITIES

Hurricane Island Internships - Maine

The Hurricane Island Center for Science and Leadership is a science and education community in Penobscot Bay, Maine. They offer paid science education and sustainability internships. The deadline for application is February 15, 2014.

<http://www.hurricaneisland.net/employment/>

OSTP Internship Program – Washington, D.C.

The unpaid White House Office of Science and Technology Policy (OSTP) Internship Program offers an opportunity to work closely with senior White House officials and science and technology policy analysts in OSTP's topic-based divisions. Divisions include communications, environment, and more. See the website for details.

<http://www.whitehouse.gov/administration/eop/ostp/about/student>

Stowaway Aboard The Charles W. Morgan

Mystic Seaport is seeking applicants to become a stowaway aboard the *Charles W. Morgan* on its voyage in the summer of 2014. The stowaway will participate in all aspects of the voyage, and use their creative energy to share the voyage experience through blogging, videos, social media, and activities in port cities. Submit your video entry; the deadline for application is February 18, 2014.

<http://www.boothbayregister.com/article/mystic-seaport-seeks-stowaway-adventure-aboard-charles-w-morgan/26952>

<http://www.mysticseaport.org/stowaway/>

Summer Internships

Many organizations offer summer internships for students or educators – far too many to be included here. Some offer stipends or free housing; others could be supported

through some of the grantmaking organizations. Be sure to subscribe to scuttlebutt and EE-news for more inclusive listings.

<http://www2.vims.edu/bridge/search/scuttle.cfm>

<http://eelink.net/pages/EE+News+Signup>

Summer Programs at University of Maryland - Maryland

The University of Maryland Eastern Shore in Princess Anne, Maryland, offers summer programs for graduating high school students, educators, and others. Some are supported by grants and offer stipends to those completing the program. Check the websites for dates, details, and deadlines for application.

- Geoscience Bridging Program for graduated high school students
<https://www.umes.edu/cscgeosciences/Default.aspx?id=40984>
- Student Enrichment & Experiential Learning Program (local students)
<http://www.umes.edu/CREST/Default.aspx?id=33272>
- Coastal Marine Sciences Workshop -
<http://www.umes.edu/CREST/Default.aspx?id=33372>
- Research Experiences for Undergraduates in Marine and Estuarine Science
<http://www.umes.edu/REU/Default.aspx?id=31198>

Summer Research Experiences for Undergraduates

The Coastal Ocean Systems and Sustainability program with the USC Wrigley Institute for Environmental Studies offers this NSF-funded program, June 16-August 8, 2014. Eight undergraduate students will conduct independent guided research on Catalina Island, California. Students from underrepresented groups in STEM fields or schools with limited research opportunities are encouraged to apply. The deadline for application is February 17, 2014.

<http://dornsife.usc.edu/wrigley/reu/>

CONFERENCES, WORKSHOPS, AND PROFESSIONAL DEVELOPMENT

Adapting to Change: Promise, Pitfalls, and Politics – Colorado and Online

The Center for Technology and Policy Research and the Cooperative Institute for Research in Environmental Sciences offer this spring lecture series with a focus on climate adaptation. In-person sessions are held in Boulder, Colorado, and webcasts are offered.

http://sciencepolicy.colorado.edu/news/seminars_spring2014.html

Alabama Master Naturalist - Alabama

Dauphin Island Sea Lab Discovery Hall Programs promote conservation through education, research, and outreach. They will host the first of eight Alabama Master Naturalist programs, a new statewide program whose goal is to help promote awareness, understanding, and respect of Alabama's natural world among Alabama's citizens and visitors, February 25, 2014 on Dauphin Island, Alabama. The deadline for registration is February 18, 2014.

Contact Doyle Keasal at keasade@aces.edu

Art and Environment - Online

Art & Environment will be available as an online-only teacher professional development course with flexible weeks, June 16–August 18, 2014. Designed for K–12 art teachers

but appropriate for science teachers seeking an interdisciplinary approach, this course will provide an in-depth introduction to the field of Eco Art, as well as a basic introduction to environmentalism. Teachers will leave the course with an extensive online curriculum packet.

<http://wexartenvironment.wordpress.com/teacher-course/>

Climate Change in Four Dimensions - Online

University of California San Diego Extension offers free courses through Open CourseWare, also known as Massive Online Open Courses (MOOC). Courses have various start and end times, but can be taken at your pace and at your convenience. Climate Change in Four Dimensions: Scientific, Policy, International and Social will review climate change from a variety of perspectives at the intersection of the natural sciences, technology, and the social sciences and humanities. The course started in January, but registration is still open.

