

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

**MARCH 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.

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

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## **Notable Reference**

### **Fish Identification Tools for Biodiversity and Fisheries Assessments**

The FAO report, *Fish identification tools for biodiversity and fisheries assessments: review and guidance for decision-makers*, provides an appraisal of existing identification tools and shows their potential for providing the right solution in different real-life situations. The ID tools reviewed include use of scientific and local experts, image recognition systems, field guides based on dichotomous keys, and much more.  
<http://www.fao.org/docrep/019/i3354e/i3354e.pdf>

### **The Science of Science Communication II**

This downloadable publication from the National Academies Press offers advice on how to identify information needs, engage the public, navigate the politicization of scientific

findings, and more. Chapters include The Sciences of Communication, Science in a Time of Controversy, Creating Collaborations for Communication, and more.

[http://www.nap.edu/catalog.php?record\\_id=18478](http://www.nap.edu/catalog.php?record_id=18478)

### **Stakeholder Participation Toolkit for Identification, Designation and Management of Marine Protected Areas**

This document offers introductory basics of stakeholder participation, types of governance, MPA planning, participatory tools, and more.

<http://www.rac-spa.org/node/1120>

## **OPPORTUNITY OF THE MONTH**

### **Tropical Coastal Ecosystems - Online**

Study tropical coastal ecosystems during this free, 7-week, online course, starting April 28, 2014. The University of Queensland's course will be led by Professor Ove Hoegh-Guldberg and delivered by other leaders in coastal ecology. The Massive Open Online Course is designed for resource managers, students, professionals, and others with an interest in coastal ecology and marine conservation.

<https://www.edx.org/course/uqx/uqx-tropic101x-tropical-coastal-1442>

## **REQUESTS**

### **Pilot Teachers Wanted**

WGBH seeks teachers to pilot lessons from the Inspiring Middle School Literacy Collection, and help complete a research survey. If you are interested in pilot testing one of the lessons in your classroom in March or April, please complete this survey.

<https://www.surveymonkey.com/s/MSLC2014>

### **World Oceans Day Outreach to Youth Networks**

Evan Bruner is working with The Ocean Project and seeks contact with youth networks to engage them in World Ocean's Day projects.

Contact Evan at [ebruner@theoceanproject.org](mailto:ebruner@theoceanproject.org)

## **GRANTS AND OPPORTUNITIES**

### **Blue Ocean Film Festival – Call for Submissions**

The Blue Ocean Film Festival, November 3-9, 2014 in St. Petersburg, Florida, is a global film festival and conservation summit for underwater filmmakers and marine researchers. The deadline for submission is May 2, 2014.

[http://www.blueoceanfilmfestival.org/film\\_festival\\_film\\_competition.htm](http://www.blueoceanfilmfestival.org/film_festival_film_competition.htm)

### **C-DEBI Request for Education & Outreach Proposals**

The Center for Dark Energy Biosphere Investigations (C-DEBI) offers grants to fund research or education and outreach projects on any area of marine deep biosphere topics. Their education and outreach goals include creating distinctive, targeted education programs and promoting increased public awareness about life below the seafloor. The deadline for application is April 1, 2014.

<http://www.darkenergybiosphere.org/education/proposals.html>

### **Climate Adaptation Fund**

The Wildlife Conservation Society's Climate Adaptation Fund supports projects that demonstrate effective interventions for wildlife adaptation to climate change. The deadline for pre-proposals is March 14, 2014.

<http://wcsnorthamerica.org/ClimateAdaptationFund/tabid/4813/Default.aspx>

### **Climate Change in Focus Student Video Contest**

The National Environmental Education Foundation and the U.S. Environmental Protection Agency are partnering for this climate change student video contest. Participants ages 11-14 should create a video (2 minutes maximum) and that answers the questions, Why do you care about climate change? and How are you reducing carbon pollution or preparing for the impacts of climate change? Hurry - the deadline for entry is March 18, 2014.

<http://neefusa.org/climatecontest>

### **EcoTech Grants**

The Captain Planet Foundation in partnership with the Ray C. Anderson Foundation will award sixteen grants to schools or non-profits organizations for the purpose of engaging children in inquiry-based projects in STEM fields that use innovation, biomimicry / nature-based design, or new uses for technology to address environmental problems in their communities. The rolling deadline for application is May 31, 2014 (as funds allow).

