National Oceanic and Atmospheric Administration

Information Exchange for Marine Educators

Archive of Workshops and Professional Development

ACE Basin Adventure – South Carolina
Teachers are invited to participate in a free learning workshop in the ACE Basin, named for the Ashepoo, Combahee and Edisto rivers, a world-class ecosystem rich in habitat diversity, wildlife, and historical significance representing one of the largest undeveloped estuaries on the East Coast. The workshop, June 7-10, 2007 at Bennett's Point, South Carolina, will help teachers learn more about estuarine ecology, hammock islands, sea turtles, water quality, and the historical significance of the ACE Basin.
http://www.dnr.sc.gov/ccd/aceadvent.html

Acropora ssp. Information Gathering Workshops
NOAA Fisheries Service published a proposed rule to list elkhorn /(Acropora palmata) and staghorn /(Acropora cervicornis) corals as threatened under the Endangered Species Act. Pending a final determination on this rule, NOAA Fisheries is sponsoring stakeholder input workshops throughout south Florida, the Florida Keys, Puerto Rico, and the U.S. Virgin Islands to collect information concerning the conservation of the species.
http://sero.nmfs.noaa.gov/pr/protres.htm

Across the Sciences - Online
Across the Sciences, a 16-week online graduate course designed for grade 9-10 teachers, is a new course offered by Oregon Public Broadcasting and Biological Sciences Curriculum Study in cooperation with the National Teachers Enhancement Network of Montana State University. Through online video, computer simulations, assessments and reflective activities, teachers will gain content knowledge and teaching strategies in biology, physics, chemistry, astronomy, and earth science.
https://www.rmccorp.com/ATS/

Adaptations from the Depths - Texas
This workshop, February 17, 2007 in Houston, Texas, is sponsored by Flower Garden Banks National Marine Sanctuary. Find out how creatures have adapted to survive in an underwater world. Free curriculum and materials will be available. And while you're on the website, check out the other workshops available at the Houston Zoo.
http://www.houstonzoo.org/index.asp?page_ID=344

Adapting to Change: Promise, Pitfalls, and Politics – Colorado and Online
The Center for Technology and Policy Research and the Cooperative Institute for Research in Environmental Sciences offer this spring lecture series with a focus on climate adaptation. In-person sessions are held in Boulder, Colorado, and webcasts are offered.
http://sciencepolicy.colorado.edu/news/seminars_spring2014.html

Adaptive Management of Natural Resources - Online
The US Geological Survey and the Florida Fish and Wildlife Conservation Commission are offering a free online short course, June 7-11, 2010, to expose scientists and managers to the basic components and process of adaptive management.
http://www.fort.usgs.gov/brdscience/AdaptiveManagementCourse.htm

Adopt-A-Stream Training - Georgia
The Elachee Nature Science Center offers Adopt-A-Stream Training, February 10-11, 2006, in Gainesville, Georgia. Join up for a total immersion into stream monitoring. Get an in-depth course in stream ecology as you become certified in both biological and chemical monitoring techniques. This is an ideal service-learning training course for teachers and students (grades 5-12) alike.
http://www.elachee.org/TeachEduc/Teacher_Education.htm

Advanced Conservation GIS and Remote Sensing course - Virginia
The Smithsonian National Zoological Park's Conservation and Research Center is offering the advanced conservation GIS and remote Sensing course, *Measuring Landcover Change and its Impact on Endangered Species,* April 3-7, 2006 and September 11-15 2006 in Front Royal, Virginia. The course will provide conservation biologists and wildlife managers an opportunity to learn how GIS and remote sensing can be used to assess the conservation status of endangered species.
http://nationalzoo.si.edu/ConservationAndScience/ConservationGIS/GIS_training/advanced_GIS

Advanced Courses in Tropical Marine Sciences - Florida
Mote Marine Laboratory's Tropical Research Laboratory is pleased to announce the schedule for Advanced Courses in Tropical Marine Sciences, August 2007 on Summerland Key, Florida. These courses cover specialized topics by experts in the topic areas. The courses are designed for advanced undergraduates, graduate students, and professionals.

- Coral Tissue Slide Reading Workshop, August 8-10, 2007
- Coral Restoration Workshop, August 8-10, 2007
- Diseases of Corals and Other Reef Organisms, August 11-18, 2007
- Benthic Workshop: Marine Sponges, August 19-26, 2007

http://isurus.mote.org/Keys/adv_courses.phtml

Advanced Inquiry Program
This Project Dragonfly program from Miami University offers a master's degree that combines web-based graduate courses with face-to-face experiential and field study in various community learning institutions. See the website for participating institutions and complete details.
http://aip.miamioh.edu/16-17_news

Advanced Invasive Field Course – Great Lakes
The Inland Seas Education Association will host a free Advanced Invasive Field Course, August 5-9, 2012 on northern Lake Michigan. Applicants will live aboard the 77' schooner *Inland Seas* as they sail between Sault Ste. Marie, and Petoskey, Michigan while conducting hands-on research, crewing the vessel, discussing relevant scientific

literature, and participating in evening shore-side activities. The course is limited to ten individuals.
Contact Dr. Timothy Davis at tdavis@schoolship.org

Advanced Project Wild Workshops – Georgia
Join Georgia Wildlife Resources Division biologists for two advanced Project Wild Workshops. WILD Bird, May 20-22, 2005 will provide al look at migratory songbird conservation and management. The Aquatic Ecology Workshop, June 10-12, 2005, will study the wildlife in ponds and streams. Also given July 13-14, 2005
http://eeingeorgia.org/content/ee/docs/WildAdv.pdf,
http://eeingeorgia.org/net/calendar/details.aspx?c=26780&s=29847.0.68.4863

Advanced ROV Building for Classroom Projects – California
The Marine Advanced Technology Education (MATE) Center offers the free summer institute for 2008, Advanced Remotely Operated Vehicle Building for Classroom Projects, July 7-13, 2008 in Monterey, California. Educators teams to will design and build their own ROVs to complete a set of predetermined mission tasks. Participants will have the opportunity to interact with undersea engineers, ROV pilots, and marine technicians to understand the technology and the work of these marine professionals.
http://www.mpcfaculty.net/tami_lunsford/SI_08_institute/Info.aspx

Advanced ROV Building for Classroom Projects - California
The Marine Advanced Technology Education Center offers a faculty workshop, Advanced Remotely Operated Vehicle (ROV) Building for Classroom Projects, July 23-30 2007 in Monterey, California. Educators will work in teams to design and build their own ROVs to complete a set of predetermined mission tasks. The workshop will begin with a SolidWorks tutorial. The educators will program a basic stamp to control sensors and motors on their ROVs.
http://www.mpcfaculty.net/tami_lunsford/SI_07_Institute/Info.aspx

AEOE Conference - California
The registration is now open for the Association for the Environmental and Outdoor Education (AEOE) 2009 Statewide Conference, *Education Unplugged*, April 24-26, 2009 in Petaluma, California.
http://www.aeoe.org/conference/spring/2009/index.html

Alabama Master Naturalist - Alabama
Dauphin Island Sea Lab Discovery Hall Programs promote conservation through education, research, and outreach. They will host the first of eight Alabama Master Naturalist programs, a new statewide program whose goal is to help promote awareness, understanding, and respect of Alabama's natural world among Alabama's citizens and visitors, February 25, 2014 on Dauphin Island, Alabama.
Contact Doyle Keasal at keasade@aces.edu

Alaska Marine Science Symposium
Scientists from Alaska, the Pacific Northwest, and beyond will gather in Anchorage to inform each other about their research in the marine ecosystems of the Arctic, the Bering Sea, and the Gulf of Alaska, January 18-22, 2010 in Anchorage, Alaska. Registration for this conference is free, thanks to their many sponsors. Plenary and poster sessions will feature research on climate, oceanography, local and traditional knowledge, and more. Abstract submission will begin in October, with a deadline for submission in November.

http://www.alaskamarinescience.org/

Alien Species Field Trip and Monitoring – Maine through New Jersey
David Delaney from McGill University monitors two invasive species: Asian shore crab and the European green shore crab, and offers teachers and their students able to get to any coast from New Jersey to Maine after May 1, 2006 free science lessons and activities (quadrat sampling, trapping, mark recapture "scavenger hunts") about alien species. Students will learn research methodology and then work as a team to gather data. They will learn how to record standardized data and answer scientific questions.
http://www.invasivetracers.com

All Wet Teacher Education Course - Georgia
These days of aquatic and watershed studies, June 20-23, 2006 in Gainesville, Georgia, will whet your appetite for water education. Enjoy pond and stream analysis, water testing on Lake Lanier, wetland studies, computer modeling and more. Participants will also receive Project WET certification.
http://eeingeorgia.org/net/calendar/details.aspx?c=28055&s=30663

The Amazing Life of the Elephant Seal - California
Dr. David Aurioles of the Instituto Politecnico Nacional in La Paz, Mexico, will present, in Spanish and English, the life of elephant seals, February 2-4, 2007 in Cambria, California. The weekend retreat is limited to 20 adult guests; join leading researchers for field trips, lectures, and personal interaction with a leading marine science researcher.
http://www.campoceanpines.org/

Ambassadors of the Environment Teacher Workshop - California
Ambassadors of the Environment is offering this teacher workshop, June 21-25, 2010 in Santa Barbara, California. The workshop offers cross-curricular training on marine, terrestrial, creek, and watershed ecosystems, with an emphasis on ecological roles and connections between species. Participants will receive hands-on K-12 curriculum in marine management, recycling, and more.
Contact Laura Brands at lbrands@oceanfutures.org

Ambassadors of the Environment Teacher Workshop - California
The Ocean Futures Society is offering the Ambassadors of the Environment teacher workshop, June 21-25, 2010 in Santa Barbara, California. The workshop offers cross-curricular training on marine, terrestrial, creek, and watershed ecosystems, with an emphasis on ecological roles and connections between species. Participants will receive hands-on K-12 curriculum in sustainable living, marine management, recycling, and more.
http://www.oceanfutures.org/ofs/aote.php
Contact Laney Heath at laneyh@mesa.k12.co.us

Ambassadors of the Environment Program – Santa Barbara
The Ambassadors of the Environment Program is an environmental education program from the Ocean Futures Society, based on the National and California State Science Education Standards. It uses experiential education in the marine and terrestrial environments to begin fostering an ecological literacy and inspire curiosity and appreciation for the natural world through exploration and discovery. Visit the spring session at El Capitan Canyon, April 5 or 6, 2005.

http://www.aote.org/menu/prog/sb/index.htm

American Maritime History to 1870 - Online
The History Channel and the State University of New York-Maritime College will offer a specialized online course for credit featuring the series, *Great Ships*. In the course, American Maritime History to 1870, students will explore the major developments in American maritime history from pre-Columbian times through the Civil War. The course will focus on the growth of America's maritime heritage as the foundation of our culture.
http://www.broadcastnewsroom.com/articles/viewarticle.jsp?id=173805

American Museum of Natural History Online Diversity of Fishes Seminar
In partnership with the NSTA Institute, The American Museum of Natural History offers Seminars on Science, its award-winning online professional development program. A six-week course in ichthyology will be available to K-12 educators, February 16-March 28, 2004. Participants receive learning resources for use in the classroom.
http://learn.amnh.org/welcome.php?w=NSTAIW041 .

American Museum of Natural History's Graduate Science Courses – Online
Spring Session 1 runs January 15-February 25, 2007; the registration deadline is January 5, 2007. Spring Session 2 runs March 19-April 29, 2007; the registration deadline is March 5, 2007. The courses include: Earth: Inside and Out; Genetics, Genomics, Genethics; Diversity of Fishes; the new course, Evolution; and more. Fall Session 2 courses (including The Ocean System, Evolution, Earth: Inside and Out, and more) run October 20-November 30, 2008.
http://learn.amnh.org/

American Museum of Natural History's Online Graduate Science Courses – D.C.
Deepen your knowledge with Seminars on Science courses from the American Museum of Natural History. Fall classes begin September 26, 2005. Winter 2006 registration is open until January 2, 2006, with classes held from January 16 – February 26, 2006. Session Two summer classes run July 3-August 13, 2006; registration ends June 19, 2006. Offerings include the integrated science course on the Ocean System, the Diversity of Fishes, Sharks and Rays, and more. Offerings include the integrated science course on the Ocean System, the Diversity of Fishes, and more. Offerings include the new integrated science course on the Ocean System. Each 6-week course immerses the learner in a collaborative investigation of a current topic within one of the life, Earth, or physical sciences. All courses are taught by museum scientists and educators, and highlight current, cutting-edge research.
http://learn.amnh.org/courses/courses.php
http://learn.amnh.org/courses/

American Museum of Natural History Winter & Summer 2005 Courses
The American Museum of Natural History offers accredited courses (through the City University of New York) in a variety of natural science topics. Included on the 2005 schedule are The Diversity of Fishes and Sharks and Rays.
http://learn.amnh.org/courses/courses.php .