<http://extension.ucsd.edu/online/index.cfm?vAction=ocw>

Community Climate Change Fellowship

The 2014 Community Climate Change Fellowship program is a pilot initiative sponsored by EECapacity, with support from EPA. It will be open to educators who want to address climate change issues in their communities through innovative education and engagement strategies. Check the website; details should be posted soon.

<http://www.naaee.net/CCCFellowship>

Communicating Climate Change - California

The Elkhorn Slough Coastal Training Program provides individuals and groups science-based information, tools, and techniques to make better decisions regarding resources within coastal watersheds. Check out the upcoming communicating climate change workshops in February and March, 2014.

<http://elkhornsloughctp.org/training/>

EDGE Fellowships

The Zoological Society of London's EDGE of Existence program focuses on threatened species that represent a significant amount of unique evolutionary history. They are accepting applications for the 2014-16 Fellowship Program from early-career conservation biologists or wildlife managers. The deadline for application is March 31, 2014.

http://www.edgeofexistence.org/conservation/become_fellow.php

Educator Opportunities from NOAA

NOAA's Education Resources' Educator Opportunities website is designed to provide information about educational opportunities that are available to educators through NOAA. Educators can find information on in-person workshops, online trainings, field experiences, and events where NOAA staff will be in attendance.

http://www.education.noaa.gov/Educator_Opportunities/index.php#page=All

International Marine Conservation Congress

The theme of the 3rd International Marine Conservation Congress, August 14-18, 2014 in Glasgow, Scotland, is Making Marine Science Matter. The deadline for oral, speed, and poster abstract submissions is March 22, 2014.

<http://www.conbio.org/mini-sites/imcc-2014>

LiMPETS Workshops - California

Learn how to get your students involved in hands-on scientific investigations at your local beach or tidepool through this workshop for educators interested in participating in the national marine sanctuary's LiMPETS programs. Participants receive the five-unit LiMPETS curriculum and are trained to survey the distribution and abundance of the Pacific mole crab at one of many monitoring sites along the coast. See the website for more information.

http://limpetsmonitoring.org/resources_workshops.php

Marine Education Workshop - Florida

Newfound Harbor Marine Institute offers this Marine Education Workshop, March 7-9, 2014 on Big Pine Key, Florida. Subjects include Soft and Hard Corals, Mangrove Islands, Sponge and Sea Grass beds, and more. The workshop includes labs, field trips, and more.

Contact the marketing department at info@nhmi.org

Master of Science Programs – Wisconsin and Online

The University of Wisconsin-Stevens Point offers graduate courses within four Master of Science Degree Programs. Courses may be taken as part of these programs or as non-degree credit for your professional development. Applied Master of Science Degree Programs for working professionals include Environmental Education for K-12 Teachers; Environmental Education and Interpretation; and Natural Resources Leadership and Administration. The fourth, more traditional master's program has emphasis in a variety of areas such as forestry, wildlife, water, human dimension, environmental education, and others. Both on-campus and online courses are available.

<http://www.uwsp.edu/cnr/Pages/graduate.aspx>

Maury Project Summer Workshop - Maryland

The Maury Project is a teacher enhancement program of the American Meteorological Society based on studies of the physical foundations of oceanography. The workshop, July 6-18, 2014 in Annapolis, Maryland, is intended to: introduce master teachers to the physical foundations of selected oceanographic topics and issues; explore and suggest ways in which these understandings and concepts can be employed in school studies; and prepare workshop attendees to conduct training sessions on selected oceanography topics and issues for teachers in their home areas during the next school year, as well as possibly participate in DataStreme Ocean Local Implementation Teams. The deadline for application is March 14, 2014.

<http://www.ametsoc.org/amsedu/MAURY/summer.html>

NAI National Workshop

The theme of the 2014 National Association for Interpretation's National Workshop, November 18–22, 2014 in Denver, Colorado, is Scaling Interpretive Heights. The deadline for presentation submission is March 31, 2014.

http://www.interpnet.com/nai/Events/NAI_National_Workshop/nai_events/NAI_National_Workshop.aspx

Ocean Exploration Workshops – Florida and Oregon

NOAA's Ocean Exploration Program and partners offer the Okeanos Explorer Education Materials Collection How Do We Explore? Professional Development Workshops 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.

