

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
INFORMATION EXCHANGE FOR MARINE EDUCATORS

OCTOBER 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

Directory of Open Access Journals

The Directory of Open Access Journals indexes and provides access to 1,720,260 articles in 9,986 journals from 134 countries, at this time. Subject areas include Biology and Life Science, Social Sciences, and more. Visitors can search by title, keywords, and more.

<http://doaj.org>

WEBSITE OF THE MONTH

Getting The Picture: Our Changing Climate

Getting The Picture: Our Changing Climate is a multimedia tool for climate education. Photographer James Balog and his team offer archives of media, film, photography and first-hand accounts of the Earth's changing climate. Scroll over and click on the

numbers to enter the website to view graphs, charts, photos and more. The resources for teachers and students offer links to a variety of additional climate change websites. <http://www.gettingthepicture.info/>

REQUESTS

Needs Assessment Survey

The National Centers of Ocean Science Education Excellence (COSEE) Network is in the process of transitioning to an independent consortium. It will be open to all ocean science research and academic institutions and organizations with a mission to promote ocean science research and ocean literacy and will begin accepting individual members in late 2014. They seek input as to how to meet the broader community's needs and assess how this new network of institutions and individuals can best meet the needs of ocean scientists and educators. Please take a few minutes to participate in the needs assessment prior to October 6, 2014.

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

GRANTS AND OPPORTUNITIES

Adopt-A-Beach RFP

The California Coastal Commission seeks an organization to coordinate the 2014 Kids' Adopt-A-Beach School Assembly and Beach Cleanup Program in San Francisco. The deadline for application is October 14, 2014.

<http://www.coastal.ca.gov/publiced/pendx.html>

Ben & Jerry's Foundation Grassroots Organizing for Social Change Program

The Ben & Jerry's Foundation offers competitive grants to non-profit, grassroots community organizations working to bring about social change by addressing the underlying conditions of societal and environmental problems. The next deadline for application is October 15, 2014.

<http://benandjerrysfoundation.org/the-grassroots-organizing-for-social-change-program/>

BLUE Ocean Conservation Fellowship

The National Geographic Society and partners will award a BLUE Fellowship Grant to the most innovative solution that protects marine reserves around the world. The categories are education, network, and technology. The deadline for submission is October 24, 2014.

<http://create.it/campaign/the-blue>

California Whale Tail Grants

The California Coastal Commission's Whale Tail Grants Program is accepting proposals for coastal and marine education projects. The program supports marine science education and projects encouraging people to value and take action to improve the health of California's marine and coastal environments. There is a special subcategory for projects addressing climate change and/or ocean acidification. Emphasis is on reaching underserved students or members of the public. The deadline for application is November 1, 2014.

<http://www.coastal.ca.gov/publiced/plate/plgrant.html>

Coral in Danger International Prize

The purpose of the first Coral in Danger International Prize for Research in Coral Reef Studies is to reward the projects and activities of groups of student (PhD and MsC) for scientific research in coral reef sciences leading to improving coral reef health and life. See the website for contact information for further details.

<http://www.nf-pogo-alumni.org/share/view/69426504>

Coral Reefs Program Spring 2015 Request for Proposals

The National Fish and Wildlife Foundation announces the Spring 2015 Request for Proposals for its Coral Reefs Program. An applicant webinar will be held October 7, 2014. This cycle focuses on the establishment of standardized baseline water quality and reef health measurements in three priority watersheds and the development of a rapid assessment protocol to map land based sources of pollution and prioritize mitigation opportunities. The deadline for pre-proposals is October 20, 2014.

<http://www.nfwf.org/coralreef/Pages/spring2015rfp.aspx#.VCm-0haFkro>

Every Day Capacity Building Grants

Every Day Grants from the National Environmental Education Foundation, with support from Toyota Motor Sales USA, Inc., help strengthen nonprofit public lands support groups, enabling them to do more to connect their communities to the land. Capacity Building Grants will be awarded to groups who make the best case for how the funds will build their capacity to better serve the lands they love. The next deadline for application is October 30, 2014.