American Museum of Natural History's Graduate Science Courses – Online
Deepen your knowledge with Seminars on Science courses from the American Museum of Natural History. Spring classes run March 20-April 30, 2006. Offerings include the

integrated science course on the Ocean System, the Diversity of Fishes, and more. Offerings include the Ocean System and Earth: Inside and Out. Each 6-week course immerses the learner in a collaborative investigation of a current topic within one of the life, Earth, or physical sciences. Also check out the summer session schedule.
http://learn.amnh.org/courses/

American Museum of Natural History's Fall 2 Sessions 2006 – Online
Fall Session 2 runs October 30–December 10, 2006; the registration deadline is October 16, 2006. The five courses available this fall are: *Earth: Inside and Out*; *The Ocean System; Genetics, Genomics, Genethics;* and *Space, Time and Motion*. Free sample resources are available for each course on the new Seminars website.
http://learn.amnh.org/

American Museum of Natural History's Graduate Science Courses – Online
Deepen your knowledge with Seminars on Science courses from the American Museum of Natural History. Summer 1 courses (including The Ocean System, Evolution, Earth: Inside and Out, and more) run June 11–July 22, 2007. Summer 2 courses (including The Ocean System, The Diversity of Fishes, Sharks and Rays, and more) run July 2–August 12, 2007. Spring courses (including The Ocean System, Diversity of Fishes, Sharks and Rays, and more) run March 16-April 26
http://learn.amnh.org/about/

American Wilderness Leadership School - Wyoming
This eight-day course provides educators with an understanding of science-based conservation and land management techniques, and the supplies needed to pass this knowledge on to their students. Teachers should apply for course sponsorship to their local Safari Club International chapter. Applications are accepted until sessions are filled; see the website for workshop dates.
http://www.safariclubfoundation.org/education/awls
http://safariclubfoundation.org/education/american-wilderness-school

Amigos de Bolsa Chica Docent Training – California
The Amigos de Bolsa Chica is accepting applications for the 2015 Docent Training Program, to take place on six Wednesday evenings in January and February, 2015 in Huntington Beach, California. Learn to share your knowledge and passion for conservation of coastal wetlands.
http://www.amigosdebolsachica.org/volunteers.htm#docent

AMS Climate Studies Diversity Project Course – Various
The American Meteorological Society invites minority-serving institutions to offer an introductory-level climate science course, AMS Climate Studies. This course explores the scientific principals governing Earth's climate system, variability, and change, and introduces societal and sustainability challenges. Professional development training is offered with no cost to designated climate course instructors.
http://www.ametsoc.org/amsedu/online/climateinfo/diversity.html

AMS Teacher Workshop and Share-A-Thon - Arizona
The annual American Meteorological Society Teacher Workshop and Share-A-Thon, January 3, 2015 in Phoenix, Arizona, presents educational resources, scientific tools, and research in the atmospheric and related sciences to teachers. Check out the additional free opportunities.

http://annual.ametsoc.org/2015/index.cfm/information-for/teachers/

Analyzing and Visualizing Data with Excel - Online
Develop your skills with Excel, one of the tools that data scientists depend on to gather, transform, analyze, and visualize data. This self-paced, six-week MOOC (Massive Open Online Course) is part of the Microsoft Professional Program Certificate in Data Science.
https://www.edx.org/course/analyzing-visualizing-data-excel-microsoft-dat206x-4

Animal Adaptations Workshop - Texas
The Houston Zoo offers teachers in grades 1-4 the Animal Adaptations Workshop, sponsored by Flower Garden Banks National Marine Sanctuary, February 25, 2006 in Houston, Texas. Animals that live in the ocean face challenges we never dream of. Find out how these amazing creatures have adapted to survive in an underwater world. Free "Adaptations from the Depths" curriculum and materials included. (Note that the curriculum may be downloaded from
http://www.sanctuaries.noaa.gov/education/teachers/features/divetybee05.html).
http://www.houstonzoo.org/Educators/Professional_Development.aqf

Animals in Curriculum-based Ecosystem Studies Workshop - California
The free Signals of Spring - ACES (Animals in Curriculum-based Ecosystem Studies) workshop teaches science within the context of the ocean, using satellite data to develop inquiry skills. Participants use Earth imagery and remote sensing data to explain the movement of animals that are tracked by satellites, along with environmental issues the animals face, and the environments of NOAA's National Marine Sanctuaries.
http://www.signalsofspring.net/aces/about.cfm

Antarctica: From Geology to Human History - Online
This MOOC (massive open online course) from the Victoria University of Wellington explores the geology and history of Antarctica.
https://www.edx.org/course/antarctica-geology-human-history-victoriax-ice101x

Antarctica: Life in a Polar Sea Teacher Workshop - California
COSEE-West invites K-12 educators to a free workshop, March 24, 2007 in Santa Monica, California. The workshop offers hands-on, inquiry-based, integrative classroom activities correlated with California Content Standards and a public lecture on the Antarctic marine ecosystem. Participants may receive a stipend for the full workshop. Contact Peggy Hamner at 310-206-8247 or cosee.west@gmail.com

Applied Environmental Education Program Evaluation Online Course
A 9-week online course, "Applied Environmental Education Program Evaluation," is offered periodically through the University of Wisconsin-Stevens Point. The course is designed to assist environmental educators and natural resource professionals in evaluating their education programs. Participants have the opportunity to apply skills in designing evaluation tools such as surveys, observation forms, and interview and focus group guides.
http://www.uwsp.edu/natres/rwilke/eetap/

Applied Environmental Education Program Evaluation – Online
The on-line course, Applied Environmental Education Program Evaluation, will be offered June 10-August 24, 2007, and September 10-December 7, 2007, February 18-May 9, 2008 through the University of Wisconsin-Stevens Point. The course is designed

to assist environmental educators and natural resource professionals in evaluating their education programs. Participants have the opportunity to develop and apply skills in designing evaluation tools such as surveys, observation forms, and interview and focus group guides.
http://www.uwsp.edu/natres/rwilke/eetap/Website2006/AEEPE.htm

Approaches to Inquiry: Shifting Classrooms toward Inquiry Learning - Washington
Port Townsend Marine Science Center offers this teacher training for teachers of grades 5-10, August 14-18, 2011 in Port Townsend, Washington, with an additional fall follow-up meeting. The workshop explores the nature of inquiry using methods and materials from the Exploratorium's Institute for Inquiry, combined with field study applications from the center.
http://www.ptmsc.org/teacher.html

Approaches to Inquiry - Washington
The Port Townsend Marine Science Center will host *Approaches to Inquiry: Shifting Classrooms Toward Inquiry Learning* for teachers of grades 5-10, August 18 to 22, 2009 in Port Townsend, Washington. The workshop explores the nature of inquiry using methods and materials developed at the Exploratorium's Institute for Inquiry, combined with field study applications.
http://www.ptmsc.org/education/teacher.html

Approaches to Inquiry: Shifting Classrooms toward Inquiry Learning - Washington
Port Townsend Marine Science Center offers this teacher training (for teachers of grades 5-10, August 17-21, 2010 with an additional fall follow-up meeting, in Port Townsend, Washington. This workshop takes place in classrooms, the marine lab, and the natural environment.
http://www.ptmsc.org/education/teacher.html

Approaches to Scientific Inquiry - Washington
The Port Townsend Marine Science Center presents Approaches to Scientific Inquiry: Science Beyond the WASL (Washington Assessment of Student Learning), a workshop for teachers, grades 3-8, August 17-20, 2008, in Port Townsend, Washington. *Approaches to Scientific Inquiry: Shifting Classrooms Toward Inquiry Learning,* August 18-22, 2009 plus a follow-up meeting, in Port Townsend, Washington. Tuition is free and covers instruction, instructional materials, and accommodations at the Fort Worden Conference Center.
http://www.ptmsc.org/education/teacher.html

Apps for Marine Conservation - Online
The Ecosystem-Based Management Tools Network is will host a webinar on Apps for Marine Conservation, November 6, 2013. The app is an extension of Whale Alert built for the Stellwagwen Bank National Marine Sanctuary using mobile, web, and crowdsourcing technology. Please register in advance.
https://www1.gotomeeting.com/register/273311416

Aquaculture 101 Teacher Workshop - Alabama
Auburn University and the Alabama Cooperative Extension System, in conjunction with Gadsden State Community College and the Alabama-Missippi Sea Grant, offer this free teacher training, June 7-11, 2010 in Gadsden, Alabama. June 10-14, 2013 in Gadsden, Alabama

http://www.aces.edu/dept/fisheries/education/ProfessionalDevelopmentOpportunities.php
http://www.aces.edu/dept/fisheries/documents/Aquaculture101workshopandpreregform.pdf

Aquaculture Center for Training, Education and Demonstration
The mission for the Aquaculture Center for Training, Education and Demonstration division of Harbor Branch Oceanographic is to educate and develop a highly skilled workforce, through practical education and training that will support competitive and sustainable aquaculture industries. Education and training programs include intensive courses, degree programs, customized training, secondary school field trips, and teacher workshops.
http://www.hboi.edu/aqua/education.html

Aquaculture in the Classroom Teacher Workshop - Florida
Harbor Branch Oceanographic Institute at Florida Atlantic University will hold an Aquaculture in the Classroom Teacher Workshop, August 1-3, 2011 July 16-18, 2012 in Fort Pierce, Florida. The workshop provides classroom aquaculture information to educators who have limited aquaculture experience. The Teach Aquaculture curriculum will be introduced and selected lessons and activities will be demonstrated. Topics covered include aquarium set-up, permitting for schools, nutrition, and more.
http://www.fau.edu/hboi/Aquaculture/AQacted_InTheClassroom.php
http://www.fau.edu/hboi/Aquaculture/AQacted_WorkshopSchedule.php

Aquaculture Systems Workshop - Florida
Harbor Branch Oceanographic Institution and Cornell University will host a Water Quality and Recirculating Aquaculture Systems Workshop, November 13-17, 2006 in Fort Pierce, Florida. The course focuses on the design, operation, and management of water reuse systems for finfish through hands-on laboratories and classroom presentations. After the workshop, individuals should be able to design their own recirculating systems and have a fundamental knowledge of principles influencing their design decisions.
http://www.hboi.edu/aqua/acted_workshops.html

Aquaponics and Quest Workshops - Maine
Herring Gut Learning Center offers two aquaponics teacher workshops, July 10-12 and July 17-19 in Port Clyde, Maine. Participants receive teacher training in aquaponics using Herring Gut's small-scale commercial aquaponics greenhouse and hatchery; a complete classroom kit including tank, filter, pumps, planting materials and an operating manual; standards-based curriculum materials, and more. In addition, a new course, Classroom Quests, will be offered July 24-26, 2012.
http://www.herringgut.org/summerworkshopsdetail.html?id=1

Aquaponics Workshop - Maine
Herring Gut Learning Center offers two aquaponics teacher workshops, July 6–8 and July 12–14, 2011 in Port Clyde, Maine. Participants receive teacher training in aquaponics using Herring Gut's small-scale commercial aquaponics greenhouse and hatchery; a complete classroom kit including tank, filter, pumps, planting materials and an operating manual; standards-based curriculum materials, and more.
http://www.herringgut.org/about.html

Aquarium Lecture Series - Massachusetts
The New England Aquarium offers a free lecture series in Boston, Massachusetts; registration is requested. Upcoming lectures cover sea-level changes, ocean stewardship showcase, and more. Archived lectures are available online through WGBH.
http://www.neaq.org/education_and_activities/programs_and_classes/aquarium_lecture_series/index.php

Aquascience Workshop - Alabama
Middle- and high-school science and math teachers interested in including aquaculture/aquascience as a hands-on component in their classrooms are invited to attend Aquaculture 101, June 11-15, 2012 in Auburn, Alabama. The free workshop focuses on aquaculture and aquascience and how to teach principles (matched to core standards) of biology, chemistry, math, and physics in innovative ways.
http://www.masgc.org/page.asp?id=720

Aquatic and Marine Science for Today's Classroom Teacher – Washington, DC
The National Aquarium in Washington, DC, with funding from the Toyota USA Foundation, is offering a teacher training program, Aquatic and Marine Science for Today's Classroom Teacher. Workshops will be offered in October and November, 2008 and February, March, and May of 2009. Each participant will receive a stipend and resources for their classroom. Space is limited.
http://nationalaquarium.org/workshops.html

Aquatic Ecosystems and Research Methods Teacher Workshop
The Bruce Museum of Arts and Science in Greenwich, Connecticut, in collaboration with Audubon Greenwich, is hosting a summer teacher's workshop on Aquatic Ecosystems, July 12 - July 16, 2004. The workshop will provide hands-on research experience of Long Island Sound and its watershed tributaries, including marine and fresh water environmental science. Participants will receive classroom and field activities appropriate for elementary and middle school classes.
http://www.brucemuseum.org/education/teachers_summer.php .

Aquatic Nuisance Species Teacher Workshop - Mississippi.
The Scott Aquarium of The University of Southern Mississippi will offer an Aquatic Nuisance Species workshop November 17-19, 2004, Biloxi, Mississippi. The workshop includes lectures by guest scientists, numerous educational activities, and a field trip to Horn Island and the Grand Bay National Estuarine Research Reserve. Participation is limited to 18 teachers; accommodations and meals will be provided. This workshop has been approved for 1.4 CEUs.
shelia.brown@usm.edu .

Archaeological Field School - Texas
The PAST Foundation will host its 2007 Field School June 2-10, 2007 in Port Isabel, Texas. The site is the wreck of an early 19th century two-masted schooner on the beach. Participants will learn about the different aspects of a scientific archaeological investigation while recording the shipwreck via mapping, test excavation, and artifact analysis. Teachers will participate in developing a public outreach program that can be taken back to the classroom and incorporated in numerous lesson plans and activities.
http://www.pastfoundation.org/2007BocaChicaFieldSchool/

Archeological Resource Protection Training – Florida and Maine
The Federal Law Enforcement Training Center will present two classes offering training in all aspects of an archeological investigation and subsequent prosecution of crimes. The class cumulates in a 12-hour archeological crime scene practical exercise. The course will be offered April 13-17, 200 in Jacksonville, Florida, and April 27-May 1, 2009 in Winter Harbor, Maine.
For registration information, contact Virginia McCleskey at 912-554-4828

Archeological Resources Protection Training Program
The Archeological Resources Protection Act (ARPA) training was developed by the Federal Law Enforcement Training Center together with the U.S. Forest Service, Bureau of Land Management, and the National Park Service. This class provides training in archeological investigation and the subsequent prosecution of the crimes.