<http://captainplanetfoundation.org/2014/01/ecotech/>

### **Excellence in Service and Leadership Award**

GenerationOn offers the Excellence in Service and Leadership Award, recognizing individuals and groups ages 5-18 who take a leadership role in improving their local and global communities through service. Projects may be large or small, short or long, focused on hometown needs or world issues, and may be completed by individuals or groups. New awardees are honored each month.

<http://www.generationon.org/teens/awards/excellence-in-service-and-leadership-award>

### **Gloria Barron Prize for Young Heroes**

The Gloria Barron Prize recognizes young people, ages 8-18, who have shown leadership and courage in public service to people and the planet. The deadline for nomination is April 15, 2014.

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

### **Kohl's Cares Scholarship Program**

The Kohl's Cares® Scholarship Program recognizes young volunteers (ages 6-18) who help make their communities a better place to live. The deadline for nomination is March 14, 2014.

<http://www.kohlscorporation.com/CommunityRelations/scholarship/>

### **NMEA 2014 Scholarships**

The National Marine Educators Association 2014 conference, *Sailing into Marine Education, from the Ocean to the Bay*, July 21-25, 2014 in Annapolis, Maryland offers tracks for classroom and informal educators, researchers in a changing world, and others, in Next Generation Science Standards components, implementation and overcoming obstacles, Arts and Culture, and more. The deadline for scholarship application is March 15, 2014.

<http://www.nmea2014.com/>

<http://www.marine-ed.org/?page=scholarships>

### **Radio Disney Hero for Change Award - Various**

Radio Disney seeks young change-makers living in Radio Disney communities, ages 5-18, who organize ongoing, youth-led projects that highlight the creativity and commitment of young people working to meet the needs of others. See the website for locations and other details. The deadline for application is March 16, 2014.

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

### **Recreational Trails Awards**

The Coalition for Recreational Trails sponsors the Annual Achievement Awards to recognize outstanding trail projects funded by the Recreational Trails Program. Categories include Education & Communication, Environment & Wildlife Compatibility, and more. The deadline for nomination is March 28, 2014.

<http://www.americantrails.org/awards/CRTawards.html>

### **Seeking EE Lessons & Curriculum**

The Captain Planet Foundation seeks nominations for exemplary, free, hands-on science lessons that teach concepts in an environmental context. If your organization has created, funded, or featured outstanding open educational resources lessons or curriculum for grades K-12, on any topic in life science, earth and space science, or physical science, please consider sharing a review copy via hyperlink or pdf. Original directions or protocols for environmental stewardship activities, citizen science, STEM learning projects, and engineering challenges are also welcome. The deadline for nomination is April 30, 2014.

<http://eeingorgia.org/resource/about.aspx?s=113387.0.0.4863>

### **Source Reduction Assistance Grant**

The purpose of this grant program from the EPA is to support environmental projects that reduce or eliminate pollution at the source. Funded programs support the pollution prevention program's strategic goals – reduce greenhouse gases, increase resource conservation, support pollution prevention integration, and more. The deadline for application is March 11, 2014.

<http://www.epa.gov/p2/pubs/grants/srap/srap14.pdf>

### **Youth Action Net Global Fellowship**

Sponsored by the Sylvan/Laureate Foundation, the Laureate Global Fellowship annually recognizes 20 young leaders, ages 18-29, who have pioneered solutions to problems in their communities and beyond. Fellows benefit from a yearlong experience that includes leadership training, coaching/mentoring, and more. The deadline for application is March 16, 2014.

<http://www.youthactionnet.org/apply>

## **INTERNSHIPS AND TEMPORARY OPPORTUNITIES**

### **National Academies' Summer Sustainability Fellowship**

Two rising college seniors can apply for a paid summer fellowship with the National Academies in Washington, D.C., to conduct research on a topic based on sustainability science and technology. The deadline for application is April 1, 2014.

<http://sites.nationalacademies.org/PGA/sustainability/index.htm>

### **Underwater Exploration Camp**

The Inner Space Center at the University of Rhode Island's Graduate School of Oceanography offers Underwater Exploration Camps for youth ages 11-15, April 21-25, 2014 and August 11-15, 2014 in Narragansett, Rhode Island. Participants will build and test a variety of oceanographic technologies, including remotely operated vehicles, and take the ROVs home after camp. Campers will engage with scientists that are involved in active exploration missions. The facility is home to Mission Control for ocean exploration, where scientists and students work remotely, interacting with live feeds from ships at sea. Space is limited and the deadline for registration is March 15, 2014.