<http://publiclandseveryday.org/grants/capacity-building-grants>

From the Bow Seat Ocean Awareness Student Contest

The goal of this contest is to challenge middle and high school students to think critically about challenges facing the ocean. This year's contest theme is Our Oceans, Our Plastic. The website offers links to scientific literature, pollution websites, resources on artists and writing, and much more. The deadline for entry is June 15, 2015.

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

Gee Whiz Kids Award for Community Service

The Heart of America Foundation's Gee Whiz Kids Award honors children age 12 and under who have made a difference in the lives of others through acts of caring and compassion. The deadline for nomination is October 31, 2014.

<http://www.heartofamerica.org/heroes/geewhiz.htm#nominate>

Get to Know Contest

Youth ages 19 and under are invited to get outside and create original works of art, writing, photography, video, and/or music inspired by nature or the outdoors. The contest urges youth to get outdoors, get inspired, and share their outdoor experiences. The deadline for application is November 1, 2014.

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

Karma for Cara Foundation Micro-Grants

The Karma for Cara Foundation encourages kids 18 and under to apply for micro-grants to complete service projects in their communities. Applications are accepted year-round.

<http://www.karmaforcara.org/get-involved>

Lexus Eco Challenge

The Lexus Eco Challenge is designed to educate and empower middle and high school students to take action to improve the environment. Within the topic of Land & Water or Air & Climate, students identify an environmental issue that affects their local community and devise an action plan. Be sure to check out the lesson plans and judging criteria. The deadline for submission is December 8, 2014.

<http://lexus.scholastic.com/>

Marisla Environmental Program

The Marisla Foundation offers Environmental Program grants for activities that promote the conservation of biological diversity and advance sustainable ecosystem management. Primary emphasis is on marine resources conservation with a geographic focus on western North America, Chile, and the western Pacific. The program also supports the search for solutions to health threats caused by toxic chemicals. The next deadline for application is October 15, 2014.

<https://online.foundationsource.com/public/home/marisla>

Mickelson ExxonMobil Teachers Academy

Nominate a teacher for the 2015 Mickelson ExxonMobil Teachers Academy, an all-expenses-paid professional development program for teachers of grades 3-5, to be held July 21-25, 2015 in Jersey City, New Jersey. Participants will learn interactive ways to inspire their students in math and science. The deadline for nomination is Oct. 31, 2014.

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

N-Vision a Brighter Future School Grant

N-Vision a Brighter Future Grants fund hands-on projects in science, technology, engineering and math (STEM). Projects that involve students directly, incorporate community resources, and use interdisciplinary or team-teaching strategies are preferred. The deadline for application is November 14, 2014.

<http://www.westinghousenuclear.com/Community/EducationalGrants.shtm>

Ocean 180 Video Challenge

COSEE Florida invites ocean scientists to share 3-minute video abstracts detailing recently published ocean science research and its importance. The deadline for submission and registration for classroom voting is December 1, 2014; check the website for additional timelines.

<http://ocean180.org/>

Pacific Northwest B-WET Orientation Workshop - Oregon and Washington

NOAA's B-WET program will hold two orientation workshops in anticipation of upcoming funding opportunities, October 14, 2014 in Newport, Oregon, and October 15, 2014 in Seattle, Washington. Topics will include the upcoming funding opportunity, how to apply, next steps, and questions. In addition, a webinar will be held for those who cannot attend in person.

<https://www.facebook.com/naabwet>

Prudential Spirit of Community Awards

The Prudential Spirit of Community Awards honor young people in grades 5-12 for outstanding volunteer service to their communities. The deadline for application is November 4, 2014.

<http://spirit.prudential.com/view/page/soc>

Solve for Tomorrow Contest

Samsung and its partners offer the Solve for Tomorrow contest to foster an increase in the pursuit of STEM education and illustrate the practical impact that applying these subjects can have. Selected participants create a video showing how STEM can help improve the environment in their community. The deadline for application is October 31, 2014.

