

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
INFORMATION EXCHANGE FOR MARINE EDUCATORS

MAY 2016

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

Navigating Governance Networks for Community-Based Conservation

This open-access article by S. M. Alexander et al in the *Frontiers in Ecology and the Environment* synthesizes an emerging and interdisciplinary literature on governance networks in conservation and natural resource management settings.

<http://onlinelibrary.wiley.com/doi/10.1002/fee.1251/full>

PROGRAM OF THE MONTH

GoMRI Education Resources

The Gulf of Mexico Research Initiative has a myriad of activities and resources on their Education Resources website, designed for both informal and formal educators. There

are educational resources and activities, multimedia, research stories, and much more. Check this out.

<http://education.gulfresearchinitiative.org/>

WEBSITE OF THE MONTH

Cli-Fi: Climate Science in Literary Texts

InTeGrate offers the free Cli-Fi: Climate Science in Literary Texts, a two- to three-week teaching module which addresses both the understanding of climate science through data analysis and interpretation, and the understanding of literary tools and techniques through which climate science is portrayed. The module is part of a growing collection of classroom-tested materials being developed by InTeGrate. The materials engages students in understanding the Earth system as it intertwines with key societal issues. Materials for faculty support, adoption, and individual notes/stories from pre-publication classroom practice are available. Check this out, and check back for more.

http://serc.carleton.edu/integrate/teaching_materials/climate_fact/index.html

GRANTS AND OPPORTUNITIES

BEST Small Grants

The BEST 2.0 Programme is a funding program supported by the European Commission as part of the EU Biodiversity for Life (B4Life) program. It promotes the conservation of biodiversity and sustainable use of ecosystem services, including ecosystem-based approaches to climate change adaptation and mitigation, as a basis for sustainable development in Europe's Overseas Countries and Territories. The deadline for concept note submission is May 23, 2016.

<https://portals.iucn.org/best/>

Funky Nests in Funky Places

The Cornell Lab of Ornithology encourages people of all ages to submit photos, artwork, or stories about Funky Nests in Funky Places. The deadline for submission is July 1, 2016.

<http://celebrateurbanbirds.org/news/funky-nests-in-funky-places-is-back/>

Good Neighbor Impact School Grant

The State Farm Good Neighbor Impact School Grant supports the efforts of K-12 public school superintendents and principals to improve student outcomes while strengthening their local communities. The deadline for application is May 6, 2016.

<http://ysa.org/grants/school-grants/goodneighbor/>

Greening Stem in Action Photo Contest

The Greening STEM in Action Photo Contest is sponsored by Mitsubishi Corporation Foundation for the Americas, and offers a chance to share pictures of your EEWeek activities. The deadline for entry is May 6, 2016.

<https://www.neefusa.org/greening-stem-photo-contest>

#H2OBigPicture Photo Contest

The National Environmental Education Foundation (NEEF) and the EPA's Office of Water invite photo submissions that demonstrate how participants protect water quality where they live. The deadline for submission is May 27, 2016.

<https://www.neefusa.org/nature/water/h2obigpicture-photo-contest>

MASNA Scholarships

The Marine Aquarium Societies of North America offers the MASNA Scholarship to one full-time undergraduate and one graduate student seeking degrees in the marine science field. The deadline for application is June 17, 2017.

<http://masna.org/masna-programs/scholarship-program/>

Mazda Foundation Grants

The Mazda Foundation awards grants to programs promoting education and literacy, environmental conservation, cross-cultural understanding, social welfare, and scientific research. The deadline for application is July 1, 2016

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

Museum Field Trips – Washington, D.C.

Google is providing financial assistance to make field trips to the National Museum of Natural History possible for middle-school students from Title I schools in the D.C. area. The museum is hosting Field Trip Days sponsored by Google on select days through June 2016.

<http://qrius.si.edu/blog/field-trip-opportunity-title-i-middle-schools-washington-dc>

NAAEE Annual Conference Scholarships

The North American Association for Environmental Education Annual Conference 2016, From Inspiration to Impact, will take place October 19-22, 2016 in Madison, Wisconsin, with the 13th Annual Research Symposium, October 18-19, 2016. Join environmental educators from North America and abroad, take advantage of the field experiences offered, and more. The deadline for scholarship application is May 31, 2016.

<https://naaee.org/conference/scholarships>

Nitrogen Reduction Grand Challenge

The Tulane Nitrogen Reduction Challenge has re-launched with an expanded scope. This nitrogen reduction challenge is the initial step in a multi-phased effort by Tulane University to seek innovative solutions to reducing hypoxia not only in the Gulf of Mexico but globally. The deadline for registration is June 30, 2016.