<http://www.innerspacecenter.org/tours.php>

### **Ramadan Rangers**

Chumbe Island Coral Park, Zanzibar has openings for two volunteer positions as Ramadan Rangers, serving as snorkel guides in the healthy coral reef for the 2014 Ramadan season, June 23-July 31, 2014. Food and lodging is provided. The deadline for application is March 24, 2014.

<http://coral.aoml.noaa.gov/pipermail/coral-list/2014-February/013865.html>

### **SEAScape - Massachusetts**

Sea Education Association offers two sessions of a shore-based summer program, June 30–July 18 and July 21–August 8, 2014 in Woods Hole, Massachusetts. High school students spend three weeks studying the marine environment from a variety of perspectives: scientific, historical, literary, and nautical. A limited number of need-based scholarships may be available; the deadline for application for financial aid is April 20, 2014.

[http://www.sea.edu/high\\_school\\_programs](http://www.sea.edu/high_school_programs)

### **Young Birders Event – New York**

The Cornell Lab of Ornithology hosts the annual Young Birders Event, July 10–13, 2014 in Ithaca, New York. The event brings together teenagers (sophomores, juniors and seniors) who are interested in pursuing a career with birds. The participants will meet ornithological researchers, tour leaders, audio specialists, and other specialists. The deadline for application is March 15, 2014; this competitive opportunity is limited to 16 participants.

<http://ebird.org/content/ybn/news/yb2014/>

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

### **Attribution of Extreme Weather - Online**

This free webinar is part of the Climate Conversations Webinar series. NOAA scientists will discuss attribution of extreme weather and its connection with climate change, March 5, 2014.

<http://www.climate.gov/decision-support/professional-development/webinar-attribution-extreme-weather>

### **Community Climate Change Fellowship Program**

The 2014 Community Climate Change Fellowship Program is a pilot initiative sponsored by EECapacity, with generous support from EPA. The fellowship focuses on climate change, community engagement, and more. It is open to educators who want to address climate change issues in their communities through innovative education and engagement strategies. The deadline for application is April 18, 2014.

<http://www.eecapacity.net/ccc-fellowship.html>

### **Climate Outreach Community of Practice**

The 2014 Climate Outreach Community of Practice Meeting will be held April 7-9, 2014 in Orange Beach, Alabama. The meeting brings together extension, outreach, and education professionals and community officials in the Gulf to learn how coastal communities can adapt to sea-level rise, precipitation changes, and other climate-related issues

<http://masgc.org/climate-outreach-community-of-practice/annual-meeting-2014>

### **Deep-sea Discoveries - Online**

NOAA's Office of Ocean Exploration and Research in partnership with the College of Exploration offer *Deep-sea Discoveries in the Atlantic Onboard the NOAA Ship Okeanos Explorer: An Online Workshop to Advance Transatlantic Ocean Science Literacy*, a free, online workshop to advance transatlantic ocean science literacy, March 3-April 4, 2014.

This workshop is available 24 hours a day, 7 days a week. The workshop will focus on mission discoveries and include content on the importance of Atlantic deepwater canyons, their associated deep-sea corals, newly-discovered cold methane seep sites, the Mytilus Seamount, and seamount topography in general.

<http://www.coexploration.org/oe2014/>

### **Down Under, Out Yonder Teacher Training Expedition - Texas**

The Down Under, Out Yonder coral reef workshop and scuba trip, sponsored annually by the Gulf of Mexico Foundation for K-12 and college entry educators nationwide, will take place July 11-16, 2014, starting in Galveston, Texas. The five-day workshop includes a two-day land-based workshop featuring instruction from Flower Garden Banks National Marine Sanctuary staff and guest speakers, as well as educational materials to bring back to the classroom. Afterwards, participants travel to Freeport, Texas, for three days of scuba diving. Educators must be previously SCUBA certified to participate in the diving field experience. Workshop space is limited and spaces are filled quickly via a competitive application process. Hurry - the deadline for application is March 7, 2014.