<http://pages.samsung.com/us/sft/home.html>

Student Film Competition

The San Francisco International Ocean Film Festival is designed to give students in grades 6-12 an opportunity to tell their story about the ocean while discovering and enhancing their skills as filmmakers. Submit an ocean-related film that is 5 minutes or less. The deadline for submission is January 12, 2015.

<http://oceanfilmfest.org/wp-content/uploads/2014/09/StudentFilmCompetitionEntryFormFinal2015-CopyrightEdit9-5-2015-1.pdf>

VolunTEEN Nation International Service Project Grants

Students ages 13-22 from the United States going abroad to volunteer or study in a developing country are encouraged to apply for an international service-learning mini-grant from VolunTEEN Nation. Applications are accepted year-round. Be sure to check out the links to scholarships and grants under the Resources link.

<http://www.volunteennation.org/blog/categories/latest-news/372-apply-for-an-international-service-project-grant?sf17720015=1>

FELLOWSHIPS, INTERNSHIPS, AND TEMPORARY OPPORTUNITIES

Coral Restoration and Conservation Internship

The Coral Restoration Foundation is accepting applications for the Winter/Spring 2015 semester in Key Largo, Florida. The internship may include both land-based and in-water duties, and offers a small stipend. The deadline for application is November 7, 2014.

<http://www.coralrestoration.org/get-involved/internships/>

Earth Expeditions and Global Field Master's Program

The Cincinnati Zoo and Botanical Garden, in partnership with Miami University's Project Dragonfly, offers Earth Expeditions graduate courses and the Global Field Program master's degree, many with an emphasis on marine science and education. Sites for 2015 include the Australia, Baja, and many more. The deadline for application is January 28, 2015.

<http://earthexpeditions.org/marine>

CONFERENCES, WORKSHOPS, AND PROFESSIONAL DEVELOPMENT

AAAS Annual Meeting

The American Association for the Advancement of Science annual meeting, February 12-16, 2015 in San Jose, California, will feature scientists, educators, policymakers, and others from some 50 nations and a full spectrum of disciplines. The meeting theme is

Innovations, Information, and Imaging. The deadline for poster submission is October 23, 2014. Check out the pre-conference, Citizen Science 2015.

<http://meetings.aaas.org/>

CERF Conference

The Coastal and Estuarine Research Federation's (CERF) 2015 conference, November 8-12, 2015 in Portland, Oregon will encourage interaction among coastal and estuarine scientists and managers, and include a special focus on the Grand Challenges in Coastal and Estuarine Science.

<http://cerf.memberclicks.net/cerf2015>

Citizen Science – California

A pre-conference of the AAAS Annual Meeting, Citizen Science 2015 is the inaugural conference of the Citizen Science Association, February 11-12, 2015 in San Jose, California.

<http://citizenscienceassociation.org/conference/citizen-science-2015/>

Coral Bleaching - Online

Science and marine educators of grades 6-8 can learn how to use NOAA's new Data in the Classroom module, Investigating Coral Bleaching Using Real Data, through two online webinars, October 7 and 21, 2014. The NOAA Data in the Classroom Project develops curriculum designed to help teachers and students use real scientific data to explore dynamic Earth processes and understand the impact of environmental events on a regional or global scale. Each curriculum module features easy-to-use curriculum materials and specially designed websites. Free registration is required.

<https://www.smores.com/hew8z>

Facilitating Learning through Outdoor Watershed Education - Online

The free, online course from National Geographic, FLOW Education: Facilitating Learning through Outdoor Watershed Education, has already begun, but runs through November 6, 2014. The course is designed for classroom teachers in grades 4-8 to learn about watersheds and outdoor education using the Chesapeake Bay watershed as an example. The course introduces technologies for investigating watersheds and helps participants plan and implement outdoor experiences.