<http://tulane.edu/tulaneprize/waterprize/>

One Shared Place Contest

The American Geosciences Institute invites educators and their students, formal and informal, to form teams to enter the One Shared Place video contest. Teams submit a 30-90 second original video that tells viewers about an outdoor place that is special to them, including relating the place to elements of geoh heritage and geoscience as they relate to one shared place of significance. The deadline for submission is August 16, 2016.

<http://www.earthsciweek.org/one-shared-place>

Sea Youth Rise Up Video Competition

Young people ages 16-21 are invited to enter the Sea Youth Rise Up Video Competition, by sharing a 90-second video message highlighting their personal opinion about the current state of the ocean and innovative ideas about how young people can help improve the health of the planet. The deadline for entry is May 13, 2016.

<http://www.seayouthriseup.com/#new-page>

Seattle Aquarium Conservation RFP

The Seattle Aquarium is recruiting a consultant to help create a vision for the future of conservation at the aquarium. The deadline for submission is May 15, 2016.

www.seattleaquarium.org/document.doc?id=2221

Seawall Interpretive Trail Request for Proposals

Artist Boat's Seawall Interpretive Trail (Project S.I.T.) public art residency program is a beautification project to transform 70 Galveston Seawall benches into educational works of art that depict the coastal and ocean heritage of Galveston Island and the Gulf of Mexico. Artist Boat is issuing the last call for design proposals for the last 33 benches. See the website for bench topics and details of the project. The deadline for proposals is May 22, 2016.

<http://www.artistboat.org/project-s-i-t.html>

Contact Amanda Rinehart at arinehart@artistboat.org

Weather Art Contest

The Weather Art Contest from the National Weather Service is open for kids ages 5-12. The theme is The Weather Outside My Window. The deadline for submission is May 20, 2016.

<http://www.weather.gov/owlie/contest>

White House Student Film Festival

The theme of the third annual White House Student Film Festival is The World I Want To Live In. Students in grades K-12 can submit a video that's three minutes or less. The deadline for submission is July 15, 2016.

<https://www.whitehouse.gov/FilmFest>

World Oceans Day Festival and Marine Debris Art Contest - Texas

Artist Boat is celebrating World Oceans Day, June 8, 2016, with an international celebration in Galveston, Texas. Submit a piece of art to be displayed at the festival, using marine debris. The deadline for submission is June 3, 2016; see the website for details.

<http://www.artistboat.org/seaweed-art-contest-and-festival.html>

Young Birder of the Year Contest

The American Birding Association sponsors the Young Birder of the Year, an annual contest for youth ages 10-18. Submissions are due by October 15, 2016, but youth must register by June 15, 2016.

<http://youngbirders.aba.org/young-birder-of-the-year-contest>

Young Professionals Marine Challenge

The IUCN World Commission on Protected Areas Marine Young Professionals Task Force and partners offer this competition, inviting youth and young professionals, age 35 and under, actively working on innovative and creative marine conservation initiatives from around the world. The deadline for entry is May 31, 2016.

<http://blog.protectplanetoocean.org/2016/04/the-young-professionals-marine.html>

FELLOWSHIPS, INTERNSHIPS, AND TEMPORARY OPPORTUNITIES

EcoLeader Graduate Student Fellowship

The National Wildlife Federation is accepting applications for a graduate student fellowship opportunity for four months this summer. The paid fellow will develop career development resources on topics such as networking, mentoring, and more. The deadline for application is May 15, 2016.

<http://www.nwf.org/Campus-Ecology/Get-Involved/Apply-for-a-Fellowship.aspx>

Marine Science Camps - Louisiana

The Louisiana Universities Marine Consortium (LUMCON) and the Coastal Waters Consortium are offering four marine science camps for students in grades 9-12. The camps will focus on Art & Science, Marine Science, Marine Technology and Engineering, and Field Marine Research.

http://cwc.lumcon.edu/?page_id=4135

CONFERENCES, WORKSHOPS, AND PROFESSIONAL DEVELOPMENT

Capitol Hill Ocean Week – Washington, D.C.

Capitol Hill Ocean Week, hosted by the National Marine Sanctuary Foundation, June 7-9, 2016 in Washington, D.C., offers an opportunity to network with colleagues who share interests in marine policy, ocean science, and coastal issues.