- Columbus, Ohio, March 10-14, 2008
- Bar Harbor, Maine, April 7-11, 2008
- Panama City, Florida, April 21-25, 2008

http://www.fletc.gov/training/programs/forensics-and-investigative/archeological-resources-protection-training-program-arptp

Arctic in the Classroom – Alaska
The Arctic in the Classroom program offers the free Make an Impact workshop, March 13-15, 2016 in Fairbanks, Alaska. The program is for educators that currently teach in Alaskan Arctic communities; and researchers who conduct funded research in the Alaskan Arctic.
https://www.arcus.org/tac

AREA Conference – West Virginia
The Aquatic Resources Education Association (AREA) will host the 2016 biennial conference October 23-27, 2016 in Shepherdstown, West Virginia. Students with a strong interest in aquatic resources education and a career with a fish and wildlife agency may apply for a conference scholarship.
https://area.wildapricot.org/page-18106

Armada Project - Research & Mentoring Experiences for Teachers
The ARMADA Project provides K-12 teachers opportunities to actively participate in ocean, polar, environmental science research and peer mentoring. Master Teachers develop ways to bring their research experiences, including scientific data, methodologies, and technology, into the classroom. ARMADA teachers mentor new teachers and present at NSTA Conventions.
http://www.armadaproject.org

Art and Environment - Online
Art & Environment will be available as an online-only teacher professional development course with flexible weeks, June 16–August 18, 2014. Designed for K–12 art teachers but appropriate for science teachers seeking an interdisciplinary approach, this course will provide an in-depth introduction to the field of Eco Art, as well as a basic introduction to environmentalism. Teachers will leave the course with an extensive online curriculum packet.
http://wexartenvironment.wordpress.com/teacher-course/

Artist Boat – Texas
Artist Boat has garnered grant support focused on science, math, and arts literacy from the Texas Education Agency and NOAA B-WET. They are able to serve more middle school students in the Galveston Bay region, and would like to meet with teachers and their principal to develop a partnership with Artist Boat. Professional Development, Eco-Art Workshops, and Eco-Art Adventures are free for partner schools and there are openings for March, April, and May.
Contact info@artistboat.org

Art and Environment - Online
This online course will provide an introduction to the field of eco art as well as a basic introduction to environmentalism. Content is available May 15-August 18, 2015.
http://wexartenvironment.wordpress.com/teacher-course

As the World Turns (Warmer and Colder) – South Carolina
COSEE SE is teaming up with regional marine and climate scientists to offer a free weeklong investigation for formal and informal educators in North or South Carolina or Georgia, into past, present, and future climate change topics, July 20-25, 2009 in Georgetown, South Carolina. Activities and resources provided will be aligned to state standards and will specifically address STEM (science, technology, engineering and math) disciplines.
http://www.cosee-se.org/teacher/?join=203

Ask NICE Educator Professional Development Series - Online
NASA's Innovations in Climate Education (NICE) offers an educator professional development series on the third Thursday of each month this fall. Upcoming webinars include:

- Climate Change Summary: What We Know and How We Know It – November 21, 2013
- Impacts of Climate Change/The GLOBE Program: Green-Up – January 16, 2013

Others will be announced in the future. Check out the additional resources on the website.
https://nice.larc.nasa.gov/node/52

Assessment Workshops – Washington, D.C.
This Project 2061 workshop, Developing and Using Assessments Aligned to Science Learning Goals, in Washington, D.C., will focus exclusively on assessment—from high-stakes testing to classroom diagnostics—and its role in helping all students achieve science learning goals. There are three opportunities to attend: May 15-17, August 7-9, and October 9-11, 2013. Scholarships may be available. See the website for details.
http://www.project2061.org/events/workshops/assessment-overview.htm

Association of Marine Laboratories of the Caribbean Scientific Meeting
The scientific meeting of the Association of Marine Laboratories of the Caribbean, June 13-17, 2005 in Curacao, will include poster and verbal presentations, promoting the exchange of scientific and technical information concerning Caribbean marine sciences. Topics include coral reef ecology and research, regional ecological connectivity, public awareness and education, and more.
Click on "Future Meetings" at http://www.amlc-carib.org/en/

At Your School Programs - California
The Gulf of the Farallones National Marine Sanctuary offers San Francisco Bay Area teachers the opportunity to bring Ocean Science to their classroom with one of the *At Your School* programs, including Crab Cab (K-3), Webs Under Waves (3-5), Sharkmobile (4-6), and Science at Sea (7-12).
http://farallones.noaa.gov/education/welcome.html

Atlas of Science Literacy Workshops – North Carolina and Washington, D.C.
The American Association for the Advancement of Science offers three-day workshops on the Atlas of Science Literacy, September 14-16, 2009 in Durham, North Carolina, and October 19-21, 2009 in Washington, D.C. Participants will use Atlas 1 and 2 and other Project 2061 resources to enhance their understanding of science literacy and to improve curricula, instruction, and assessment. Registration is limited; earlybird rates scholarships are available – check the website for details and deadlines.
http://www.project2061.org/events/workshops/default.htm

Atlas of Science Literacy Workshops - Various
The Atlas of Science Literacy program offers a three-day workshop which demonstrates how participants can use the conceptual strand maps in Atlas 1 and Atlas 2, along with other Project 2061 resources, to enhance their own understanding of science literacy and take a benchmarks-based approach to helping all students achieve literacy in science, mathematics, and technology.
http://www.project2061.org/events/workshops/default.htm

Atlas of Science Literacy Workshops - Various
The American Association for the Advancement of Science offers three-day workshops on the Atlas of Science Literacy throughout fall 2008, with future workshops planned for 2009. Participants will use Atlas 1 and 2 and other Project 2061 resources to enhance their understanding of science literacy and to improve curricula, instruction, and assessment. Registration is limited and earlybird rates are available.
http://www.project2061.org/events/workshops/default.htm?txtRef=&txtURIOld=%2F070619%2Fworkshops

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

Audubon International Webinars - Online
To celebrate the mid-way point of the United Nation's Decade of Education for Sustainable Development, Audubon International will be hosting a series of training webinars designed to help people become better stewards of the environment where they live, work, and play. The webinars will focus on topics such as community sustainability, greening your business or property, eco-development practices, and community outreach ideas. Registration is free but space is limited.
http://www.audubooninternational.org/webinars

Autosub Under Ice Webconference and Educator Workshop
This three week long on-line conference and educator workshop, September 18-October 6, 2006, focused on the science, technology and engineering of the Autosub Under Ice programme. Learn about this cutting edge science and technology directly from the scientists and engineers. Resources and lesson plans are included, and the program will provide a foundation for learning during the International Polar Year, which begins in March 2007.
http://www.coexploration.org/autosub

Awareness of Coastal Habitat - Texas
The Nature Conservancy offers the workshop, Awareness of Coastal Habitat, June 11-13, 2008, starting in Collegeport, Texas. Teachers will study and compare the flora and fauna of the mid coast of Texas, including freshwater and salt marsh wetlands and prairies at Mad Island Marsh Preserve. Participants will also spend time on Matagorda Island, studying organisms of the barrier island beach, sand dunes, grasslands, and back-bay habitats.
Contact Cathy Porter at cporter@tnc.org

Bays and Bayous Symposium - Mississippi
The 2016 Mississippi-Alabama Bays and Bayous Symposium, November 30-December 1, 2016 in Biloxi, Mississippi focuses on coastal science research, education, and outreach in the northern Gulf of Mexico.
http://masgc.org/bays-and-bayous

Beach Fossil Field Trip - Maryland
The Society for Ocean Sciences has organized a beachcombing and fossil hunting event in the Chesapeake Bay region at Brownie's Beach, Maryland. The trip will introduce participants to paleontology and teach how to tell the difference between fossilized bones and everyday rocks. The trip is limited to 20 participants.
http://www.societyoceansciences.org/sharkhunt.html

Beach Management, Tourism and the Coastal Environment Workshop
Beach Management, Tourism and the Coastal Environment Workshop: *A Conference of America's Beaches*, planned for March 2-4, 2005 in Miami, Florida will focus on overlapping contemporary social and scientific issues. Topics include beach management and tourism, beach management in the face of coastal disasters, and beach management and the environment (including education).
defraene@fiu.edu

Benefits of Research Experiences, Call for Abstracts
Organizers of Session ED10, at the American Geophysical Union Ocean Sciences Meeting, February 22-26, 2010 in Portland, Oregon, *Authentic Research Experiences for Teacher and Student Benefits,* announce a call for abstracts. Contributions are invited from researchers and educators that would like to share their research experience.
Contact Jennifer Hammond at Jennifer.Hammond@noaa.gov
http://www.agu.org/meetings/os10/index.php

Best Education Practices for Water Outreach Professionals
The University of Wisconsin Environmental Resources Center hosts *Defining Best Education Practices, Refining New Resources and Recommending Future Actions Symposium*, June 2-4, 2004, Madison, Wisconsin. Best education practices and topic-

specific water outreach resources will provide a resource for natural resource and water outreach professionals.
http://www.uwex.edu/erc/waterbeps

Beyond Doom and Gloom - Online
The Disciplinary Associations Network for Sustainability and partners will host the webinar, Beyond Doom and Gloom: Include Solutions to Climate Change, March 1, 2017. The webinar will focus on curricular materials to engage students in current and future solutions that can be used in any course and in any discipline.
https://attendee.gotowebinar.com/register/2860146782187308801

Beyond the Horizon: Creating a Network of Special Ocean Places – Florida
This forum, May 11-13, 2011 in Sarasota, Florida, is being organized with the purpose of initiating discussions of a potential network of special ocean places to strengthen the ecology, economy, and culture of the Gulf of Mexico.
http://www.mote.org/index.php?src=gendocs&ref=BeyondtheHorizon&category=Marine%20Policy%20Institute

Beyond Penguins and Polar Bears - Online
NSDL continues its partnership with NSTA, presenting web seminars for teacher professional development that showcase NSDL experts and resources. The presenters share their expertise and answer questions live during a 90-minute online program; archive versions of each presentation are provided following the presentation. *Beyond Penguins and Polar Bears: Energy and the Polar Environment* will be presented November 13, 2008.
http://learningcenter.nsta.org/products/symposia_seminars/NSDL3/Webseminar3.aspx

Big Listening 101 - Online
The free webinar from Upwell, Big Listening 101: Networked Campaigns and Communications the Upwell Way, will take place March 5, 2015. Those interested in using social media to advance their campaigns for change can learn how to listen to the tides of internet conversation, learn to surf them, better identify opportunities, and use the momentum of conversation to raise issues above the noise and better achieve campaign objectives through Big Listening techniques. Free registration is required.
https://cc.readytalk.com/cc/s/registrations/new?cid=r7xeuh0bbpjo

BioBlitz Teacher Workshop - Florida
Teachers of grades 5-12 and informal educators are invited to attend this teacher professional development, February 6-7, 2010 in Homestead, Florida. Participants will explore the park's biodiversity using a variety of tools and resources and will leave with activities to help students prepare for the BioBlitz event April 30-May 1, 2010. There is an optional field trip.
Contac Maria Beotegui at Maria_Beotegui@nps.gov

Biocomplexity in Shallow-Water Hydrothermal Systems Student Workshop
National Science Foundation and the University of South Florida sponsored a student workshop, May 25-31, 2003, St. Petersburg, Florida to explore *Biocomplexity in Shallow-Water Hydrothermal Systems.*
http://www.biocomplexity.usf.edu/index.htm

Biology for Voters, Part 1 - Online
This edX course from the University of California, Berkeley, offers to teach the fundamentals of modern biology to help participants make more informed voting decisions. The course is seven weeks, starting September 9, 2015.
https://www.edx.org/course/biology-voters-part-1-uc-berkeleyx-bfv101-1x

Bioluminescence and Vision on the Deep-Sea Floor Webinar for Educators - Online
Scientists explored bioluminescence and vision within deep-sea benthic communities in the Gulf of Mexico. This archived webinar from NOAA's Office of Ocean Exploration and Research introduced the expedition along with standards-based lessons and other resources that support teaching about bioluminescence.
http://oceanexplorer.noaa.gov/edu/development/webinars/welcome.html

Biomimicry: Using Nature's Design to Revitalize Your Science Curriculum - New York
Biomimicry borrows nature's ideas to derive more sustainable designs for human existence. This biomimicry workshop, August 4-6, 2008 in Westchester County, New York, is aimed at middle school science teachers and will help guide educators in incorporating biomimicry into their own curricula. Check out the website for lesson plans, brief case studies, and more.
http://www.biomimicryinstitute.org/

Birch Aquarium's MARE Summer Workshop for Teachers - California
The 2008 MARE Ocean Immersion Summer Workshop for teachers is July 28-August 1, 2008 in La Jolla, California. Participate in classroom and field experiences highlighting Southern California's marine habitats. Ocean science content and hands-on activities from the Marine Activities, Resources and Education (MARE) curriculum includes: inquiry-based science teaching strategies; reading literacy through science instruction; addressing the needs of English language learners; and effective field-based activities.
http://aquarium.ucsd.edu/Education/For_Schools/For_Teachers/Professional_Development/

Blue Carbon Workshops - Various
Blue carbon refers to the carbon and other greenhouse gases captured, stored, and emitted by tidal wetlands, salt marshes, and other coastal ecosystems. Participants will learn the basic concepts of blue carbon and its importance to conservation and restoration efforts; applications of blue carbon as a management tool; opportunities for coastal wetlands to earn carbon finance; and, how to assess regional opportunities to implement projects.
https://www.estuaries.org/bluecarbon-events

Boeing Teacher Institute
The Aquarium of the Pacific's 2004 Boeing Teacher Institute, August 23-27, 2004, provided K-8 teacher participants an intensive introduction to the aquarium, marine biology and Southern California's diverse marine life, habitats and ecosystems. Guided tours, standards-based activities and field trips provided teachers with an up-close look at California marine life. Participants also receive a complete aquarium, including filtration and a guidebook on how to incorporate aquariums into their curriculum.
John McCord at 562/951-1624 or jmccord@lbaop.org.