<https://www.coursera.org/course/watershed>

GCFI Conference

The theme for the 67th Gulf and Caribbean Fisheries Institute Conference, November 3-7, 2014 in Barbados, is *Small islands, big issues: applying fisheries and marine science to solve problems and create opportunities*. The conference will focus on applying fisheries and marine science to solve problems and create opportunities in Small Island Developing States and larger countries.

http://www.gcfi.org/Conferences/67th/Barbados_en.html

Georgia Shorebirds Conservation Teacher Workshop - Georgia

The Sapelo Island National Estuarine Research Reserve is hosting this teacher workshop November 21-23, 2014 on Sapelo Island, Georgia. The workshop is open to formal and informal educators of all grade levels. Participants will receive curriculum and resource materials. The deadline for registration is November 1, 2014.

<http://www.sapelonerr.org/georgia-shorebirds-conservation-teacher-workshop/>

NAAEE Conference

The North American Association for Environmental Education will hold its 43rd Annual Conference and 11th Annual Research Symposium, October 8-11, 2014 in Ottawa, Canada. The conference theme is Building Momentum for the Next Chapter.

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

NSTA STEM Forum & Expo - Minnesota

The National Science Teachers Association offers science content, teaching strategy, and more. The 2015 STEM Forum & Expo will be held in Minneapolis, Minnesota, May 20-23, 2015. The deadline for submission is December 1, 2014.

<http://www.nsta.org/conferences/sessions.aspx>

Ocean Exploration Workshop – Oregon

NOAA's Ocean Exploration Program and partners offer the Okeanos Explorer Education Materials Collection Why Do We Explore? Professional Development Workshops for Educators, November 15, 2014 with the Oregon Museum of Science and Industry in Portland, Oregon. The deadline for registration is October 24, 2014. Participants will receive curriculum with CD-ROM's, certificates of participation, and more.

Contact Nate Lesiuk at nlesiuk@omsi.edu

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

Ocean Literacy Summit - Massachusetts

The Ocean Literacy Summit, November 6-7, 2014 in Woods Hole, Massachusetts, aims to advance ocean literacy across New England by exploring the issues facing people and the ocean.

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

Storytelling for Teaching and Learning in EE – Online

This EECapacity Online Course, October 13-November 8, 2014, is designed for environmental educators to explore the role storytelling can play in facilitating student learning, and as a teaching tool in both formal and non-formal settings. Educators will be given opportunities to consider the power of storytelling as part of one's personal learning process and examine the role storytelling can play as a means to disseminate environmental knowledge through various social media outlets.

<https://sites.google.com/a/eelearn.net/eelearning-portal/storytelling-for-learning-and-teaching-in-ee>

Water: The Essential Resources – Online

This free, online course from National Geographic, October 15–December 17, 2014, is for teachers of grades 4–8, focusing on ocean and freshwater topics and teaching strategies.

https://www.coursera.org/course/waterandenvironment?ar_a=1

Wilderness Management Distance Education Program - Online

The University of Montana's Wilderness Management Distance Education Program offers accredited university courses in wilderness management. Courses are offered as traditional correspondence courses or interactive online courses through the Wilderness Management Distance Education Program in the College of Forestry and Conservation.

<http://wmdep.wilderness.net/>

Youth Ocean Conservation Summit

The third annual Youth Ocean Conservation Summit will be held November 8, 2014 in Sarasota, Florida. Youth participants will learn from marine scientists and conservationists about current threats facing marine ecosystems, will work with mentors to develop action plans for their own ocean conservation projects, and will take part in workshops designed to give them the skills necessary to successfully implement these projects. In conjunction with the Youth Ocean Conservation Summit, Mote Marine Laboratory will host the annual Community Ocean Conservation Film Festival, November 8, 2014. Hurry - the deadline for registration is October 3, 2014.
http://www.stowitdontthrowitproject.org/pb/wp_a9baf081/wp_a9baf081.html

EDUCATIONAL RESOURCES

Climate at Your Doorstep

The Climate at Your Doorstep project connects participants directly with leading climate change experts through social media to share information about climate change impacts that are occurring in readers' own backyards. A panel of scientists and experts specializing in climate change will monitor the #ClimateDoorstep and other daily climate social media channels and will directly respond to readers' questions, photos, and videos about environmental changes they may be experiencing in their own communities.