<http://www.marinesanctuary.org/chow/2016/>

Coastal Ocean Science Academy - Massachusetts

The Coastal Ocean Science Academy, July 11-15 and August 8-19, 2016 from Nahant, Massachusetts, is for students in middle and high school who have a strong interest in science and the marine environment. The program includes class and field instruction. A limited number of scholarships are available; the deadline for application is June 24, 2016.

<http://www.northeastern.edu/cos/marinescience/outreach/coastal-ocean-science-academy/>

Communicating Climate Change - Online

The National Marine Sanctuaries Webinar Series provides educators with educational and scientific expertise, resources, and training to support ocean and climate literacy in the classroom. The next webinar in the series, May 25, 2016, is Communicating Climate Change: Resources for Making it Stick. Be sure to check for upcoming webinars, and the archives for webinars that you may have missed.

<http://sanctuaries.noaa.gov/education/teachers/webinar-series.html>

Delaware Wetland Warrior and Wetland Apprentice Awards

Delaware's Division of Watershed Stewardship is seeking nominations for the 2016 Delaware Wetland Warrior Award and the program's new youth award, Wetland Apprentice. These awards recognize exemplary efforts to study, protect, and preserve wetlands and the critical services they provide to all Delawareans. The deadline for application is June 24, 2016.

<http://www.dnrec.delaware.gov/Admin/DelawareWetlands/Pages/Portal.aspx>

Designing Inquiry-Based Curriculum Units Workshop - Virginia

St. Catherine's School, Armfield Science Center offers the Designing Inquiry-Based Curriculum Units for Environmental Science and STEM July 25-July 27, 2016 in Richmond, Virginia. The workshop is for instructors interested in implementing hands-on learning through differentiated instruction who would like to be able to design their own standards-aligned, multidisciplinary, inquiry-based curriculum units. Registration is limited to 20 participants.

Contact Jeannette Adkins at jadkins@st.catherines.org

Green Eggs and Sand Workshop - Delaware

The Delaware Division of Fish and Wildlife will host a Green Eggs and Sand Workshop, May 20-22, 2016 in Smyrna, Delaware. Participants will receive a curriculum for middle and high school students. The deadline for registration is May 6, 2016.

<http://tydb.mobiusnm.com/workshop>

International Pacific Marine Educators Network Conference

The International Pacific Marine Educators Network (IPMEN) conference will be held August 10-13, 2016 in Manado, North Sulawesi. The conference theme is Making a Splash: Moving education into action. The second deadline for presentation submission is June 17, 2016 – see the website for details.

<http://ipmen.net/ipmen-indonesia-2016/call-for-presenters>

Marine Aquarium Conference of North America

The 2016 Marine Aquarium Conference of North America will take place September 9-11, 2016 in San Diego, California. The deadline for submission to the inaugural MASNA Scientific Poster Session is June 24, 2016.

<http://masna.org/masna-programs/masna-scientific-poster-session/>

<http://macnaconference.org/2016/>

Marine Technology Camp - Michigan

Northwestern Michigan College and the Marine Technology Society are offering this course, May 22-28, 2016 in Traverse City, Michigan. Students will use a variety of technologies, log ship time on research vessels conducting research using the technologies, and learn about several applications of the technologies. This program welcomes students of all disciplines potentially interested in using these technologies in their careers. The deadline for application has passed; late applicants will be considered based on available space.

<https://www.nmc.edu/programs/academic-programs/marine-technology/marine-technology-camp.html>

NMEA @ NSTA - California

NMEA members who have submitted a session proposal for the NSTA 2017 National Conference, March 30-April 2, 2017 in Los Angeles, California and wish to be a part of a marine science track, please send your assigned proposal ID#, session title, and abstract to Lauren Rader.

Contact Lauren Rader at lrader@oceanology.org

NMEA Conference

The theme for the 2016 National Marine Educators Association annual conference, June 27-30, 2016 in Orlando, Florida, is Making Waves: Current Connections in Marine

Science. Check out the conference schedule, workshops, and more. Be sure to check out the great field trips and sign up early to assure a spot.

<http://www.marine-ed.org/?conferences>

NMEA Pre-Conference Workshops – Florida

For those going to the NMEA conference, there are a variety of pre-conference workshops June 27, 2016 in Orlando, Florida. Topics include evaluation, climate change, conservation through film, and more.

http://www.marine-ed.org/page/NMEA_2016_Workshops

Ocean Exploration Workshops Parts One and Two – Louisiana

NOAA's Ocean Exploration Program offers the Okeanos Explorer Education Materials Collection Professional Development Workshops for Educators Why Do We Explore and How Do We Explore June 14-15, 2016 with the Audubon Aquarium of the Americas and hosted by the Science and Technology Education Center Louisiana Tech University in Ruston, Louisiana. The deadline for registration is May 25, 2016. Participants will receive classroom-ready lessons, certificates of participation, and other resources. A stipend may be available.