Boat Camp - Massachusetts
Boat Camp Inc. offers professional development workshops for K-12 and informal educators aboard the vessel Erica Lee and inside their waterfront classroom in Newburyport, Massachusetts. They also offer courses for students and families.
http://www.boatcamp.org/index_home.html

Boston Harbor Educator's Conference - Massachusetts
The Massachusetts Marine Educators sponsors the Boston Harbor Educator's Conference, October 1, 2011 in Boston, Massachusetts. The conference will focus on how to make the islands an element in classroom lessons through its theme, *National Assets of Boston Harbor and its Islands for Teaching and Learning*.
http://bostonharborislands.org/event-details?rid=1729

Boston Sea Rovers Clinic
The Boston Sea Rovers Clinic, March 9-10, 2013 in Danvers, Massachusetts, is dedicated to education, conservation, and exploration of the underwater world. The show features seminars, a Saturday Evening Film Festival, and more. Check out the Scalli Internship for students entering their freshman or sophomore year of college interested in careers in marine biology. Daytime student volunteer opportunities for the clinic are available, as are discounted student tickets.
http://www.bostonsearovers.com/

Boston Sea Rovers Show - Massachusetts
The Boston Sea Rovers 2012 Show, March 10-11 in Danvers, Massachusetts, will offer seminars featuring underwater photography and video presentations along with a film festival. There will also be a Discover Scuba offered at the on-site pool, a free Exhibit Hall showcasing travel and dive industry booths, kids programs, and more.
http://www.bostonsearovers.com/

Bouncing Back: Preparing for a Changing Coast – Massachusetts
The Waquoit Bay National Estuarine Research Reserve (NERR) will offer a teacher professional development workshop focusing on preparing for the impacts of climate change, especially sea level rise, March 18, 2015 in Waquoit, Massachusetts. The day will include hands-on, field, and on-line activities to bring back to your classroom, expert presentations, and take home materials.
http://www.waquoitbayreserve.org/event-registration/?ee=229

Bring the Ocean into Your Classroom - Online
Bring the Ocean into Your Classroom with National Marine Sanctuaries, September 21, 2016. Learn about marine protected areas, free STEM educational resources to increase ocean literacy with your students, and more.
https://attendee.gotowebinar.com/register/5391920732998151683

Bringing Climate Science Into the Classroom - Online
The Science Friday Live Online Discussion: Bringing Climate Science Into the Classroom will take place April 5, 2016, online. The web panel will discuss challenges and approaches to teaching climate change science in the classroom.
http://www.sciencefriday.com/educational-resources/science-friday-discussion-beyond-the-debate-climate-change-in-the-classroom/

Bringing Local Marine Science to our Schools – North Carolina
This free workshop, April 25, 2013 at Pine Knoll Shores, North Carolina, offers educators the opportunity to learn more about marine research conducted in North Carolina; obtain materials and ideas to take home and implement in the classroom; take part in demonstrations and hands on activities; and more.
http://sciren.web.unc.edu/

Broader Impacts Collaboration Workshop – New York
This workshop from COSEE Ocean Systems and the Seacoast Science Center especially for educators from New Hampshire, Maine, and Massachusetts, April 11, 2013 in Rye, New York, will allow participants to work in small groups with area research scientists that are looking for informal education collaboration opportunities. Learn from other educators about developing programs that are well-organized, high-impact, and have a broad reach.
http://www.surveymonkey.com/s/educatorsbi

Building New England Connections – New England
Building New England Connections will bring together teams of teachers using the watersheds and coastal environments of New England as a context for learning. Project Oceanology and Connecticut Sea Grant are providing this opportunity with funding from NOAA's B-WET Program. The program includes a professional development workshop; classroom resources; participation in am overnight research project of coastal and watershed environments; and more.
http://www.oceanology.org/BNECPDflier.pdf

Building New England Connections - Connecticut
Project Oceanology and Connecticut Sea Grant present Building New England Connections, a professional development session for teachers November 6-7, 2009 in Groton, Connecticut.
http://www.oceanology.org/BNECPDflier.pdf

Building Urban and Community Habitats with Youth: OUT8064 - Colorado
This blended learning course, April 8-10, 2014 in Denver, Colorado along with two webinars, is designed to empower conservation professionals to assess, develop, and work with local youth service corps that engage 14-25 year olds in job training, conservation skills, and leadership opportunities through community habitat enhancement, restoration, or monitoring projects.
Contact Scott_T_Owen@fws.gov

Building Urban Wildlife Habitats with Youth - Minnesota
This blended learning course, in Bloomington, Minnesota along with two webinars, is designed to empower conservation professionals to assess, develop, and work with local youth service corps that engage 14-25 year olds in job training, conservation skills, and leadership opportunities through community habitat enhancement, restoration, or monitoring projects.
https://naaee.org/eepro/learning/webinars-workshops-training/building-urban-wildlife-habitats-youth
.

B-WET Shifting Baselines Teacher Institute - Mississippi
The Shifting Baselines B-WET Project uses existing maps, aerial photographs, and Internet resources to teach watershed concepts along with science education standards

to middle and high school classes. Dr. Jessica Kastler is seeking a team of two teachers from Alabama (preferably), Mississippi, or possibly independent teachers, to work to maximize environmental learning for students in grades 6 or above throughout their schools. There will be a free teacher institute, in Ocean Springs, Mississippi. Contact Jessica Kastler at Jessica.Kastler@usm.edu

California and Energy Course
Join the Aquarium of the Pacific each Thursday in October, from October 6-27, 2005 in Long Beach, California, to learn about energy. Each session will feature experts exploring energy sources, uses, and surrounding issues. Participants will get the inside scoop on gas prices and energy costs from industry experts. The course will also explore the future of our energy supply and a discussion of tomorrow's technology, including renewable energy and fuel cells.
http://www.aquariumofpacific.org/EDUCATION/ADULT/cal_energy.htm

California and Water Classes - California
Learn about one of California's most limited resources—water—through this course offered on five consecutive Thursdays at the Aquarium of the Pacific in Long Beach, California, March 9-30, 2006. This course is taught by industry experts and explores current issues relating to California's water budget, threats to water quality, desalination and the allocation of water resources such as the Colorado River Basin.
http://www.aquariumofpacific.org/EDUCATION/ADULT/cal_water.htm3

California Islands Symposium
The 7th California Islands Symposium, February 5-7, 2008 in Oxnard, California, is a forum for the presentation of natural and cultural resource information collected on all of the California Islands - the Channel Islands, the Farallones, and the Baja Mexican islands - and their surrounding marine environments.
http://www.californiaislands.org/

California Professional Development Workshops
CREEC-LA Network, a project of the California Department of Education and TreePeople, hosts an extensive search engine of California educational resources, including the following professional development opportunities: *9th annual WEFTeach* for Los Angeles-area high school teachers about water quality, Oct. 14, and *Waves, wetlands and watersheds educator workshops*, Orange County, November 5, 2003. www.creec.org, www.coastforyou.org, and www.wef.org/wefteach

California Summer Professional Development Opportunities
The following are just some of the professional development opportunities available in the California area for educators interested in marine and coastal issues.

- **Coastal Ecosystem Workshop**: The Coastal Ecosystem Workshop, June 20-22, 2007 in San Francisco, California, will focus on the physical and biological oceanography of the Gulf of the Farallones and our coastal ocean. http://farallones.org/education/teacher_workshops.php
- **Sloughs and Stewardship**: Join Save The Bay staff for a two-day summer workshop, Sloughs & Stewardship, June 26-27, 2007 in San Francisco, as you explore the richness and splendor of San Francisco Bay in two different regions. http://www.saveSFbay.org/workshop
- **Summer Leadership Institute**: The National Science Education Leadership Associations' annual Summer Leadership Institute, The Rising Tides of Science

Education: Preparing Our Students for Global Leadership, will be held June 28-July 2, 2007 in Pacific Grove, California. The institute offers professional development to support both experienced and emerging leaders who serve with schools, school districts, universities, and community colleges, and professional organizations in an instructional and/or leadership capacity. http://www.nsela.org/calendar/calendar.html

- **Watershed Awareness and Sustainable Action**: Formal and non-formal educators, science teachers, environmental program developers, and others are invited to this four-day summer training, July 31-August 3, 2007 in Berkeley, California. Contact Shefali Shah at shefali@kidsforthebay.org

Camp SEA Lab Teacher Workshop
Camp SEA Lab is a marine science camp adventure for youth ages 8-13. Science, Education, and Adventure are the focus as SEA Campers explore the marine world from the top of the watershed to the bottom of the deep sea. They hosted a free teacher workshop *From Sandy Shores to Salty Seas* on February 21, 2004.
http://www.campsealab.org/Programs/Teachers/ .

Cape Ann Whale Watch Workshops for Students or Teachers – Massachusetts
Cape Ann Whale Watch is offers the World of *Whales,* one-day, hands-on workshop for teachers, which will take place each Thursday from July 21 through August 25, 2005, and *Ocean Detectives,* offering students entering grades 4-6 a one-day, hands-on experience exploring the plants and animals in the Gloucester Harbor as well as the Stellwagen Bank National Marine Sanctuary, Wednesday mornings, July 20 through August 24, 2005.
http://www.caww.com/Teachers%20and%20Students.htm

CAPSTONE Webinar for Educators - Online
NOAA OER launched the Campaign to Address Pacific Monument Science, Technology, and Ocean NEeds (CAPSTONE) Expedition, a three-year effort to explore unique, biologically rich deepwater regions around the U.S. Marine National Monuments and other protected places in the Pacific Ocean, with the goal of collecting baseline information to support science and management needs. This webinar introduced the science of the expedition along with educational resources.
http://oceanexplorer.noaa.gov/edu/development/webinars/welcome.html

Career Edge: Communication and Teamwork - Online
In this free MOOC from FulbridgeX, students learn how to create and deliver high-impact communications and effectively collaborate on teams. The four-week course is self-paced.
https://www.edx.org/course/career-edge-communication-teamwork-fullbridgex-career2x

Case Western Reserve University Professional Development – JASON Project
Three professional development opportunities in conjunction with the JASON Project will be available from Case Western Reserve University:

- Wetlands Habitats - March 22, 2005
- Compare the Chagrin River and Mississippi Flood Plains - April 21, 2005
- Wildlife Created and Manmade Wetlands Habitats in the National Park - May 16, 2005

216-368-5075

A Century of Wildland Fire Research - Washington, D.C. and Online
This free workshop, March 27, 2017 in Washington, D.C., will look at how wildland fire science can inform more cost-effective strategies for living with fires. Topics include the ecological role of fire in the landscape, mapping fire and fire effects, risk perceptions and mitigation behavior, and more. The workshop will be recorded and the presentations will be made accessible online for viewing after the meeting.
http://dels.nas.edu/Upcoming-Workshop/Century-Wildland-Fire-Research/AUTO-5-97-34-D?bname=besr

Certified Interpretive Guide Training
The National Association for Interpretation (NAI) offers a professional certification program to recognize individuals who exhibit knowledge and skills necessary to assure quality interpretive services to all audiences. The Certified Interpretive Guide (CIG) program is one level in that program. The State Arboretum of Virginia at Blandy Experimental Farm, Boyce, Virginia, will host a CIG workshop March 2 - 5, 2005. The Pacific Northwest region will host a 32-hour CIG workshop March 20-23, 2005. Other certification programs and locations are posted on the website.
http://www.interpnet.com/interpnet/miscpages/programs/main.htm
http://interpnet.com/interpnet/miscpages/programs/Workshops/CIG/ArboretumMarch2005.htm

Certified Interpretive Guide Training - Texas
The Houston Zoo is offering Certified Interpretive Guide Training, December 3-6, 2007, in Houston, Texas. Participants will learn to use interpretation to create meaningful experiences, participate in activities, and receive curriculum and materials.
Contact Tara Tucker at TTucker@houstonzoo.org

Certified Marine Investigator Training Seminar
For those place-based educators whose additional duties cover a lot of water, check out this seminar. The International Association of Marine Investigators offers its annual Certified Marine Investigator Training Seminar, February 22-25, West Palm Beach, Florida.
http://www.iamimarine.org/2004%20Seminar.htm .

CEUs for Annenberg Courses - Online
In addition to graduate credit for Annenberg Learner professional development and content courses, Annenberg Learner and Colorado State University will begin offering continuing education units (CEUs) for teachers, beginning with the 10 most popular math and science courses. Teachers will be able to register for either graduate credit or non-credit continuing education units and then be able to access the course materials available on a rolling schedule throughout the year. Scroll down to the page bottom.
http://www.online.colostate.edu/onlinedistance/graduate-programs/annenberg

Changing Oceans: Challenges, Impacts and Solutions - Massachusetts
This four part course, March 9 &16, April 4, and May 9, 2013 in Boston, Massachusetts, will help teachers understand how various issues are impacting the marine environment, as well as discuss the solutions and technologies being used to tackle them. Participants will gain content background in ocean science as well as hands-on practice in inquiry-based classroom activities. Participants will receive lesson plans as well as other resources to use in their classroom.

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

Changing Public Behavior - Online
Changing Public Behavior: People and the Environment is a self-study course through the USDA's University Extension online learning resource, designed for natural resource professionals, extension educators, and environmental educators who work with communities. Through the seven units, participants build skills in identifying and analyzing behavior change opportunities and draft a plan for increasing people's involvement in an environmental situation.
http://campus.extension.org/enrol/index.php?id=548

Changing Reefs: Corals on Acid - Florida
The Florida Marine Science Educators Association is hosting *FMSEA 2010 - Changing Reefs: Corals on Acid,* May 14-16, 2010 in Key Largo, Florida. The conference will offer workshops, field trips, and events. (Note: keynote speakers include Dr. Billy Causey and cartoonist Jim Toomey)
http://www.fmsea.org/events.html

Channel Islands MERITO Academy Workshop - California
The Channel Islands MERITO Academy Workshop will be held October 5-6, 2007 with a follow-up workshop on February 2, 2008, in Oxnard and Santa Barbara, California. The MERITO Academy's goal is to increase students' understanding of coastal and ocean issues through hands-on, in the field and classroom activities while exposing students to careers in science and building pride and stewardship towards their sanctuary and local environment.
http://channelislands.noaa.gov/edu/edu_act1.html

Channel Mappers Workshop - California
Channel Mappers workshop, March 10-11, 2007 in Camarillo, California, was offered by the Ventura County Office of Education and the Center for Image Processing in Education, in collaboration with Channel Islands National Marine Sanctuary and the Marine Science Institute of the University of California, Santa Barbara. Middle and high school teachers learned to use GIS as a tool that allows students to examine scientific information. The workshop afforded the opportunity to learn how to integrate inquiry-based learning aided by technology into science, social studies, and history instruction.
https://www3.scoe.net/ctap7/index.cfm?fuseaction=eventdetail&eventid=1358
Contact Kris Rees at krisr@evisual.org

Charlotte NC SE PORT
The Southeast COSEE SouthEast Portal to Ocean Research for Teachers (SE PORT) has an Ocean Awareness Day scheduled for March 27, 2004 at the Discovery Place, Charlotte North Carolina, for North and South Carolina educators.
Contact Mary Bures at maryb@discoveryplace.org .