- April 12, 2014 with the University of South Florida College of Marine Science in St. Pete Beach, Florida. The deadline for application is March 21, 2014. Contact Teresa Greely at greely@marine.usf.edu
- April 19, 2014 with the Oregon Museum of Science and Industry in Portland, Oregon. The deadline for application is March 28, 2014. Contact Tracy Crews at tracy.crews@oregonstate.edu

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

Professional Development Courses - Massachusetts

The New England Aquarium offers professional development workshops in Boston, Massachusetts. In addition to scheduled workshops, the aquarium will work with teachers, schools, and districts to design custom in-service training, and also offers science-themed events and conferences. Check out the upcoming Introduction to Ocean Science and Changing Oceans: Challenges, Impacts & Solutions workshops in February and March, 2014.

http://www.neaq.org/education_and_activities/teacher_resources/professional_development/workshops/index.php

Project WET – New Jersey

The Jacques Cousteau National Estuarine Research Reserve offers this Project WET Curriculum Guide Workshop, February 22, 2014 in Tuckerton, New Jersey. Project WET activities use the importance of water to cover diverse topics and disciplines.

<http://jcnerr.org/education/educators.html>

Schweppe Public Lecture Series - Texas

The Laura Randall Schweppe Endowed Lecture Series in Marine Science at The University of Texas Marine Science Institute in Port Aransas, Texas, brings scientists to the institute to interact with its faculty, staff, and students. Sign up to receive email notification about the lectures given (usually on Thursdays).

<http://www.utmsi.utexas.edu/visit/public-lectures/schweppe-public-lecture-series>

SeaPerch & OE Workshop - Ohio

The United States Naval Academy's STEM Office, NOAA's Office of Ocean Exploration and Research, and Greater Cleveland Aquarium present a two-day SeaPerch/NOAA Ocean Exploration Professional Development Workshop For Educators of Grades 5-12, February 14-15, 2014 in Cleveland, Ohio. Hurry - the deadline for registration has been extended to February 7, 2014.

Contact Ray Patacca at rpatacca@greaterclevelandaquarium.com

Social Interpretation: Graphic Design and Social Media - California

The National Association for Interpretation will hold this Social Interpretation workshop May 22-23, 2014 in Monterey, California. It is designed for interpreters who have little or no training in graphic design or social media, but find themselves responsible for creating nonpersonal media.

http://www.interpnet.com/nai/Certification/Social_Interpretation_Graphic_Design_Social_Media/nai/certification/Social_Interpretation.aspx?hkey=644bc161-e54d-47d4-914c-96f3f0f66e41

STEM Educators' Series – New Jersey and Online

Rutgers University hosts these STEM educator events for teachers interested in bringing current STEM research into their classrooms. Each meeting includes a scientific presentation followed by the opportunity to review curriculum developed to align with the research presented that evening. Background Materials, topic-related and data-specific Lesson Plans, and the presentation will be posted for each lecture. Hurry and register – the next lecture is February 5, 2014.

<http://coseenow.net/mare/ocean-lecture-educators-night/>

Student Climate & Conservation Congress

The Green Schools Alliance in partnership with the U.S. Fish and Wildlife Service supports the 2014 Student Climate & Conservation Congress, an environmental leadership training program, June 22-28, 2014 in Shepherdstown, West Virginia. The program is for rising 9-12th grade students who have demonstrated outstanding leadership in their schools or communities.

<http://www.greenschoolsalliance.org/students/student-climate-conservation-congress-sc3>

EDUCATIONAL RESOURCES

Conservation Connect

Conservation Connect is a web-based video series that aims to connect middle school students with the outdoors and conservation careers. Produced by the U.S. Fish & Wildlife Service, each episode will help students learn about wildlife, careers, and new technologies used to study and protect wildlife. An introductory broadcast for teachers and visitor services specialists, February 5, 2014, will give a preview of the 5-7 minute episodes, and illustrate how these videos can supplement the use of existing environmental education curriculum, citizen science projects, and STEM content.

<http://www.fws.gov/letsgooutside/educators.html>

Expedition 349: South China Sea Tectonics

Join the crew of the *JOIDES Resolution* on Expedition 349: South China Sea Tectonics, January 26-March 30, 2014 as they explore the formation of the South China Sea. Teachers can sign up for 30-45 minute live interactions through Skype or Zoom, where your students can get a tour of the labs, see what the latest discoveries are, and ask questions of scientists.