<http://www.gulfmex.org/education-training/down-under-out-yonder/>

### **International Pacific Marine Educators Network Conference**

The mission of International Pacific Marine Educators Network (IPMEN) is to foster collaborative relationships that will create the resources, programs, training, and leadership necessary to build ocean literacy at every level of society in the Pacific region. The fifth IPMEN biennial conference will be held July 10-16, 2014 in Tokyo and Iwate, Japan. An important aspect of the conference is binging hope and pride to the area devastated by the 2011 tsunami. The deadline for proposals is July 1, 2014.

<http://ipmen-2014-japan.jimdo.com/>

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

JASON Learning's 2014 National Educators Conference, June 26-28, 2014 in Ashburn, Virginia, offers educators an opportunity to obtain resources and develop skills for bringing high-quality STEM education to their teachers and students. The conference offers a combination of hands-on workshops, targeted breakout sessions, and more.

<http://www.jason.org/news/announcing-our-2014-national-educators-conference-june-26-28th>

### **Marine Mammals Teacher Workshop – Georgia**

Join experts in the marine mammal field for this Marine Mammals in Coastal Georgia Teacher Workshop, April 12, 2014 in Brunswick, Georgia. Topics will include current research, threats and conservation efforts, and more, along with an Estuaries 101 curriculum overview and classroom activity sessions. The deadline for registration is March 15, 2014.

<http://eeingeorgia.org/net/calendar/details.aspx?s=54702.0.0.4863&c=5058725>

### **Master Naturalist Program - Florida**

The Florida Master Naturalist Program promotes awareness, understanding, and respect of Florida's natural world. Instructors use science-based information and interpretive techniques that prepare students to share their knowledge with others. Check the website for upcoming courses, including Coastal Systems, Freshwater Systems, Habitat Evaluation, and more.

<http://conference.ifas.ufl.edu/fmnp/>

### **NAAEE 2014 Call for Presentations**

The theme for NAAEE's 43rd Annual Conference and 11th Annual Research Symposium, October 8-11, 2014 in Ottawa, Canada, is *Building Momentum for the Next Chapter*. The deadline for proposals is March 31, 2014.

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

### **Ocean Acidification Webinar Series - Online**

This series of free webinars is jointly sponsored by the NOAA National Marine Sanctuaries and Ocean Acidification Program. The webinars provide ocean acidification communication tools to formal and informal educators. A primary goal is to promote a more integrated and effective ocean acidification education community by sharing ocean acidification education and communication activities virtually. Webinars will be archived for future viewing.

<http://oceanacidification.noaa.gov/AreasofFocus/EducationOutreach/WebinarSeries.aspx>

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### **Ocean Exploration Workshops – Various**

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 24, 2014 with the Seattle Aquarium in Seattle, Washington. The deadline for application is April 4, 2014. Contact Dan Newburn at [d.newburn@seattleaquarium.org](mailto:d.newburn@seattleaquarium.org)

- May 3, 2014 with the New England Aquarium in Boston, Massachusetts. The deadline for application is April 11, 2014. Contact Tania Slywinskyj at [tslywinskyj@neaq.org](mailto:tslywinskyj@neaq.org)
- May 3, 2014 with the Audubon Aquarium of the Americas in New Orleans, Louisiana. The deadline for application is April 11, 2014. Contact Tricia LeBlanc at [tleblanc@AudubonInstitute.org](mailto:tleblanc@AudubonInstitute.org)
- May 17, 2014 with the Birch Aquarium at Scripps Institution of Oceanography in San Diego, California. The deadline for registration is April 25, 2014. Contact Audrey Evans at [eadrey@ucsd.edu](mailto:eadrey@ucsd.edu)

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

### **Otters, Ecosystems and Ocean Acidification - Washington**

Otters, Ecosystems and Ocean Acidification in Washington Waters, a free educator workshop, March 8, 2014 in Clallum Bay, Washington, will discuss sea otter populations in Washington. The workshop will also introduce classroom activities and resources on ocean acidification and ecosystems of Puget Sound.

<http://www.seattleaquarium.org/teacher-resources>

### **Sea Turtle Conservation Teacher Workshop - Georgia**

Join educators at the Sapelo Island National Estuarine Research Reserve, June 16-18, 2014 on Sapelo Island, Georgia, for the Georgia Sea Turtle and Conservation Teacher Workshop. The deadline for registration is May 15, 2014.