Charting an Interdisciplinary Voyage - Massachusetts
This curriculum development workshop for teachers, August 8-18, 2006 with an optional voyage August 19-22, in Woods Hole, Massachusetts, is based on Massachusetts Frameworks for Grades 3-6. The workshop will assist upper-elementary school teachers to link New England maritime history to science, math and social studies skills using an interdisciplinary voyage-based curriculum.

http://www.sea.edu/academics/program_teacherprogram.asp

Chesapeake Bay Gateways Network Conference - Maryland
The 2005 Gateways Network conference will be held April 4-6, 2005 in Solomons, Maryland. There will be more than 30 sessions on topics which include developing education programs, planning and delivering effective interpretation, and inspiring resource stewardship. There are also six full-day seminars to pursue an in-depth topic.
http://www.baygateways.net/2005_conference.cfm

Chesapeake Classrooms – Various
The Chesapeake Bay Foundation and supporters offer Chesapeake Classrooms, professional development that meets the evolving needs of teachers and schools while enabling teachers to involve their students in outdoor bay or stream experiences that are aligned with local school systems standards. Options include Summer Immersion Courses, Field Investigation Workshops, Student Action Training, and Curriculum Workshops. Grants may be available.
http://www.cbf.org/site/PageServer?pagename=lrn_sub_teachers_professional

Chesapeake Classrooms Summer Courses – Chesapeake Bay
Join the Chesapeake Bay Foundation for a five-day adventure on the Bay or one of its tributaries in July or August, 2012. Teachers can earn recertification or graduate credit while they learn how to integrate the environment into their classroom and help students achieve success as environmentally literate leaders. There are courses in Maryland, Pennsylvania, Virginia, and Washington, D.C. See the website for complete details.
http://www.cbf.org/page.aspx?pid=318

Chesapeake Classrooms Summer Courses – Chesapeake Bay
Join the Chesapeake Bay Foundation for a five-day adventure on the Bay or one of its tributaries in June, July, or August, 2013. Teachers can earn recertification or graduate credit while they learn how to integrate the environment into their classroom and help students achieve success as environmentally literate leaders. There are courses in Maryland, Pennsylvania, Virginia, and Washington, D.C. See the website for complete details. A scholarship may be available.
http://www.cbf.org/join-us/education-program/professional-development/summer-courses

Children's Water Festival - Georgia
Winning Water will be an interactive day of learning for selected 4th grade classes in the Coosa, Tallapoosa, and Tennessee River basins on March 8, 2005, in Dalton, Georgia. The purpose of the festival is to educate students about watersheds and water quality in a fun hands-on atmosphere. It will serve as a model for future water festivals in Georgia's other river basins. On March 7-8, there will be a 2-day workshop designed for those who want to learn about hosting a children's water event in their community.
http://www.winningwater.org/
http://www.groundwater.org/pe/festival_expedition.html

CHNEP Environmental Education Program - Florida
The Charlotte Harbor National Estuary Program in partnership with Mote Marine Laboratory offers this free environmental education program, September 6, 2013 in Sarasota, Florida. Topics include Incorporating New Media into Environmental

Education, NWS Weather Ready Nation: Ecology and Environmental Pilot Project, and much more. Sign up if you're in the area.
http://chnep-enved9-6-13.eventbrite.com/#

Circular Economy: Reduce, Reuse, Recycle - Online
This free edX MOOC from Delft University of Technology discusses how to contribute to a sustainable economic system by implementing novel business and design approaches. Instructors include experts in the fields of industrial ecology, cradle to cradle, and biomimicry. The seven-week course starts October 20, 2015.
https://www.edx.org/course/circular-economy-reduce-reuse-recycle-delftx-circularx

Citizen Science Academy Courses - Online
The NEON Citizen Science Academy, sponsored by the NSF, provides online professional development resources for educators to support effective implementation of citizen science projects and activities that focus on ecology and environmental sciences. The project is intended to be a complete professional development resource for educators and will include online courses, modules, tutorials, and a virtual community of practice. Current resources include a variety of online courses, videos, and more.
http://citizenscienceacademy.org/home

Citizen Science Association Conference
CSA2017, May 17-20, 2017 in Twin Cities, Minnesota, offers the opportunity to make face-to-face connections with leaders in areas of science, policy, conservation, science education, and citizen science practice to inspire social responsibility through participation in citizen science.
http://citizenscience.org/association/conferences/citsci2017/

Citizen Science Webinars - Online
OpenChannels.org and the EBM Tools Network are hosting two webinars with coastal and marine citizen science experts.

- June 4, 2013, Effective Citizen Science for Coastal and Marine Environments: Reef Check California, COASST, and MPA Watch.
- July 17 and July 18, 2013, Effective Citizen Science for Coastal and Marine Environments: Latest Research, Redmap Australia, Reef Watch, and Feral or In Peril.

http://www.ebmtools.org/

Classroom Exploration of Oceans – Maritime Heritage Online
This online virtual teacher workshop focuses on maritime heritage: Mysteries and Sirens of the Deep: April 4-17, 2005. The upcoming keynotes are Maritime Heritage: Resources Revealed in the Hawaiian Islands; The Steamship Portland - Discovering and Managing our Maritime Heritage and the Technologies That Take Us Beneath the Blue Horizon; and Exploring Shipwrecks Together: How one program helps scientists and the public connect with the past.
http://www.coexploration.org/ceo/

Classroom Exploration of the Oceans - Online
Join this virtual teacher workshop series to explore America's little-known ocean realm during the upcoming Classroom Exploration of the Ocean Virtual Teacher Workshop Series, October 9–20 and November 6–17, 2006. This professional development program is offered free to anyone who has access to the Internet. Leading and

emerging scientists will present their research, explorations and discoveries in these unique ocean areas to you online through engaging keynotes which will be followed by opportunities for you to ask the scientists questions online about their work. Links to educational resources, networking opportunities, and more are also available.
http://www.coexploration.org/ceo2006

Classroom Exploration of the Ocean - Online
The College of Exploration, with the support of NOAA's Office of Ocean Exploration and the Marine Sanctuaries Foundation, presents the Virtual Teacher Workshop Series 2008-2009, September 29-October 10, 2008. Week 1 is *Deep Ocean Exploration – New Discoveries and Implications for Our Warming Planet*, September 29–October 3, 2008, with an introduction to the NOAA OE websites and curriculum. Week 2 is *The Okeanos Explorer*, October 6-10, 2008, with a virtual tour of the Okeanos Explorer.
http://www.coexploration.org/oe

Classroom Learning 2.0 - Online
Classroom Learning 2.0 is a free professional-development tutorial on Web 2.0 tools. The tutorial teaches about Web 2.0 tools that are bringing kids in touch with the world through social networking, wikis, video, podcasting, and gaming sites.
http://ctapcl2.blogspot.com/

Classroom in the Wild - Alaska
American University's School of Communications Center for Environmental Filmmaking is hosting this eight-day Alaskan wilderness adventure, August 12-20, 2007, combining survival skill training with wildlife and expedition filmmaking. Students will get hands-on experience under extreme filmmaking conditions.
http://www.environmentalfilm.org/

CLEAN Interactive Webinars - Online
The Climate Literacy & Energy Awareness Network (CLEAN) offers free monthly interactive webinars on topics and resources in climate change science. The series will explore current topics and resources for teaching these topics in the classroom, presented by educators and scientists active in the field. Free registration is required.
http://cleanet.org/clean/community/webinars/index.html

Clean Water Act Course - Online
The River Network offers an online Clean Water Act course. This course provides lessons on topics that are integral to understanding the Clean Water Act. Participants can select a topic or take the entire ten-lesson course.
http://www.rivernetwork.org/introduction-cwa-course

Climate Adaptation in Coastal Communities Webinars
The Sea Grant Climate Network is hosting Climate Adaptation in Coastal Communities: A Network Approach to Outreach, November 9-11, 2009 in Charleston, South Carolina. With support from the National Sea Grant Office and a donation of free connect time from WebEx, they are making the following workshop plenary sessions available for webcasting:

- Session A - Welcome; State of Climate Science; Sea Grant's Focus Areas
- Session B - Panel on Communicating Climate Change
- Session C - Panel on Vulnerability/Adaptation Assessment; Sea Grant Agent Experiences; Community Partnerships

- Session D - Panel Policy, Legislative Issues in Adaptation and Mitigation; Sea Grant and NOAA Efforts
- Session E - Inaugural Business Meeting of the Sea Grant Climate Network (conference call)

They will be posting videos of the sessions on the web shortly after the workshop for those unable to attend.
http://uwmadison.qualtrics.com/SE/?SID=SV_9vtPWwoImWkUeI4&SVID=Prod

Climate Adaptation Training for Coastal Communities – Louisiana and Mississippi
This course gives participants a grounding in the topic of adaptation and time in class to apply what has been learned to their own adaptation projects. The course covers understanding climate science and impacts; determining community vulnerabilities; communicating effectively; identifying adaptation strategies; and finding mechanisms to implement those strategies. Scholarships may be available.

- February 25-26, 2013 in Baton Rouge Louisiana with Louisiana Coastal Management Program
- February 27-March 1, 2013 in Biloxi, Mississippi with Grand Bay National Estuarine Research Reserve

http://csc.noaa.gov/training/calendar/

Climate Change Academy - Alaska
The second Climate Change Academy program, held in collaboration with the National Park Service, will be July 14-24, 2015 from Anchorage, Alaska. In addition to the trip, the program involves climate-specific curriculum meetings in the spring and follow-up campaign aimed at spreading awareness about climate change in the fall. Openings are available for both students and teachers, but see the website for complete details.
http://www.nobarriersyouth.org/programs/climate_change_academy

Climate Change Activities - Massachusetts
The New England Aquarium is hosting a free climate change training, June 21, 2013 in Boston, Massachusetts. The workshop is aimed at classroom teachers and informal educators hoping to engage students and adults around the topic of climate change. The activities are from Climate Interpreter.
http://climateinterpreter.org/resource-topic/training
http://www.surveymonkey.com/s/BCL6KHJ

Climate Change - Cause and Effect - Georgia
The Georgia Aquarium, in partnership with COSEE–Southeast, presents *Ocean Awareness Day: Climate Change - Cause and Effect*, November 6, 2010 in Atlanta, Georgia., an educator workshop for middle and high school teachers This event is free but pre-registration is required.
http://www.georgiaaquarium.org/education/teachers/professional-development.aspx

Climate Change Communication for Environmental Educators - Online
This free online course from EECapacity, September 6-October 28, 2016, is not about climate change science or impacts, but rather about effective practices for *communicating* about climate change through environmental education programs. The course is for environmental education professionals interested in applying current research in climate change communication and psychology to their educational programs.

http://www.eecapacity.net/activities/online-courses/climate-change-communication-environmental-educators

Climate Change Course - Online
The University of California offers this free online course for the general public, examining the factors responsible for climate change, the biological and sociological consequences of such changes, and the possible engineering, economic, and legal solutions to avoid more extreme perturbations. The course includes weekly themes, daily mini-lectures, data visualizations, quizzes, exams, weekly assignments, a textbook, and readings.
http://www.climatechangecourse.org/

Climate Change Courses - Online
The State University of New York's College of Environmental Science and Forestry is offering two online courses on climate change. Climate Change Science and Sustainability, March 21-May 6, 2011 introduces participants to climate science. Climate Change Science and Environmental Meteorology, January 18–May 11, 2011 is a more in-depth examination of climate science and climate change through a basic meteorological perspective.
http://www.esf.edu/esfonline/

Climate Change E-Conference Series - Online
The EcoRes Forum is a new series of free, online e-conferences focusing on the ethical, political, and sociocultural aspects of climate change. The first e-conference, *From Anthropocentrism to Ecocentrism: Making the Shif*t, April 14-30, 2007, will evaluate the current status - what is working, and what isn't, around the globe. Armed with this knowledge, participants will shift focus to the future, considering multi-prong approaches for moving forward on this issue.
http://www.eco-res.org

Climate Change Education - Online
CAMEL (Climate, Adaptation, Mitigation, E-Learning) is a free, interdisciplinary, multimedia resource for educators. An online college course for educators offers daily video mini-lectures, readings, and much more.
http://www.camelclimatechange.org/

Climate Change Education Professional Learning Community - Online
NAAEE is supporting a new Professional Learning Community on climate change education. The sessions start March 15, 2012 and will take place the first and third Thursdays of each month.
Contact Karen Hollweg at khollweg@naaee.net

Climate Change Education Roundtable – Washington, DC
The purpose of the Climate Change Education Roundtable is to foster ongoing discussion of the challenges to and strategies for improving public understanding of climate science and climate change among federal agencies, the business community, non-profit, and academic sectors and provide a critical mechanism for developing a coherent, national strategy to advance climate change education guided by the best available research evidence.
http://www7.nationalacademies.org/bose/Climate_Change_Education_Homepage.html

Climate Change Educator Conference - California
NASA JPL offers this Climate Change Educator[1]s conference, March 3-4, 2007, April 4-May 16, 2008 in Pasadena, California, including presentations by Earth scientists, engineers, and educators. Participants will gain a better understanding of how NASA data is gathered that informs the climate debate and some of the recent results. There will also be discussion of past climate variations and their impacts on human society.
http://ecourses.ncar.ucar.edu/
http://education.jpl.nasa.gov/events/climate20070116.html

Climate Change in Four Dimensions - Online
University of California San Diego Extension offers free courses through Open CourseWare, also known as Massive Online Open Courses (MOOC). Courses have various start and end times, but can be taken at your pace and at your convenience. Climate Change in Four Dimensions: Scientific, Policy, International and Social will review climate change from a variety of perspectives at the intersection of the natural sciences, technology, and the social sciences and humanities.
http://extension.ucsd.edu/online/index.cfm?vAction=ocw

Climate Change Game Night – Washington, D.C.
The Smithsonian's National Museum of Natural History Q?rius program will host a Climate Change Game Night, January 21, 2016 in Washington, D.C. Play newly developed games, talk with their designers, and give them feedback during this open-house event. Along the way you'll explore Arctic ice-melt, conserve marine ecosystems, and try to keep the global temperature from rising.
http://go.si.edu/site/Calendar/65562556?view=Detail&id=101021

Climate Change Impact Webinar--Hawaii and Pacific Islands
The Department of Energy's Minorities in Energy Initiative is a platform to increase engagement of minority and tribal communities in the broader energy sector, with a focus on the three primary goal areas of STEM education and workforce development, energy economic development, and climate change. Register for a Regional Climate Change Impact Webinar; hurry -- Hawai'i and Pacific Islands will broadcast November 5, 2015.
http://energy.gov/diversity/mie-webinar

Climate Change Impacts Webinars
NSTA is offering two webinars about the regional impacts of global climate change: Global Climate Change Impacts in the Western United States, November 5, 2009 and Global Climate Change Impacts in the Eastern United States, November 17, 2009. The webinars are free; registration is required.
http://learningcenter.nsta.org/products/symposia_seminars/fall09/NOAA/webseminar2.aspx
http://learningcenter.nsta.org/products/symposia_seminars/fall09/NOAA/webseminar1.aspx

Climate Change Interpretation Study Circles
The National Network for Ocean and Climate Change Interpretation is implementing a study circle for interpreters or communicators who focus on ocean or coastal issues. See the website for complete details.
http://support.neaq.org/site/PageNavigator/prof_devel_study_circle.html