<http://www.dailyclimate.org/doorstep>

Communicating Climate Change

Solution Generation and ecoAmerica aim to catalyze higher education leadership on climate change by empowering college and university leaders to lead by example and engage others in climate solutions. The website provides a range of communication tools, resources, and more to design and implement strategies to inspire and empower students, faculty, and others. Check out the Communicating on Climate guide, links to resources for energy performance improvement, and more.

<http://solutiongeneration.org/>

CREEC Resource Directory

The California Regional Environmental Education Community (CREEC) website offers a variety of professional development and student programs and resources. Topics include ecology, ocean ecosystems, biodiversity, and much more. The website also offers links to grant resources, news and events, and more.

<http://creec.org/>

Earth Science Week

This year, Earth Science Week, October 12-18, 2014, celebrates Earth's Connected Systems – from land to sea, ice to sky, and everything living in between. Check out the educator resources, order a toolkit, and more. Be sure to also check out the links from NASA's Earth Science Week website, including the Know Your Earth quiz, the All About Earth storybook, and much more .

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

<http://nasaesw.strategies.org/educational-resources/>

Education Resources for the Alaska Region

The National Climate Assessment education resources for the Alaska region highlight five key messages, including disappearing sea ice, native communities, and more. The resources include links to lesson plans, videos, and more.

<http://www.climate.gov/teaching/alaska-region>

Education Resources for the Northwest Region

The National Climate Assessment education resources for the Northwest region highlight four key messages: Water-related Challenges, Coastal Vulnerabilities, Impacts on Forests, and Adapting Agriculture.

<http://www.climate.gov/teaching/northwest-region>

Ensia

From the Institute on the Environment at the University of Minnesota, Ensia is a magazine showcasing environmental solutions in action. The magazine offers short articles on a variety of current science and sustainability topics, including Ecosystems, Culture, Business, and more. Sections include articles, interview, multimedia, and more. Visitors can sign up for the weekly newsletter highlighting top stories.

<http://ensia.com/>

ENSO Blog

On NOAA's Climate.gov website, a group of climate scientists periodically share a new post and engage in discussions on the El Niño-Southern Oscillation (ENSO). Check back for scientific perspectives on the ongoing El Niño Watch.

<http://www.climate.gov/news-features/department/8443/all>

Explaining Extreme Events of 2013 from a Climate Perspective

A new report from the Bulletin of the American Meteorological Society, Explaining Extreme Events of 2013 from a Climate Perspective, addresses the causes of 16 individual extreme events that occurred across four continents in 2013.

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

Exploring Atlantic Canyons and Seamounts 2014

From September 4 to October 7, 2014, NOAA Ship Okeanos Explorer explores the largely unknown deep-sea ecosystems of the U.S. Atlantic coast. The at-sea and shore-based science team will collect baseline data in the Atlantic submarine canyons and along the New England Seamount Chain. Watch live feeds from the remotely operated vehicle Deep Discoverer throughout the New England Seamount and Atlantic Canyon regions.

<http://oceanexplorer.noaa.gov/okeanos/explorations/ex1404/welcome.html>

Habitat the Game Enviro App

The Wildlife Conservation Society and Rainforest Alliance have created this app for kids to save virtual endangered species and reduce their carbon footprint while on real-life missions. Designed for players aged 7-12, Habitat encourages care of virtual endangered animals while players earn points by completing real-life missions, like recycling or visiting a park or zoo.

<http://www.habitatthegame.com>

Independent Generation of Research (IGoR)

IGoR's goal is to help everyone, from science enthusiasts and hobbyists to professionals, do scientific research by providing a platform for people to pool their knowledge and resources. Sections include projects, articles, sparks, and a contact list of scientists who may be able to provide advice or feedback.