Contact Georgia Graves at [georgiabeachwalk@bellsouth.net](mailto:georgiabeachwalk@bellsouth.net)

### **Shipboard Science Workshop – Lake Erie**

Join the Center for Great Lakes Literacy and scientists from the US EPA's Great Lakes National Program Office on an excursion through Lake Erie aboard US EPA's *R/V Lake Guardian*, July 7-13, 2014. Fifteen formal and non-formal educators of students in grades 4-12 from throughout the Great Lakes watershed will collect data on plankton communities, water chemistry, and plastic pollution. Hurry – the deadline for application is March 7, 2014.

<http://www.paseagrant.org/projects/rv-lake-guardian-workshop/>

### **Summer Workshops - Maine**

Herring Gut Learning Center offers two summer courses in Port Clyde, Maine: Introduction to Aquaponics and Lobster Investigations. Partial tuition scholarships for the Aquaponics may be available; the other course is free of charge. Space is limited for both. The deadline for application is May 31, 2013.

<http://www.herringgut.org/forteachers.html>

## **EDUCATIONAL RESOURCES**

### **CARIB Tails**

Help track humpback whale migration through this Caribbean Citizen Science Project for Yachters. The project is an international research collaboration between NOAA's Stellwagen Bank National Marine Sanctuary's and partners. CARIB Tails relies on photo-identification techniques to help monitor the recovery of this endangered species. Participants contribute tail fluke photographs to monitor the movements, health, and behavior of individual humpbacks.

<http://caribtails.org/>



### **Catastrophe Insight**

The Catastrophe Insight portal draws on the aggregated data from Aon Benfield's Impact Forecasting team and is designed to offer information on global natural catastrophe events. It provides a gross breakdown by disaster type of economic/insured loss data for the current year plus the previous ten years. In addition, check out the Annual global climate and catastrophe report: impact forecasting – 2013 which evaluates the impact of the natural disaster events that occurred worldwide during 2013.

<http://www.preventionweb.net/english/professional/publications/v.php?id=36073>  
<http://catastropheinsight.aonbenfield.com/Pages/Home.aspx>

### **Climate Change: Evidence & Causes**

The U.S. National Academy of Sciences and The Royal Society offer the downloadable publication, Climate Change: Evidence & Causes, a brief reference document for decision makers, policy makers, educators, and others seeking authoritative information on questions regarding climate change. An introductory webcast will be archived on the website soon.

<http://nas-sites.org/americasclimatechoices/events/a-discussion-on-climate-change-evidence-and-causes/>

### **Communication Lessons**

Here are four lessons about climate change outreach learned through the experience of #DrownYourTown. These lessons can be generally useful for communicating science to mass audiences.

<http://www.southernfriedscience.com/?p=16583>

### **DEEP Game**

The Deep-sea Extreme Environment Pilot (DEEP) game was built to spread interest in the world's oceans, with a specific focus on deep-ocean environments. It is designed to be a stand-alone exhibit in aquariums, informal learning centers, and elsewhere, and can also be used in undergraduate classrooms to enhance student's understanding of ocean observatory systems.

<http://siogames.ucsd.edu/deep.html>

### **Earth Learning Idea**

Earth Learning Idea offers downloadable activities and suggested teaching strategies in Earth Science, Geology, Environmental Science, and Physical Geography. These resources require minimal equipment.

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

### **EarthNow: Monthly Climate Digest Videos and Highlights**

Each month, the EarthNow blog provides a brief, narrated video of climate highlights from the previous month, based on the National Climatic Data Center's monthly global analysis. Along with large datasets for display on Science on a Sphere exhibits, all feature stories and Climate Digests are available as videos that can be viewed on computers or mobile devices. There are also easy-to-understand maps and more, to help visitors understand these model predictions.

<http://sphere.ssec.wisc.edu/>

### **Ecology 180**

Ecology 180 offers science delivered in three minutes or less. The website aims to offer viewers important and complex environmental issues in digestible bites. Check out This is Coral, the first of seven short animations on ocean acidification.

<http://www.ecology180.com/>

### **Glacial Balance**

The film, Glacial Balance, is a country-by-country journey along the spine of the Andes, providing a narrative of climate change impacts on communities. The goal of the film is to communicate scientific concepts in understandable language through edits of long-form interviews with locals and scientists during the journey. The 2-set DVD is available on a sliding scale fee schedule.