Climate Change, Learn and Contribute - Online
Join NOAA's Climate Stewards Education Project September 6, 2016 for the webinar, Climate Change, Learn and Contribute: Become a Citizen Scientist Today!
https://attendee.gotowebinar.com/register/1932857155813134593

Climate Change Messaging Workshop for Informal Educators – North Carolina
This free introductory workshop from the National Network for Ocean and Climate Change Interpretation, December 12, 2013 in Kure Beach, North Carolina, is offered to informal science educators interested in strategic framing and climate change communication. The workshop will introduce participants to elements of strategic framing.
https://reservations.ncaquariums.com/fortfisher/Info.aspx?EventID=29

Climate Change - Online
The American Museum of Natural History is looking for 100 science teachers to participate in the Seminars on Science Climate Change program. Each participant will receive a stipend to offset the cost of completing this online course.
http://www.amnh.org/learn/climate

Climate Change Interpretation Study Circles - Various
The National Network for Ocean and Climate Change Interpretation is implementing a study circle for interpreters or communicators who focus on ocean or coastal issues. See the website for complete details.
http://support.neaq.org/site/PageNavigator/prof_devel_study_circle.html

Climate Change and the Practices of Science - California
This professional development opportunity, July 22-23, 2013 in Berkeley, California, focuses on the science of climate change and how to provide middle school students with opportunities to gather evidence and use scientific argumentation to make evidence-based explanations.
http://lhsgems.org/gemsworkshops.html

Climate Change Professional Development - Online
NOAA's climate portal offers listings of professional development opportunities for those educators interested in learning more about climate change. Opportunities include courses and workshops, hangouts, webinars, and more. Items can be view as a list or via a calendar.
http://www.climate.gov/teaching/professional-development

Climate Change: The Science - Online
This free edX course from the University of British Columbia will provide an introductory level course on climate science to help participants better understand the news, evaluate scientific evidence, and explain global warming to anyone. The course begins October 14, 2015. The seven-week course begins January 11, 2016.
https://www.edx.org/course/climate-change-science-ubcx-climate1x

Climate Change Teacher Training - California
The San Luis Obispo County Air Pollution Control District and partners are hosting this free workshop, February 15, 2011 in San Luis Obispo, California, recruiting school teachers to implement a science-based climate change curriculum in their 2011 lesson

plans. Participants will receive a stipend, educational materials, and more. Space is limited and registration is required.
Contact Gary Arcemont at garcemont@co.slo.ca.us

Climate Change in Urban Estuaries Symposium - California
Join Santa Monica Bay Restoration Commission and partners for a scientific symposium focusing on the impacts of changing climate on the ecology and resilience of urban wetlands, March 25, 2013 in Los Angeles, California. Topics will range from sea level rise to erosion and thermal stress. The symposium is part of a week's focus in Los Angeles on climate change.
http://www.santamonicabay.org/CoastalWetlands/Symposium2013/registration.html

Climate Change Vulnerability Index Webinar - Online
The Climate Change Vulnerability Index assesses the relative vulnerability of plant and animal species to the effects of climate change using readily available information about climate predictions and species' natural history, distributions, and landscape circumstances. The webinar described the concepts used to develop the index, the climate data sources it draws upon, the specific assessment factors, and demonstrated the use of the assessment and highlight a variety of ways in which it has been applied.
http://www.natureserve.org/prodServices/climatechange/ccvi.jsp

Climate Communication: Changing the Conversation - Virginia
Join educators from the Virginia Aquarium and the Chesapeake Bay National Estuarine Research Reserve, February 21, 2015 in Newport News, Virginia for this climate communication workshop, with activities and lessons from the National Network of Ocean and Climate Change Interpretation. This hands-on workshop will explore best practices for communicating climate change as participants look at how audiences think, and tools to promote sustainable energy practices.
http://www.mamea.org/vamini.html

Climate Discovery Courses for Educators - Online
The National Center for Atmospheric Research offers distance learning courses that build upon their face-to-face professional development workshops. Climate Discovery is a series of six-week courses for middle and high school educators that aims to enhance teacher qualifications, competency, and self-confidence in integrating Earth system science, climate, and global change the science classroom. The next courses run concurrently from January 22-March 14, 2010. The next courses run from March 25-April 28, 2010. Summer courses run June18-August 8, 2010 and Fall courses run September 17-November 7, 2010.
http://www.windows.ucar.edu/tour/link=/teacher_resources/main/gccepdn_main.html
http://ecourses.ncar.ucar.edu/

Climate Education in an Age of Media - Massachusetts
The Climate Education in an Age of Media project at the University of Massachusetts Lowell offers two summer workshops for secondary and post-secondary science educators to combine student-created media production and climate science.
http://cleanet.org/cced_media/your_classroom/index.html

Climate Education Regional Workshop - Colorado
NOAA's Climate Stewards Education Project and partners will convene four free climate-science workshops for formal and informal educators. This workshop, June 25-27, 2015

in Boulder, Colorado, will focus on the region and topical impacts of climate change. Availability is on a first come first serve basis, so register early.
http://www.climate.gov/teaching/professional-development/climate-education-regional-workshop-boulder-colorado

Climate Education Regional Workshops - Various
NOAA's Climate Stewards Education Project and partners will offer free climate-science workshops for formal and informal educators. Registration is currently open for the following workshops:

- May 17-18, 2015 St. Petersburg Florida
- June 25-27, 2015 in Boulder, Colorado
- August 5, 2015 in Silver Spring, Maryland

Participation is on a first-come, first-served registration basis.
https://docs.google.com/a/noaa.gov/forms/d/1NfDNsSSQUcDTP2-fEKrGLCxwe8421HwLA-2-zPLGwFI/viewform
https://docs.google.com/a/noaa.gov/forms/d/1UqtHKKgGhfILBZmmbbybPd2YaMt0sqhTlMhb1oKWe3g/viewform
https://docs.google.com/a/noaa.gov/forms/d/1zb_d0vbcMYCv8Pd6P7L9LCf68LXdf87PBr0VaEgAaP4/viewform

Climate Educator Conference - California
NASA is hosting an educator conference on the unique climate of the state of California, May 1-2, 2010 in Pasadena, California. The conference is geared toward all educators and students, high school and above, interested in earth and space science and exploration. Presentations will address the current climate, the historical record, long-range trends and future forecasts in context. Special attention will be paid to the California science standards.
http://www.jpl.nasa.gov/education/index.cfm?page=130

Climate Literacy Conference - California
The invitational Climate Literacy Conference, February 17-18 in San Diego, California, is designed to bring together educators working in a wide range of informal science environments for a two-day professional development conference that will focus exclusively on climate literacy in all of its dimensions and to provide opportunities for informal science educators to interact with scientists and science media who will be participating in the 2010 AAAS Annual Meeting that immediately follows.
http://www.project2061.org/events/meetings/climate2010/

Climate Literacy: Essential Principles for Teachers - Online
This online course, July 6-28 from the University of Colorado at Boulder, will serve educators seeking knowledge about our scientific understandings of Earth's climate, historical climate change, and recent climate change. Educators will also explore pedagogical approaches to incorporating climate science and related topics into their classrooms and programs. All Colorado middle school and high school teachers are eligible for an 80% scholarship.
http://conted.colorado.edu/programs/sustainable-practices/additional-opportunities/climate-literacy-essential-principles-for-teachers/

Climate Outreach Community of Practice - Alabama
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

Climate Reality Leadership Corps - Colorado
The Climate Reality Project will host the next leadership corps training March 2-4, 2017 in Denver, Colorado. The three day training, meals, and materials are free, but lodging and transportation are the responsibility of the participant.
https://www.climaterealityproject.org/training

Climate Resilience Toolkit Webinar - Online
NOAA and partners will host this free webinar, April 13, 2015. It will examine NOAA's climate resilience toolkit, which provides resources and a framework for understanding climate issues. Topics include coastal flood risk, ecosystem vulnerability, and more.
http://cpo.noaa.gov/ClimatePrograms/ClimateandSocietalInteractions/SARPProgram/WebinarsandWorkshops.aspx

Climate Science 101 - Online
The Cooperative Institute for Research in Environmental Sciences at the University of Colorado presents Climate Science 101: Essential Knowledge and Teaching Strategies, January 21-April 30, 2013. This online course focuses on the essential principals of climate science and provides experience with teaching strategies, such as identifying and addressing misconceptions, minimizing controversy, and teaching so that students can engage positively.
http://cires.colorado.edu/education/outreach/ICEE/OnlineCourse/

Climate Science Academy for Teachers - Delaware
The MADE CLEAR (Maryland and Delaware Climate Change Education Assessment and Research) Climate Academy, July 14-19, 2013 in Lewes, Delaware, is designed for Maryland and Delaware middle and high school science teachers. The academy will provide guidance around the implementation of the Next Generation Science Standards, Environmental Literacy Standards, and existing science standards.
http://www.madeclear.org/climate-academies/

Climate Science in the Classroom - Online
The half-day virtual conference from NSTA and NOAA, Climate Science in the Classroom, March 12, 2016, will feature climate scientists and education specialists who will share both their knowledge about climate science as well as classroom-ready resources that educators can use with their students.
http://learningcenter.nsta.org/products/online_courses/VC_160312.aspx

Climate Science and the Oceans - Massachusetts
The New England Aquarium and partners offer this summer professional development workshop for teachers of grades 6-12, August 10-13 in Boston, Massachusetts, with a follow-up meeting date to be decided. The workshop will focus particularly on ocean ecosystems and consider rising sea levels and melting ice caps as indicators of a changing climate. Participants will also consider ocean acidification as a related topic with implications for marine life and systems.
For more information, contact trc@neaq.org.

Climate Science Research for Educators and Students – New York
The Institute for Earth Science Research and Education and partners seek participants for summer professional development workshops in the second year of its *Climate Science Research for Educators and Students* project. This project is funded under NASA's Innovations in Climate Education initiative, and focuses on improving the understanding of sun-Earth-atmosphere interactions in part by helping educators and students develop high-quality, climate-related, science fair projects. June 28-30, 2012 in New York City, New York. June 27-29, 2013
http://www.instesre.org/GCCE/GCCEHome.htm
http://www.instesre.org/GCCE/Agenda2012.htm
http://www.smdeponews.org/programs-events/nasanice-climate-science-research-for-educators-and-students-workshop-middle-and-high-school-educators-apply-by-may-1/

Climate Science in Support of Decision Making Workshop - Virginia
The U.S. Climate Change Science Program is hosting a workshop entitled *Climate Science in Support of Decision Making*, November 14-16 2005, in Arlington, Virginia. The workshop will include a discussion of decision-maker needs for scientific information on climate variability and change, as well as expected outcomes of the program's research and assessment activities that are necessary for sound resource management, adaptive planning, and policy formulation.
http://www.climatescience.gov/workshop2005/default.htm

Climate Science & Sustainability - Texas
The University of Texas' Environmental Science Institute will hold this professional development workshop for K-12 teachers, February 19, 2015 in Austin, Texas, during UT Energy Week. Highlights will include a sustainability tour of the UT Microgrid, a panel discussion on the impact of water resources on energy technology, lesson plan activities related to climate and alternative energies, and more.
Contact Karen Bishop at karen.bishop@esi.utexas.edu

Climate Science Workshops – Various
NOAA's Climate Stewards Education Project is collaborating with Federal, State, and NGO partners to convene six free climate-science workshops for formal and informal educators. Participants will interact with climate science education and communication experts, and visit facilities to explore innovations in climate research, mitigation, and/or adaptation. Each workshop will focus on regional and/or topical impacts of climate change. Contact the local educator for details.

- Long Beach, California - Alie LeBeau at ALebeau@lbaop.org
- Boulder, Colorado - Teri Eastburn at eastburn@ucar.edu
- New Orleans, Louisiana - Tricia LeBlanc at tleblanc@audubooninstitute.org
- Detroit, Michigan - Claire Lannoye-Hall at clannoyehall@dzs.org
- Charleston, South Carolina - Evie Bell at EV.Bell@scseagrant.org
- Salt Lake City, Utah - Chris Schmitz at cschmitz@hoglezoo.org

Climate Stewards Education Project - Online
NOAA's Climate Stewards Education Project provides formal and informal educators working with elementary through university students with sustained professional development, collaborative tools, and support to build a climate-literate public that is actively engaged in climate stewardship. Participants are eligible for a variety of funding resources.

http://oceanservice.noaa.gov/education/climate-stewards/

Coast Alive Workshop - California
Learn how to explore the complex biological issues of southern California's marine environment, coastal wetlands, and related watersheds through this Coast Alive! Workshop, April 8-9 in Long Beach, California. Coast Alive! Offers an 8-day teacher institute, helping teachers learn ways to incorporate inquiry-based, hands-on, and interactive multimedia activities in their middle and high school science classrooms, using a comprehensive curriculum that integrates Ocean Literacy with California Content Standards. Educators in all subjects and grade levels are encouraged to apply.
http://www.coastalive.org/
http://eurekaseries.org/coastalive/land-sea-interface/

Coast Alive! Teacher Training Workshop - California
Coast Alive! is a project created by the California Institute for Biodiversity, California State Parks Foundation, and California State Parks for 5th-9th grade teachers and their students. The project provides teacher professional development and incorporates interactive computer technology and lessons in literacy, science, math, and social science. Teachers will be able to have their students extend and apply classroom lessons to field investigations.
http://www.coastalive.org/

Coast Alive! Teacher Institutes – California
Coast Alive! and the California Institute for Biodiversity offer this field experience to strengthen teacher's skills in science, pedagogy, and leadership. Coast Alive! Earth, Wind, Fire, Water Institute for southern California will be held in June 2008; Coast Alive! Land-Sea Interface Institute for the East Bay Regional Park District – San Francisco Bay Area will be held August 3–8, 2008.
Contact Roger Renn at roger@calalive.org

Coast to Classroom – Online
Audubon Aquarium of the America's new Coast to Classroom Distance Learning Program will offer a live webcasted class to teachers in Texas, Louisiana, Mississippi, Alabama, and Florida. These classes are offered free of charge to all teachers through May 2010. Advanced registration is required to participate, and classes are offered at various times during regular school hours. Programs include Identification of Gulf Habitats (grades 4-8) and Coastal Conservation Issues and Restoration (grades 9-12).
http://www.auduboninstitute.org/media/releases/audubon-aquarium-americas-new-distance-learning-program