<http://joidesresolution.org/node/2737>

https://docs.google.com/a/noaa.gov/spreadsheet/viewform?usp=drive_web&formkey=dFNpZlV2bndvd0hkcxFLdkp0Zk5JRUE6MA#gid=0

Geoguesser

Explore the world with this online game. GeoGuessr is a geography game which takes you on a journey around the world and challenges your ability to recognize your surroundings. Use your geo-sleuthing to guess where you are.

<http://geoguessr.com/>

GeoQ Newsletter

The European geosciences Union publishes GeoQ, an online quarterly newsletter. GeoQ #8, the December 2013 issue, is a dedicated Climate Issue. The newsletter can

be downloaded from the website, or select individual sections from the online Table of Contents. While on the website, check out the additional publications and offerings.

<http://www.egu.eu/newsletter/>

Great Lakes Ice Page

The Great Lakes Environmental Research Laboratory hosts the Great Lakes Ice Page regarding Great Lakes ice cover with ice products, data, research papers, images, statistics, and more.

<http://www.glerl.noaa.gov/data/ice/>

JASON Live STEM Role Model Series

JASON Learning's free, live, interactive events can help inspire kids to pursue STEM careers. All webcasts are held on Thursdays at 1:30 pm Eastern. Check out the wide range of upcoming speaker interests, from sharks to climate to archaeology, on the website. Students can pre-submit questions on the submission form or through video, or submit using the form during the webinar. All events are archived and posted soon after the event ends.

<http://www.jason.org/live>

Marine Science Apps

Fish Navy Films is a small production company that explores the relationship between the ocean and mankind. They have posted a webpage with ten fun, interesting, and free marine science apps, along with several available for a small charge. Check out some of the previous blogs, including five favorite blogs of the year, trawlers as lawnmowers of the sea, and more.

<http://www.fishnavy.com/image/10-fun-interesting-free-marine-science-apps-2/>

National Academies of Sciences Year in Review

The National Academies of Sciences publishes a myriad of reports each year. This web page offers highlights of 2013, including reports on topics such as climate change, land use, and more.

<http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=01022014b>

New Jersey Institute of Technology OpenCourseWare

The OpenCourseWare page of the New Jersey Institute of Technology brings together dozens of courses from their College of Engineering, School of Management, and the College of Science and Liberal Arts. Files include archived video from class meetings, along with tutorials and handouts. Visitors can even suggest future courses for inclusion. Check out the science and liberal arts offerings, including professional and technical communication with online design, proposal writing, editing, and more.

<http://ocw.njit.edu/csia/index.php>

Ocean Planning Publications

OpenChannels offers a weekly literature email update, helping subscribers to stay informed of the latest publications on MPAs, EBM, and marine spatial planning. There are news updates, literature updates, and more. Create a free OpenChannels Member Account and check the boxes for the Weekly Update and/or Literature Update newsletters.

<http://openchannels.org/ocnewsletters/weekly-update>

One Ocean : A Guide for Teaching the Ocean

The National Geographic Education iBook One Ocean : A guide for teaching the ocean grades 3-8 is now available as a free download on iTunes. The guide was developed to support teachers in teaching topics with real-world context, and provide them with the background to feel competent and comfortable when teaching about the ocean. The iBook version includes additional interactive diagrams, embedded videos, and more.

<https://itunes.apple.com/us/book/one-ocean/id775248912?mt=11>

Parks Caribbean

This new website is dedicated to providing information on protected areas programming in the Caribbean. The website offers news, background information, links to publications, and more. Further information will be added, so check back often.

<http://parkscaribbean.net/>

President's Climate Action Plan Tracker

The Columbia Law School Center for Climate Change Law hosts this web page to help visitors keep track of the President's Climate Action Plan. The links lead to information about each provision in the plan, including the specific goals it sets, related policies, and steps taken to achieve its goals.

<http://web.law.columbia.edu/climate-change/resources/presidents-climate-action-plan-tracker>

Putting Time In Perspective

These timelines represent the history of time, initially from a human view, as a series of growing timeline. Each timeline contains all the previous timelines (colors will help you see which timelines are which). Note that this is from a very informal blog – a link at the end of the article will take you to a less informal time series.

<http://waitbutwhy.com/2013/08/putting-time-in-perspective.html>

Reach

US Sailing's Reach program engages youth and enhances career opportunities in the fields of STEM and Environmental Stewardship through learning experiences. The program uses sailing as an educational platform, challenging youth to embrace education, establish a love of learning, and explore productive STEM-based careers. Combining educators, sailing instructors, engineers, scientists with youth to provide them with a one of a kind authentic learning experience, gives students the opportunity to apply classroom learning in a cooperative work environment. Preview the educator guide and check out upcoming course and opportunities.