Contact Stephanie Smith at educationprograms@auduboninstitute.org

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

Professional Development for Early Career Scientists

The Consortium for Ocean Science Exploration and Engagement (COSEE) will offer Professional Development for Early Career Scientists as the second in its webinar series, May 18, 2016. Part of the webinar will focus on several professional development models that the COSEE network has developed, implemented, and tested with early career scientists. Free registration is required prior to May 16, 2016.

https://www.surveymonkey.com/r/COSEEWebinar_May2016

Professional Development Opportunity - Texas

The Texas State Aquarium seeks five K-12 educators to contribute to a series of lessons and activities focused on sharks - adaptations, diversity, conservation, and research, while earning a stipend and receiving CE credits. Spend August 1-5, 2016 in Corpus Christi, Texas.

<https://texasstateaquarium.org/programs-camps/teacher-resources/>

Summer Teacher Workshops - Oregon

The Oregon Coast Education Program offers two workshops in Newport and Charleston, Oregon, June 27–30 and July 11-14, 2016. The workshops are for teachers who are interested in teaching about the ocean and want to incorporate more watershed and coastal field experiences into their teaching. Topics include coastal ecology and habitats, impacts and solutions, working with data sets, and more.

<http://www.pacname.org/chap.shtml>

Teacher Workshops - Louisiana

This summer LUMCON and the Coastal Water Consortium are offering two professional development workshops in Cocodrie, Louisiana.

- From H-2-O: a free water quality workshop, June 1-4, 2016
- Ship Time & Shoreline, July 11-15, 2016

Contact: M. Conover at mconover@lumcon.edu

Teachers on the Estuary – North Carolina

The North Carolina Coastal Reserve & National Estuarine Research Reserve is hosting a free Teachers on the Estuary (TOTE) workshop June 22-24, 2016 in Beaufort, North Carolina. The field and research-based workshop is geared towards middle and high school teachers and will focus on estuarine ecosystems..

<http://www.nccoastalreserve.net/web/crp/teacher-workshops>

Teachers on the Estuary Workshops - Various

NOAA's National Estuarine Research Reserves are offering 30 Teachers on the Estuary programs this spring and summer around the country. Check out the 2016 Educator Training Opportunities page for the specific workshops.

<http://estuaries.noaa.gov/Teachers/Default.aspx?ID=170>

Trinity River Institute featuring Waters to the Sea® - Texas

Hamline University's Center for Global Environmental Education offers its Trinity River Institute, June 8-10, 2016 in Fort Worth, Texas, a field-based professional development opportunity for teachers of grades 4-8.

<http://www.hamline.edu/education/cgee/trinity/>

EDUCATIONAL RESOURCES

America's PrepareAthon

This community website from FEMA offers a range of materials to help you prepare for natural hazards including earthquakes, floods, and more. Materials on the website include supplies, communication plans, and more. Additional topics include forums and stories.

<https://community.fema.gov/>

Beachapedia

The Beachapedia website from Surfrider Foundation is similar to Wikipedia, but with articles that focus on beach and ocean issues. Topics include Beach Preservation and Access, Clean Water, Climate Change Adaptation, and more. Check out the Coastal Factoids and contribute links to educational materials on specific subjects. The information is also available in Spanish.

http://www.beachapedia.org/Main_Page

Benthic Deepwater Animal Identification Guide

NOAA's Okeanos Explorer website offers an online Benthic Deepwater Animal Identification Guide - a collection of *in situ* images taken during ROV explorations around the Hawaiian Archipelago and Johnston Atoll. This guide is a pilot project and will be updated on a periodic basis as new images become available, errors are detected and reported by taxonomists and others using the guide, or when taxonomic revisions are made to the various groups included here.

http://oceanexplorer.noaa.gov/okeanos/animal_guide/animal_guide.html

Citizen Science Page

NEEF offers a new citizen science website with curated citizen science projects, information, and resources in three categories: Nature, Weather + Climate, and Health.