Coastal Concerns Teacher Workshop - Georgia
Join scientists from Georgia Southern University, the University of Georgia, and the Sapelo Island National Estuarine Research Reserve, January 20, 2012, November 12, 2011 February 15, 2013 in Brunswick, Georgia. Learn about their current research relevant to how the Georgia Coast is responding to impacts from estuarine pollution, invasive species, and from rising temperatures and carbon levels in the atmosphere and in the ocean.
Contact Georgia Graves at georgiabeachwalk@bellsouth.net
http://eeingeorgia.org/net/calendar/details.aspx?s=99296.0.0.4863&c=4623361

Coastal Concerns Teacher Workshop – Georgia
Join the Sapelo Reserve for the Coastal Concerns Teacher Workshop, February 14, 2014, February 27, 2015 in Brunswick, Georgia. The workshop will cover a variety of topics including sea level rise and shoreline change, marine debris, and more.
Contact Georgia Graves at georgiabeachwalk@bellsouth.net

Coastal Conservation through STEM - Georgia
The 2012 Georgia Association of Marine Education Conference will take place November 2-4, 2012 on Jekyll Island, Georgia. Scholarships may be available.
http://www.gamarineeducation.org/sites/default/files/2012GAMERegistration.pdf

Coastal Curricula Workshops - Louisiana
The Barataria-Terrebonne National Estuary Program is partnering with the Louisiana Department of Wildlife and Fisheries to offer free summer wetland teacher training workshops for educators who teach grades K-4. Teachers can learn more about Louisiana wetlands through interactive Coastal Curricula Workshops. Teachers will receive information and instruction on Louisiana's wetlands during this one-day workshop along with standards-based lessons and activities
http://www.btnep.org/newsletter/newsletters.asp

Coastal Ecology Teacher Workshop - Georgia
Join Sapelo Island National Estuarine Research Reserve for an in-depth look at Georgia's coastal systems and discover the abundance and variety of wildlife found along our shores, June 16-19, 2009, June 21-24, 2011 , June 11-15, 2012, July 9-11, 2013 June 25-27, 2014 June 20-22, 2015 June 23-26, 2016; on Sapelo Island, Georgia. Emphasis is placed on estuarine and marine ecology, coastal species identification and adaptations, commercial and recreational fisheries, and management.
Contact Georgia Graves at georgiabeachwalk@bellsouth.net

Coastal Ecosystem Education Program
A free, one-week Coastal Ecosystem Education Program workshop offers professional training about rocky intertidal and sandy beach monitoring projects. The complimentary curriculum offers background information and activities about the ecology and oceanography of the Gulf of the Farallones National Marine Sanctuary.
http://www.farallones.org .

Coastal Ecosystem Teacher Workshop - California
This five-day professional development workshop, June 25-29, 2005, in San Francisco, California, is for middle and high school teachers and educators. Learn about the oceanography and ecology of the Gulf of the Farallones through field work and standards-based activities to take back to your classroom. This professional development workshop focuses on monitoring projects at the rocky shore and sandy beach.
Contact April Devitt at (415) 561-6625 x304 or adevitt@farallones.org

Coastal Ecosystem Workshop - California
The Farallones Marine Sanctuary Association and the Gulf of the Farallones National Marine Sanctuary are hosting their annual educators' workshop, August 10-11, 2006 in Montara, California for middle and high school teachers. The workshop will focus on the rugged, diverse coastal ecosystems of San Mateo County. Participants join sanctuary

staff on field trips to rocky intertidal and sandy beach sites to learn monitoring and learn how to incorporate inquiry-based monitoring projects into their curriculum.
http://www.rudyalicelighthouse.net/CalLts/PtMntara/PtMntara.htm

Coastal Ecosystem Workshop - California
The Farallones Marine Sanctuary Association is offering the annual summer Coastal Ecosystem Workshop, July 8-10 in San Francisco, California, for teachers of grades 6-12. Participants will broaden their knowledge of California's rocky intertidal marine ecosystems, connect and collaborate with local teachers and scientists, and receive background materials and classroom resources. The workshop is free; a stipend may be available.
http://www.farallones.org/education/teacher_workshops.php

Coastal Ecosystems Long Term Ecological Research Program – Georgia
The Georgia Coastal Ecosystems Long Term Ecological Research Program studies how long-term changes caused by climate change, sea level rise, and human alterations of the landscape affect coastal ecosystems. The Schoolyard Program, July 8-13, 2012 on Sapelo Island, Georgia, provides in-service training for K-12 educators in field ecology, immersing science and math teachers in hands-on research activities in the field to enable them to bring lessons and actual research data back to the classroom.
http://www.marex.uga.edu/aquarium/teacherWorkshops.html

Coastal Explorations Workshop – North Carolina
The North Carolina National Estuarine Research Reserve and Coastal Reserve programs held a Coastal Explorations Workshop, September 10-11, 2004, Atlantic Beach, North Carolina. This workshop targeted activities for use in both the classroom and in the field. These activities are designed to increase awareness and understanding of the importance of estuaries. Both activity guides include a variety of activities and levels of information.
http://www.ncnerr.org/education/workshops/index.html .

Coastal Marine Ecology of the Florida Keys - Florida
MarineLab is offering its Coastal Marine Ecology of the Florida Keys teacher workshop, July 26-31, 2009 in Key Largo, Florida. The workshops are designed for informal or formal science teachers, who can choose the snorkeling or SCUBA diving option for the workshop.
http://www.marinelab.org/Teacher_Workshops.html

Coastal Marine Sciences Workshop - Maryland
The University of Maryland Eastern Shore offers a free annual CMARS Teacher Development Workshop for grades 6-12 educators, July 15-28, 2012 in Princess Anne and Berlin, Maryland.
http://www.umes.edu/CREST/Default.aspx?id=33372

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

Coastal Oceanography Day - California
Coastal Oceanography Day is a free workshop, April 28, 2007 in Tiburon, California, designed to promote interaction between San Francisco Bay Area marine scientists and middle and high school science teachers. Participating teachers will learn about local scientific resources, take home lesson plans and project ideas aligned with state science standards, and have an opportunity to network with other science teachers as they study the coastal ocean through interactive lectures, activities, and a research cruise.
Contact Sarah Davies at daviess@sfsu.edu

Coastal Restoration Project Design and Evaluation - Virginia
The NOAA Coastal Restoration Project Design and Evaluation Training, February 2-3, 2016 on Wallops Island, Virginia, will help restoration practitioners and education professionals to gain valuable knowledge, skills, and tools to enhance their ability to design and evaluate targeted restoration projects. There will be four grants in 2016-2017 to create or improve on coastal restoration projects; participating organizations will be given preference in the selection process for these funds.
https://coast.noaa.gov/digitalcoast/training/coastal-restoration
https://msconsortium.wufoo.com/forms/zky4rt0asuqdt/

Coastal Science Institute for Middle School Teachers - Maine
Bowdoin College offers a weeklong Summer Institute in Brunswick, Maine. The institute will provide a meaningful professional development opportunity for teachers to conduct hands-on science and disseminate important environmental knowledge into classrooms over time. Interdisciplinary teams are encouraged to apply. The theme of the 2007 institute is *Invasive Species* and will introduce teachers to laboratory and field techniques that will help to identify, monitor, and trace the spread of introduced species.
http://academic.bowdoin.edu/csc/bccsi/index.shtml

Coastal Services Center Online Training Courses
NOAA's Coastal Services Center has two e-learning training courses available online. The *Public Trust Doctrine* course provides an overview of the physical, legal, and administrative aspects of public trust lands. The *Web Content Design and Evaluation* course is designed to help coastal organizations develop better web content and determine its effectiveness.
http://www.csc.noaa.gov/bins/training.html

Coastal Legacy Workshop for Teachers – North and South Carolina and Georgia
Coastal Legacy will assist you integrate Sea Island culture and heritage into your science and mathematics instruction. The workshop will be held July 25-30, 2005 on St. Helena Island, South Carolina. Teachers will explore South Carolina and Georgian coastal habitats, land use, geology, and geography of the Southeast region, in the context of the Gullah/Geechee culture. Teachers will receive educational resources and lessons, access to scientists and community leaders, and more.
http://www.scseagrant.org/se-cosee/education.htm

Coastal Legacy Program – North Carolina, South Carolina, and Georgia
The 2006 Coastal Legacy Program for middle level teachers, June 17-23, 2006 on St. Helena Island, South Carolina, highlights the cultural history of the Southeast's coast, barrier islands, and sea Islands. In this week-long investigation, teachers will explore coastal culture, history, and heritage to earth, environmental, and physical science and

mathematical concepts. Participants will investigate barrier island ecosystems, impact of hurricanes, geography, and physical factors.
http://www.scseagrant.org/se-cosee/teacher/06_coastal_legacy.htm

Coastal Marine Ecology of the Florida Keys Teacher Workshop - Florida
MarineLab hosts the Introduction to Coastal Marine Ecology of the Florida Keys Teacher Workshop in July 25-30, 2010, in Key Largo, Florida, along with a new AP MarineLab workshop and a SCUBA workshop learning the REEF CHECK research protocols. Ten in-kind scholarships are available to Florida teachers.
http://www.marinelab.org/Teacher_Workshops.html

Coastal Marine Sciences Workshop For Teachers - Maryland
The paid CMARS workshop, July 7-19, 2013 in Princess Anne, Maryland, promotes environmental literacy among high school and middle school teachers and students by infusing ocean science educational materials into the existing curricula. Check out the website for extended details.
http://www.umes.edu/CREST/Default.aspx?id=33372

Coastal Ocean Observing Workshop - Georgia
This Coastal Ocean Observing Workshop will take place June 20-25, 2006 in Savannah, Georgia. The workshop is open to middle and high school teachers who are presently involved in teaching marine science, physical science, physics, or earth/oceanography.
http://eeingeorgia.org/net/calendar/details.aspx?c=28356&s=37717

Coastal Restoration Workshop – California
The California Coastal Commission is hosting a series of free workshops on how to develop a volunteer-based habitat restoration program; the next seminar will be held September 18, 2008 in Carlsbad, California. The workshops will introduce the guide, Digging In: A Guide to Community Based Habitat Restoration. The guide covers each step of a volunteer restoration project, from getting permissions, to collecting seeds, to conducting outreach for your restoration event.
http://www.coastal.ca.gov/publiced/UNBweb/diggingin.html
Contact Kristina Finstad at kfinstad@hotmail.com

Coastal Studies for Girls - Maine
Coastal Studies for Girls is a residential marine science and leadership semester school just for girls, located on the coast of Freeport, Maine. The program offers hands-on marine and environmental science and outdoor leadership adventures in the classroom, laboratory, and along the coast. In addition to the summer programs for students, they offer Mapping Place with ArcGIS for educators.
http://www.coastalstudiesforgirls.org/summer-programs/

Coastal Waters Institute for Art, Science, and Math - Texas
Artist Boat, with funding from NOAA's B-WET program, offers this free professional development for middle school teachers in a five-county region of Texas. The Coastal Waters Institute is a five-day program with two sessions available in June and July 2010, offering teachers the opportunity to get hands-on, feet-wet training in art, science, social studies, English and math, with a focus on Galveston Bay.
Contact Rani Henderson at Rhenderson@artistboat.org

Coastal Waters Institute - Texas
Artist Boat, with funding from NOAA's B-WET program, offers this free professional development for teachers in grades 7-8. The Coastal Waters Institute is a five-day program with different sessions available June-August, offering teachers the opportunity to get hands-on, feet-wet training in art, science, social studies, English and math. Check the website for areas served and contact information. Space is limited. July 14-17 or July 21-24, 2014
http://www.artistboat.org/coastal-waters-institute-for-art-science-and-math.html
Contact lashley@artistboat.org

CoastLines 2010 - California
CoastLines is a three-year comprehensive project for students and teachers introducing fundamental concepts about information technologies to grade 7-12 schools using geographic information systems (GIS) and global positioning system (GPS) technology to conduct scientific studies of coastal ecosystems in the NSF's Long-Term Ecological Research network. The CoastLines project is now accepting applications from teachers to participate in the 2010 project cohort.
http://www.coastlines.ws/

Coastlines 2005 - Georgia
Join educators and research faculty for fifteen days of intensive field and laboratory experience which will prepare teachers to identify water quality issues and conduct studies in their own schools and communities. Twenty middle and high school teachers will work alongside research scientists collecting water samples in the field, conducting both field and laboratory assays, and statistically analyzing results to assess water quality. This is a residential program on Skidaway Island, Georgia from July 6-19, 2005.
http://www.uga.edu/aquarium/workshops/CL05.html

COASTeam Leadership Institute – South Carolina
The COASTeam Leadership Institute is a free, three-hour graduate professional development credit course, June 13-17, 2005, in Charleston, South Carolina. The COASTeam Program is an integrated course for middle school teachers to learn marine science concepts in the fields of geology, biology, chemistry, and physics. The course teaches these concepts using South Carolina's coast as the classroom, providing teachers with relevant, local examples.
Contact Sarah McGuire, COASTeam@cofc.edu

CoastWatch Shoreline Science Workshops - Oregon
Learn about coastal natural history at these three-day CoastWatch workshops in July and August, 2015. The workshops will cover major coastal ecosystems, including tidepools, sandy beaches, estuaries, and more. Each session will include field trips, indoor presentations, and lab experiences.
https://oregonshores.givezooks.com/events/2015-coastwatch-shoreline-science-workshops

CoCoRaHS WeatherTalk Webinars - Online
The Community Collaborative Rain, Hail and Snow Network is a non-profit, community-based network of volunteers measuring and mapping precipitation. By using low-cost measurement tools, stressing training and education, and utilizing an interactive website, the aim is to provide high-quality data for natural resource, education, and research

applications. They offer bimonthly webinars, and archive them for those wishing to view them at a later date.
https://www.cocorahs.org/Content.aspx?page=wxtalk

Collaborative Summer Program for High School Seniors - Maryland
This free Collaborative Summer Program, July 1-August 10, 2012 in Princess Anne, Maryland offers stipends and course credit for high school students, particularly from underrepresented groups, in various areas of geosciences. Students will receive lectures and take part in hands-on activities in marine geology, physical oceanography and atmospheric science, remote sensing/GIS, and more.
http://www.nosb.org/2012/noaa-geosciences-summer-program-for-high-school-students/

College of Exploration Courses - Online
The College of Exploration is launching a new set of online courses featuring expert faculty and professional development topics in education pedagogy, assessment, scientific discovery, and more. The first course, Teaching 21st Century Skills, runs July 10-August 4, 2013. Additional courses will include Oceans and Human Health, Searching for Shipwrecks, and Short Cycle Assessment in the Classroom.
http://www.coexploration.org/online-campus/index.html

Colonial Coast Birding & Nature Festival - Georgia
The Colonial Coast Birding & Nature Festival celebrates Southeast Georgia as a birder's paradise, offering a wide variety of habitats and wildlife. Shorelines, salt marshes, old rice fields, woodlands, tidal rivers, freshwater wetlands and more all host their own fascinating bird communities. The festival is not just for birders, offering field trips and seminars that will appeal to all types of nature lovers, including different vendors, conservation groups, kids' activities, arts and crafts, even a live raptor show.
www.coastalgeorgiabirding.org .