<http://reach.ussailing.org/>

Resources for Marine Educators

Ryan Cilsick offers this website with links to various resources for marine educators, including links to the Castro-Huber textbook, marine science apps, and more.

<https://sites.google.com/a/share.brevardschools.org/cilsick/resources-for-marine-educators>

Rozalia Project

The Rozalia Project puts together expeditions to clean the oceans, lakes, and rivers of marine debris using action, technology, education, and research. Join as virtual crew members on American Promise and partner vessels to be part of these expeditions right

from school. Once or twice a week, participants receive a Daily Mission Report with photos, data, activities, and more based on project cleanup and research.

http://www.rozaliaproject.org/mission_atlantic/

Smithsonian X 3D

The Smithsonian X 3D project was created by the Smithsonian's Digitization Program Office. The viewer offers students the ability to explore some of the Smithsonian's objects with a level of control that has never been possible until now. Visitors can browse models, view how the technology is being used for conservation and education, learn about blue crabs, and much more.

<http://3d.si.edu/>

Tides & Currents

The Center for Operational Oceanographic Products and Services (CO-OPS) and its predecessors have gathered oceanographic data along our nation's coasts for over 200 years to protect life, property, and the environment. It offers tides, water levels, currents, and other oceanographic information. Educators can easily access the products for data analysis. Check out the education materials, including definitions and background information, links to lesson plans, and more.

<http://tidesandcurrents.noaa.gov/education.html>

What the Fish?

The Field Museum in Chicago, Illinois offers a series of Science Podcasts, with commentary on the museum's in-house research, exhibits, and more. What the Fish? was a biweekly podcast series with 26 episodes, covering topics surrounding the biodiversity of fishes, including discussions on their general biology, ecology, and evolution. You can still access the series archives from this website.

<http://fieldmuseum.org/explore/science-podcasts>

Year in Weather

This beautiful eight minute time lapse visualization, comprised of imagery from geostationary satellites, shows the entire year of weather across the globe during 2013. Commentary is from Mark Higgins, Training Officer at EUMETSAT, a global operational satellite agency. The satellite data layer is superimposed over NASA's Blue Marble Next Generation ground maps, which also change with the seasons.

<http://www.youtube.com/watch?v=m2Gy8V0Dv78>

INITIATIVES, JOURNALS, and MORE

Boston Sea Rovers Clinic

The Boston Sea Rovers Clinic, March 8-9, 2014 in Danvers, Massachusetts, is dedicated to education, conservation, and exploration of the underwater world. The show features seminars, a Saturday Evening Film Festival, free Sunday programs for kids, and more. Daytime student volunteer opportunities for the clinic are available.

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

Great Backyard Bird Count

The 2014 Great Backyard Bird Count will take place February 14-17, 2014. This annual four-day event engages bird watchers of all ages in counting birds to create a real-time snapshot of where the birds are. Everyone is welcome--from beginning bird watchers to

experts. It takes as little as 15 minutes on one day, or you can count for as long as you like each day of the event. If you have iTunes, check out the free Merlin Bird ID app.

<http://www.birdsource.org/gbbc/>

<http://merlin.allaboutbirds.org/>

National Wildlife Week

National Wildlife Week 2014 will take place from March 17-23, 2014 with the theme Wildlife and Water: From the mountains to the rivers to the oceans. The National Wildlife Federation offers a toolkit that includes lessons, activities, and more. A kickoff webinar will be held February 19, 2014.

<http://www.nwf.org/national-wildlife-week.aspx>

Ocean Discovery Day – Texas

Join the educators at the Flower Garden Banks National Marine Sanctuary, March 22, 2014 in Galveston, Texas for a free day of discovery and exploration as the NOAA campus is opened to all visitors. Learn about NOAA's activities in the community, meet NOAA scientists, and more.

<http://flowergarden.noaa.gov/newsevents/oddarticle.html>

Seaside Chats - Texas

Flower Garden Banks National Marine Sanctuaries will host a series of free Seaside Chats each Wednesday in February. The presentations will take place the Aquarium at Moody Gardens in Galveston, Texas.

<http://flowergarden.noaa.gov/newsevents/calendar.html>

World Ocean Journal

The World Ocean Observatory publishes the World Ocean Journal, a bi-annual e-zine on ocean culture and solutions to today's ocean issues. The inaugural volume includes essays, interviews, art, and more, profiling some of the impacts of the ocean on our lives.

<http://publ.com/1Wj5dye#1>