<https://www.neefusa.org/citizen-science>

Climate Change: Vital Signs of the Planet

NASA's Global Climate Change: Vital Signs of the Planet website features a diverse set of resources related to the measurement, analysis, and dangers of global climate change. Interactive features include the Climate Time Machine, which allows users to go backward and forward through four different climate indicators including Sea Ice, Sea Level, Carbon Dioxide, and Global Temperature. Other resources include the water cycle, a virtual tour, and more.

http://climate.nasa.gov/climate_resource_center/interactives

Climate Choices

Climate Choices: How Should We Meet the Challenges of a Warming Planet? from NAAEE enables communities to explore the advantages and disadvantages of multiple options for addressing climate impacts. This issue guide is designed to promote meaningful, productive discussions, convened locally and online, about difficult issues that affect the environment and communities. The website links to moderator resources for using the guide along with downloadable full or abbreviated guides. There are also links to background information and educational resources on climate change and more.

<https://naaee.org/our-work/programs/environmental-issues-forums/eif-resources>

Climate Education Week Toolkit

The free Climate Education Week Toolkit offers standards-based, cross-disciplinary lesson plans, activities, and contests for K-12 students.

<http://www.earthday.org/campaigns/education/climate-education-week/>

Climate Stories Project

The Climate Stories Project is a forum for sharing stories about personal and community responses to climate change. They are looking for high school and college teachers who are interested in facilitating interview workshops in their classrooms. Workshops may be tailored to meet the needs of particular classrooms or topics, such as earth science, climate change science, geography, or more. Students in the workshops may also develop creative projects using the recorded interviews, such as digital storytelling or art projects.

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

Cool Critters

Andrew Hendry offers this Flickr website with over five thousand animal and plant pictures. They are free to use by non-profits.

https://www.flickr.com/photos/andrew_hendry/collections/72157630675030886/

Coral Health Atlas

The Coral Health Atlas, hosted by the University of Hawai'i, provides interactive access to coral health data and immersive data visualizations at study sites throughout the Hawaiian Archipelago. Additional information includes historical information about each study site and recent news.

<http://coralhealth.uhh.hawaii.edu/>

Deepwater Exploration of the Marianas

NOAA's Office of Ocean Exploration and Research website will follow the 2016 Deepwater Exploration of the Marianas expedition, April 20–July 10, 2016. The expedition posting hosts content essays, an Ocean Explorer Expedition Education Module, and more. Follow along with live feeds of remotely operated vehicle (ROV)

dives on the Internet . Three cruise legs will conduct mapping and operations in the deep waters of the Marianas Trench Marine National Monument and the Commonwealth of the Northern Mariana Islands. Operations will focus on understanding the diversity and distribution of these deepwater habitats.

<http://oceanexplorer.noaa.gov/oceanos/explorations/ex1605/welcome.html>

Design Essentials for Non-Profit Non-Designers

This blog from NonProfitReady.org offers tips about layout, typography, and images for newsletters, websites, and other promotional materials.

<https://www.nonprofitready.org/blog/design-essentials-non-profit-non-designers>

EARTH A New Wild

PBS Learning Media offers EARTH A New Wild, a new collection of multimedia educational resources for students in grades 5-12. Students can explore the crossroads between nature, conservation, and society.

<http://www.pbslearningmedia.org/collection/earth-a-new-wild/>

Ecosystems on the Edge

The Smithsonian Environmental Research Center offers these videos to provide glimpses of coastal zone ecosystems, both literally and figuratively on the edge. Discover the challenges life faces on the coasts and what can be done to save them.

<http://ecosystems.serc.si.edu/>

Educational Passages

Educational Passages uses miniature sailboats fitted with GPS as an educational tool for oceanography, earth science, geography, international relationships, and more. They are hoping to involve as many students and experts as possible, and Caribbean support is especially needed. Check out the upcoming program, sign up for the mailing list, and more.

<http://educationalpassages.com/>

Endangered Species Day

The 11th annual international Endangered Species Day is May 20, 2016. Check out the Endangered Species Day Toolkit for College Students, report your activities, and more.

<http://www.endangered.org/campaigns/endangered-species-day/>

Federal Resource Management and Ecosystem Services Guidebook.

This guidebook offers federal agencies and others information about common, credible approaches to incorporate ecosystem services concepts into natural resource management, planning, and decision making. It includes an overview of ecosystem services, examples of federal agency ecosystem services use, assessment methods, and more.

<https://nespguidebook.com/about-the-project/printable-guidebook/>

Great Barrier Reef Bleaching Images

For those teaching about corals, check out these open access video footage and still images taken during the aerial and underwater surveys of the Great Barrier Reef.