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

### **Global Warming Frequently Asked Questions**

NOAA's Climate.gov website recently posted this website with Frequently Asked Questions on Global Warming. The plain-language answers to commonly asked questions were vetted by a panel of climate scientists, and each answer is connected to references in the scientific literature. The article offers scientifically accurate responses to many of the myths and misconceptions about climate that circulate in emails or via social media. Visitors can click on the plus signs to view the answers, or download a pdf version of the FAQs.

<http://www.climate.gov/news-features/understanding-climate/global-warming-frequently-asked-questions>

### **Historical Sea Ice Atlas**

This website allows users to make comparisons of the extent of sea ice past and present, download data from various collections, and more. Check out the common terms used in sea ice research.

<http://seaiceatlas.snap.uaf.edu/>

### **Journey North**

Journey North has launched for Spring 2014, exploring the interrelated aspects of seasonal change. Watch how the seasons affect the web of life and report your own backyard observations.

<http://www.learner.org/jnorth/season/>

### **Learn More About Climate**

This website from the University of Colorado - Boulder translates climate change information into resources and tools for teachers, policy makers, and citizens. Watch videos, find standards-based lessons and interactive resources, and more. Categories include Climate & Weather, Resiliency, Ecology, and more.

<http://learnmoreaboutclimate.colorado.edu/>

### **Marine Debris PSAs**

The Sitka Sound Science Center has created three, one-minute videos highlighting the role individuals play in reducing marine debris. The project is called "A Drop in the Bucket, Every Drop Counts!"

[https://www.facebook.com/permalink.php?id=156006977745168&story\\_fbid=797718413575442](https://www.facebook.com/permalink.php?id=156006977745168&story_fbid=797718413575442)

### **MPA Blog**

The MPA Center offers a new monthly blog about MPAs, hosted on OpenChannels. It will explore the implications of new information; tools and trends for MPA design and management; and more.

<http://openchannels.org/blog/cmwahle/welcome-national-marine-protected-areas-centers-new-blog>

### **MPA List**

Created by MPA News and hosted by OpenChannels, MPA List is an email-based discussion forum for the marine protected area community. It provides a way for managers, researchers, and others to share knowledge, discuss current issues, and stay up-to-date on the latest news and announcements.

<http://openchannels.org/community/mpalist>

### **National EE Week**

National Environmental Education Week 2014, April 13-19, 2014, is dedicated to increasing the environmental knowledge of K-12 students, with a focus on Greening STEM. The website's new goal is to expand beyond a single week's focus in April, and become a leading educator portal for Greening STEM resources. Sign up for upcoming webinars, check out the educator toolkits, and more. Be sure to register for EE Week 2014

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

### **National Severe Weather Preparedness Week**

National Severe Weather Preparedness Week is March 2-8, 2014. The annual event is a public education effort aimed at improving the way people prepare for and respond to severe weather. This website provides different resources to raise awareness of severe weather and help increase disaster preparedness.

<http://www.nws.noaa.gov/com/weatherreadynation/severe.html#.UxCtRYV9IQ0>

### **Ocean 180 Video Challenge Finalists**

The Ocean 180 Video Challenge produced video abstracts which highlight the significance and implications of recently published research. Check out Wavechasers and the Samoan Passage, Innocence by Viral Tagging, and more.

<http://ocean180.org/previous-winners/video-abstract-entries.html>

### **Ocean Today**

The Ocean Today website provides access to current and archived videos of the Ocean Today kiosk exhibit in the Smithsonian's Sant Ocean Hall. It offers a new 3-part video series, The Depths Below, which includes Lakes in an Ocean, Life on a Vent, and the Ring of Fire. Check these out, and look through the previous videos.

<http://oceantoday.noaa.gov/welcome.html>

### **Planet H2O**

Planet H2O explores water technology, water hot-spots, and careers involving water. View video clips from the Planet H2O TV special plus download lesson plans for K-12, teaching guides, and environmental activities to use in the classroom.

<http://www.thirteen.org/h2o/index.html>

### **Powers of Ten**

Powers of Ten is a film about magnitudes. The companion website offers a visualization expanding by ten time greater magnification, from a proton of a carbon atom within a DNA molecule in a white blood cell to outside our galaxy. Check out the blog.