<http://igor.wikidot.com/>

NASA Innovations in Climate Education

NASA Innovations in Climate Education (NICE) promotes climate and Earth system science literacy and seeks to increase the access of underrepresented minority groups to science careers and educational opportunities. Features include climate education news, resources, and more. The educator resources links to online materials specifically related to climate education, along with links to data that can be used to explore climate change.

<https://nice.larc.nasa.gov/>

Nature's Toolbox

This website from *Nature, the International weekly journal of science*, offers a hub for scientific software, apps, and online tools. Current links include Sharing online: how to make data open; Citizen science: how to get volunteers engaged; and more.

<http://www.nature.com/news/toolbox>

Observe Everything

Science Friday is celebrating observation, and challenging you and your students to get out and observe everything. The initiative is an invitation to practice the skill of observation with Science Friday's community of scientists, students, and educators. Submissions will be highlighted throughout the month of October on the Science Friday website and its social media outlets.

<http://www.sciencefriday.com/segment/09/26/2014/science-friday-science-club-observe-everything.html>

Open Science World

Open Science World is a science webzine whose mission is to enable active interaction between the general public and researchers. Researchers can post pieces about their academic research in an understandable way and visitors can post through the Leave a Reply feature. Topics include Environment, Life on Earth, and more.

<http://openscienceworld.com/>

Race 4 Birds Birding Competitions for Young People

The Race 4 Birds Foundation promotes youth birding competitions. The website offers a planning guide, resources, and more.

<http://www.race4birds.org>

Sharks International Keynotes

The Southern Fried Science team have posted the keynote addresses from the 2014 Sharks International conference in Durban, South Africa. Learn about sustainable shark fisheries, why scientists and conservationists need to focus on the less charismatic shark species, and more.

<http://www.southernfriedscience.com/?p=17732>

Sharks: Taking a Bite Out of the Myth

Check out this featured Bridge DATA Activity - Sharks: Taking a Bite Out of the Myth. Many shark populations worldwide are dwindling at alarming rates. Most fish bear tiny offspring in enormous numbers, a reproductive strategy that lets their stocks recover when fishing pressure is lifted. But sharks are strongly "K-selected" species whose offspring emerge big and well-developed, yet few in number. This makes them especially vulnerable to overfishing. In Sharks: Taking a Bite out of the Myth, students mine data from The National Marine Fisheries Service on commercial landings of sharks.

http://www2.vims.edu/bridge/DATA.cfm?Bridge_Location=archive0999.html

Tri-Agency Climate Education Catalog

The TrACE Catalog includes climate education projects from NASA, NOAA, and the NSF. Visitors to the website can search for projects through an interactive map and can filter by resource type, target audience, and more.

<https://nice.larc.nasa.gov/>

Water's Edge: The Crisis of Rising Sea Levels

Reuters published a multi-part series on rising sea levels. The report is available for viewing on the website.

<http://www.reuters.com/investigates/special-report/waters-edge-the-crisis-of-rising-sea-levels/>

Winged Warnings

Created by Environmental Health News in partnership with National Geographic, Winged Warnings explores our changing environment through birds and bird health.

<http://www.environmentalhealthnews.org/ehs/news/2014/aug/wingedwarnings1summary>

Yale Climate Connections

Climate Connections is a daily public radio series produced by the Yale Center for Environmental Communication. The series aims to help radio listeners understand how climate change is impacting our lives and what diverse people and organizations are doing to reduce the associated risks.

<http://www.yaleclimateconnections.org/climate-connections/>

INITIATIVES, JOURNALS, and MORE

Special Days for EE

Check out the updated 2015 Special Days for EE school year planner. Be sure to celebrate Save the Frogs Day (April 25, 2015), Pollution Prevention Week (September 15-21, 2015), and many more. Each links to a bit of information about the time period along with a link to a website for details.

<http://eeingeorgia.org/resource/about.aspx?s=16215.0.0.4863>