<https://www.dropbox.com/sh/yj8tt2mj5u0inmb/AACQ2b-aU1JMYZNfiyldAsTqa?dl=0>

Hurricane Webinar

The Hurricane Webinar 2016, May 17, 2016, is aimed at students in grades 4-6. The webinar will cover hurricane hazards, forecasting, preparedness, and more. Questions may be submitted in advance. Free registration is required.

<http://www.hurricanescience.org/resources/nhc5grade/>

iBiome-Wetland

This app allows users to explore the wetland habitat and associated species within. Users can build marshes and swamps, make plants and animals flourish, and more.

<https://itunes.apple.com/us/app/ibiome-wetland/id900933868?mt=8>

Induced Earthquakes

The U.S. Geological Survey offers this website about induced earthquakes. It offers links to observational studies, hazard estimation, and more on the myths and misconceptions surrounding manmade quakes.

<http://earthquake.usgs.gov/research/induced/>

Inner Space Center Education Programs

The Inner Space Center at the University of Rhode Island's Graduate School of Oceanography uses technology, including telepresence, to explore the global ocean, support research, and engage diverse audiences. Newly updated education programs may be done in-house in Narragansett, Rhode Island, or, depending upon distance and the selected program, may be conducted off-site or virtually.

<http://innerspacecenter.org/>

Love is in the Estuary

The Coastal & Estuarine Research Federation's (CERF) 2016 Spring newsletter is available for easy reading online. Read it for news and learn about the governing board's strategic planning process. Be sure to check out the article on pages 15-16 about Love is in the ... Estuary for reasons to love mud.

http://data.axmag.com/data/201604/20160428/U139653_F379594/FLASH/index.html

Moving Culture and Community

This article from the Natural Hazards Center discusses the plans of residents of Isle de Jean Charles to move culture and community in the face of sea level rise.

<https://hazards.colorado.edu/article/saving-place-isle-de-jean-charles-plans-to-move-culture-and-community>

Oceans International Educational Project

Oceans is an international educational project for students ages 12-16. The objective is to make the students realize, through their own observations, that the sea is not the same worldwide, and have them share their observations with other schools around the world using information and communication technologies. Materials are also available in Spanish and other languages.

<http://sagulla.org/en/education/>

Seasonal Change on Land and Water

In this worksheet-based activity hosted by NOAA's Climate.gov, students review global visualizations of incoming sunlight and surface temperature and discuss seasonal change. Students use the visualizations to support inquiry on the differences in

seasonal change in the Northern and Southern Hemispheres and how land and water absorb and release heat differently.

<https://www.climate.gov/teaching/resources/seasonal-change-land-and-water>

Sustainability Lesson Clearinghouse

The Green Education Foundation offers a searchable collection of free, sustainability-focused lesson plans. The lessons are grouped into grade bands PK-2, 3-5, middle school, and high school. Search topics include climate change, ecosystems, and much more.

<http://www.greeneducationfoundation.org/institute/lesson-clearinghouse.html>

Teacher at Sea Blog

Meet NOAA Teacher at Sea, Mary Cook, a high school teacher in Scammon Bay, Alaska. Mary participated in NOAA OER's Glacier Bay National Park expedition. Read about the expedition and follow along as Mary relates sea stories gathered on the cruise.

<https://teacheratsea.wordpress.com/category/2016/mary-cook-2016/>

Teaching Professor Blog

The Teaching Professor Blog, hosted by Magna Publications' Faculty Focus website, discusses a variety of topics of interest to educators. Topics include curriculum development, distance learning administration, classroom management, and much more.

<http://www.facultyfocus.com/topic/articles/teaching-professor-blog/>

INITIATIVES, JOURNALS, and MORE

48 Days of Blue

In the 48 days between Earth Day and World Oceans Day, join the National Aquarium's 48 Days of Blue Campaign and give something back to the planet. Sign up to complete a small conservation challenge each day. For example, if everyone goes a day without straws, it would keep 127 school buses worth of plastic from littering natural spaces.

<https://48daysofblue.com/>

American Trails Magazine

The free digital Spring 2016 issue of the American Trails Magazine is available, along with links to archived issues.

<http://www.americantrails.org/trailtracks/>

Tentacles Night - Texas

The Texas State Aquarium is planning a special teachers' family evening in Tentacles, the aquarium's newest exhibit, July 15, 2016 in Corpus Christi, Texas. Sign up for the newsletter or check back at the website for future details.

<https://texasstateaquarium.org/>