<http://www.powersof10.com/>

### **Resources for Earth Science Teachers**

Created and maintained by the Massachusetts Geological Survey, this webpage links to resources for earth science teachers working with high school and college students. The resources are organized into nine areas, including Lesson Plans, Fieldtrips, and more. Note, however, that the page was last updated in 2008.

[http://www.geo.umass.edu/stategeologist/frame\\_edu.htm](http://www.geo.umass.edu/stategeologist/frame_edu.htm)

### **Sanctuaries and Climate Change**

The Office of National Marine Sanctuaries offers this website with an introduction that explains what kind of climate change impacts sanctuaries can expect to face; what sanctuaries can do about climate change impacts; and detailed pages on adaptation, mitigation, science, and outreach - all featuring links to climate-related work and greening projects across the system.

<http://sanctuaries.noaa.gov/management/climate/welcome.html>

### **Shifting Baselines**

Check out this entry from NPR with pictures of trophy fish, for a good visual of what makes a fisherman happy over time.

<http://www.npr.org/blogs/krulwich/2014/02/05/257046530/big-fish-stories-getting-littler>

### **Tribal Directory Assessment Tool**

The Tribal Directory Assessment Tool is a web accessible database that contains information about federally recognized Indian tribes and their geographic areas of current and ancestral interest. The database links tribes' areas of interest down to the county level. Visitors can download the user manual, select by location or tribe, and more.

<http://egis.hud.gov/tadat/Tribal.aspx>

### **Visualization Challenge Winners**

The winners of the 2013 International Science and Engineering Visualization Challenge are posted on this NSF website. The contest honors scientists and artists who create thought-provoking videos and visuals that promote understanding of scientific research. Check out Invisible Coral Flows, EarthViewer, Dynamic Earth Visualization Excerpt, and more.

[http://www.nsf.gov/news/special\\_reports/scivis/winners\\_2013.jsp](http://www.nsf.gov/news/special_reports/scivis/winners_2013.jsp)

### **Weather Interactive**

Annenberg Learner offers the Weather Interactive, an online introduction to the "hows" and "whats" of weather, including the atmosphere, forecasting, and more. There is also a list of links for more in-depth information. While on the website, check out the other interactives by grade level, discipline, and more.

<http://www.learner.org/interactives/weather/>

### **What If Scientific—Leave Only Bubbles**

What If Scientific—Leave Only Bubbles provides innovative educational materials to supplement marine, earth, and environmental science curriculums. What If... offers materials for earth & space science curriculums, and Leave Only Bubbles hosts marine science curriculum supplies.

<http://www.leaveonlybubbles.com/catalog/>

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

### **Citizen Science Association**

Citizen Science Association is a new organization and offers free, inaugural membership. The association supports practitioners in the broad field of public participation in scientific research, and aims to advance a global and cross-disciplinary field of practice.

<http://citizenscienceassociation.org/>

### **Conservation Sew Mates**

Conservation Sew Mates was established to support wildlife conservation efforts. Sew Mates toys are made in the Philippines and sold in Hong Kong, with proceeds going to support whale shark research.

<https://www.facebook.com/CSVsewmates?fref=ts>

### **Evotis**

Evotis is a quarterly online publication by the University of California Davis One Health Institute, which is home to the Wildlife Health Center. Each volume focuses on a central theme that highlights the center's work. Volume one is *Wings*; volume two is *Coastlines*.

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

### **MPA Guardian**

MPA Guardian is a tool that will allow anyone to help protect sensitive marine reserves through the crowdsourced reporting of activities observed by concerned citizens. Reports of possibly illegal activities can be submitted on the website or through free smartphone applications. MPA Guardian is currently focused on California's marine protected areas, with plans to expand it to MPAs across the country.

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

### **Science & Engineering Festival – Washington, D.C.**

The 3rd USA Science & Engineering Festival, April 26-17 in Washington, D.C., will feature over 3,000 interactive exhibits, stage shows, the first X-STEM extreme STEM symposium, and other exciting attractions. This event is free.

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

### **Smartphone to Digital Microscope**

Build a digital camera microscope cheaply, if you have a smartphone. This website gives step-by-step instructions on how to build a stand which turns your phone into a microscope. Then, with the addition of a second lens, magnification can be as high as 375x. Students can observe plant cells and more, and even photograph their observations.

<http://www.instructables.com/id/10-Smartphone-to-digital-microscope-conversion/>