Communicating Clearly: Writeshops for Developing Country Scientists
The Stockholm Environment Institute and partners are helping early-career scientists and practitioners from developing countries to build their writing skills on climate change adaptation and disaster risk reduction through a series of "writeshops", to be held in 2011.
http://climate-l.iisd.org/guest-articles/communicating-clearly-writeshops-for-developing-country-scientists/?referrer=climate-change-daily-feed

Communicating Climate Change - California
The Elkhorn Slough Coastal Training Program provides individuals and groups science-based information, tools, and techniques to make better decisions regarding resources within coastal watersheds. Check out the upcoming communicating climate change workshops in February and March, 2014.
http://elkhornsloughctp.org/training/

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

Communicating Climate Science Instructors' Workshop - California
The Lawrence Hall of Science, University of California, Berkeley is offering a free workshop, February 23-24, 2015 in Berkeley, California, to learn how to teach their newest college course. The Instructors' Workshop prepares faculty and others interested in teaching the Communicating Climate Science course at their institutions. Travel funds may be available.
Contact Catherine Halversen at chalver@berkeley.edu

Communicating Complex Biological Stories in National Parks
This workshop, March 30-31, 2004, Atlanta, Georgia (immediately preceding NSTA's Conference), focuses on communicating and designing educational programs for National Park Service biological resources. Participants will complete a pre-workshop assignment, a post-workshop product, and contribute to a publication on techniques for bringing the biological sciences to both the general public and educators.
http://www.nature.nps.gov/LearningCenters/new/biowrkshp_flyer_mar03.pdf .

Communicating for Conservation Workshops
The Ocean Project conducts day-long conservation communications workshops to bring their communications strategy directly to key staff at Partner Institutions throughout the country, including aquariums, zoos, and museums. The interactive workshops increase the capacity of staff at these institutions to effectively educate their visitors about conservation through improved exhibits, outreach, and other educational programs.
http://www.theoceanproject.org/what_we_do/communication.html

Communicating Ocean Sciences - California
Communicating Ocean Sciences is a university course introducing graduate and undergraduate science students to learning and teaching science. The course is designed to be co-taught by an ocean scientist and science educator. The Communicating Ocean Sciences Instructors' Workshop, June 3-5, 2009 in Berkeley, California, shares the pedagogy and curriculum with scientists and science educators interested in teaching the course at their institutions.
http://www.coseeca.net/programs/communicatingoceansciences/instructorsworkshop/

Communicating Ocean Sciences Summer Workshop - California
The Center for Ocean Science Education Excellence (COSEE) – California will host a two-day workshop, Communicating Ocean Sciences Summer Workshop, June 11-12, 2007 in Berkeley, California. This instructors' workshop, June 7-9, 2010 in Berkeley, California, Participants will study education-theory-grounded methodology and receive the materials needed to teach the courses which are now being taught at more than 20 universities that have marine science programs.
http://cacosee.net/collegecourse/workshop.html
http://www.coseeca.net/programs/communicatingoceansciences

Communicating Ocean Sciences Summer Workshop - California
COSEE-CA offers the Communicating Ocean Sciences Summer Workshop, June 2-4, 2008 in Berkeley, California. The course will teach education-theory-grounded methodology and provide materials needed to teach the award-winning courses, Communicating Ocean Sciences and Communicating Ocean Sciences to Informal Audiences, taught at more than 24 universities with marine science programs.
http://www.coseeca.net/collegecourse/

Communicating Science - Distilling Your Message CLM8204 – West Virginia
This course from the U.S. Fish & Wildlife Services' National Conservation Training Center, February 1-5, 2016 in Shepherdstown, West Virginia, will help participants learn to communicate more effectively about science with people outside their field, including the general public, policy makers, the media, and more. Through discussion and practice, the course will first focus on fundamental skills.
http://training.fws.gov/nctcweb/catalog/CourseDetail.aspx?CourseCodeLong=FWS-CLM8204

Communication Workshops - Online
The Goodman Center was founded to help nonprofits recruit, propose, persuade, and present more effectively. This new online education venture will offer interactive online workshops from nationally recognized experts, designed to teach nonprofit professionals how to effectively communicate the significance of their causes. The courses will offer guidance on how organizations can convincingly reach out to stakeholders through storytelling, strategic communications, market research, and compelling presentations.
http://www.thegoodmancenter.com/

Community Biodiversity Education Partnership Program
The U.S. Fish and Wildlife Service's National Conservation Training Center will host forty formal and nonformal educators for the *Community Biodiversity Education Partnership Program* and present a training session, November 12-14, 2003 Shepherdstown, West Virginia. The program will bring educators together to explore creative ways to enhance biodiversity education locally and globally.
www.worldwildlife.org/windows/CBEPP.html

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

Community Culture and Sense of Place Training
The US EPA's Coastal Management Branch provided *Community Culture and Sense of Place Training*, March 10-11, 2003, Seattle, Washington. For more information about the Seattle workshop, contact trainor.theresa@epa.gov.
http://www.trainex.org

Compromise in the Estuary – South Carolina
This workshop, sponsored by the Centers for Ocean Sciences Education Excellence SouthEast (COSEE SE) and the South Carolina Aquarium, will be held March 18, 2006 in Charleston, South Carolina. Learn about the importance of estuaries by participating in a stakeholders' forum of guest speakers which include a biologist, an environmentalist, a politician and a developer. Workshop activities will also include a field trip, an aquarium gallery tour, and a crab lab investigation.
http://www.scaquarium.org/visit/upcomingevents.aspx

Connect Toolkit and Workshop – Illinois and Online
Connect tools are interactive resources and activities for educators, community groups, and conservation organizations to use to engage people of all ages and backgrounds in climate change education and action. While the tools focus on the Midwest, they are easily adapted to other regions.
http://www.chicagobotanic.org/education/teacher_programs/connecting_your_community_climate_change_workshop
http://www.connectcca.org/

Connecting with Climate Change - California
The Sally Ride Educator Institute on Climate Change for Middle and High School Educators will hold this workshop February 26-27, 2011 in Pasadena, California, with a follow-up online webinar. Connecting with Climate Change is targeted for middle and high school teachers.
https://www.sallyridescience.com/for_educators/institutes/11climate

Connecting with Climate Change - Maryland
NOAA and Sally Ride Science offer this educator conference, Connecting with Climate Change, July 23-24, 2008 in Silver Spring, Maryland. Explore the latest findings, meet experts, and learn to customize content for your classroom.
http://www.sallyridescience.com/for_educators/conferences/climate

Connecting with Marine Science Teacher Institute – California
This free institute for teams of teachers of grades 9-12, June 25-30, 2017 in Monterey, California, will examine the role that humans have played in the stability and change of Monterey Bay. Topics include: climate change science; sustainable seafood, and more.
http://www.montereybayaquarium.org/education/teacher-professional-development/connecting-with-marine-science-teacher-institute

Connecting With Visitors - Communication Skills Training
Connecting with Visitors Communication Skills Training workshops provide training and strategies to create tours and interpretive programs that connect with visitors. The schedule for spring, 2005, in locations throughout the country, is available on the website, along with several training articles.
http://www.connectingwithvisitors.com/

Connecting People with Nature through Birds - Florida
Environment for the Americas and staff from U.S. Fish and Wildlife Service will offer the workshop, OUT8163: Connecting People with Nature through Birds, March 12–16, 2012 in the St. Marks National Wildlife Refuge, Florida. Participants will learn to teach others basic bird identification; explore a variety of programs that connect people to nature including citizen science and mist netting birds; discuss current bird conservation issues; and discover the possibilities of inspiring interest in birds through Flying WILD.
http://www.birdday.org/education/training

Connecting People with Nature through Birds – West Virginia
Explore activities that engage people in bird watching, June 6-9, 2011 in Shepherdstown, West Virginia. Even non-birders will find these activities easy to implement. Participants will learn to teach others basic bird identification; explore a variety of programs that connect people to nature including citizen science and mist

netting birds; discuss current bird conservation issues; and discover the possibilities of inspiring interest in birds through Flying WILD.
http://www.birdday.org/education/training

Connecting Your Environment to Your Classroom – California
Sponsored by the CREEC Network and Rancho El Chorro Outdoor School, this free workshop August 3-4, 2015 in San Luis Obispo, California, offers curriculum guides for Project Learning Tree, Project Wet, and more, along with a stipend, additional resources, and much more.
http://www.creec.org/writable/news_letters/document/summer_ee_training_for_teachers_2015.pdf

Conservation in Action - Connecticut
Mystic Aquarium is launching a free public speaker series sponsored by Dominion. The three-part series will feature guest speakers who share their experiences with and contributions to the conservation of our ocean planet. The first of the series, Crittercam: A Tool in International Conservation, will take place August 19, 2015 in Mystic, Connecticut. Conserving Our Coastal Ecosystem, October 6, 2015, in Mystic, Connecticut, with a first-hand account of sandpipers migration. Free registration is required.
https://tickets.mysticaquarium.org/mainstore.asp?vid=3#cat1354

Conservation across Borders – Texas and Montana
The Boone and Crockett Club offers a hands-on field course designed for teachers who are interested in integrating natural resource conservation into their curricula, June 15-29, 2007 in Sinton, Texas, (also July 11-25, 2006). The course takes a systems approach comparing two distinct ecological regions of North America, and the science behind the conservation and management of wildlife species endemic to these regions to enable students to conceptualize a systems view of the underlying causes and solutions to issues regarding wildlife and natural resources. Reimbursements for expenses and graduate credit is available.
http://www.boone-crockett.org/educationPrograms/education_cab.asp?area=educationPrograms&ID=6080AFEF&se=1&te=1
http://www.boone-crockett.org/educationPrograms/education_cab.asp?area=educationPrograms

Conservation Biology for Educators - Online
The Bronx Zoo is piloting its newest online course, Conservation Biology for Educators, May 3-31, 2008, at a discounted rate.
Contact Tom Naiman at tnaiman@wcs.org

Conservation Conflict Resolution - Virginia
Conservation Conflict Resolution, January 10-21, 2011 in Front Royal, Virginia, is offered by the Smithsonian-Mason Global Conservation Studies Programs, for anyone addressing conservation conflicts. The course teaches participants strategies and processes for effectively addressing conservation related conflict, including: the role of neutrality in conflict prevention and reconciliation; effective conflict resolving communication techniques; and how to apply conflict analysis and process models.
http://nationalzoo.si.edu/SCBI/MAB/GMU/consconflict.cfm

Conservation Training - Online
The Nature Conservancy supports ConservationTraining.org to provide free online conservation training from experts across the globe. Curriculum topics include GIS, Reef Resilience, Biodiversity Valuation, and more. Free registration is required.
https://www.conservationtraining.org/

Cool Waters: Water Workshop for Georgia Educators
This free water workshop for Georgia educators, June 14-16, 2004, and June 4-6, 2007 in Marietta, Georgia, was geared toward middle school teachers. Each day of the workshop included field trips and hands on classroom activities, food, field trips, and many free resources. K-12 resources will be provided, including Project WET, The Urban Watershed, Healthy Water Healthy People, and Georgia Adopt-A-Stream certification. The deadline for registration is May 25, 2007.
http://www.gawp.org/events.htm#Anchor-Cool-49575
http://eeingeorgia.org/event.asp?eventID=17802 .

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 scientific data to explore dynamic Earth processes and understand the impact of environmental events on a regional or global scale.
https://www.smore.com/hew8z

Coral Ecosystems - Online
Plan ahead. Sign up for free web seminars, offered by the National Science Teachers Association, featuring NOAA scientists and education specialists with a focus on the biology, dynamics, and conservation of coral ecosystems designed for grade 5-12 level educators. The presenters will share their expertise and assist participants in linking this content to hands-on, inquiry-based, classroom activities. All activities will address national science education standards topics.
http://institute.nsta.org/Anaheim/coral/webseminar.asp

Coral Identification Workshop – Hawai'i
This Coral Identification Workshop will be held June 18-19, 2016 in Honolulu, Hawaii, just prior to the ICRS 2016. The workshop will be held at the Waikiki Aquarium with access to living displays, the teaching collection, and a behind the scenes tour.
http://www.byoguides.com/product/coral-identification-workshop-honolulu-hawaii-usa/

Coral Reef Airborne Laboratory Science Workshop – Hawai'i
The COral Reef Airborne Laboratory (CORAL) is a three-year NASA Earth Venture Suborbital project to measure the condition of coral reefs and understand their relation to the environment. CORAL will use airborne spectral imaging to generate calibrated scientific data products and models describing reef condition, namely the composition, primary production, and calcification of the seafloor community.
Contact Stacy Peltier at stacy.peltier@bios.edu
https://coral.jpl.nasa.gov/

Coral Reef and Climate Change Workshop – Hawai'i
COSEE Coastal Trends in partnership with the National Parks Service offers this professional development workshop for Hawaiian educators, June 20-24, 2011 on Coconut Island, Oahu. The workshop will focus on the science, research, and cultural aspects of coral reefs and their susceptibility to climate change. A stipend and some travel reimbursement are available.
http://www.coseecoastaltrends.net/programs/workshopsforeducators/

Coral Reef CSI
The International Coral Reef Initiative has created a committee on Coral Reef Enforcement and Natural Resource Investigation to facilitate the development of standards and protocols for training field investigators in investigative, forensic and rapid ecological assessment techniques, to ensure accurate assessment and data collection and maximize prosecution, mitigation, or negotiation success.
http://www.icran.org/action-csi.html

Coral Reef Ecology Field Course - Bermuda
The Bermuda Institute of Ocean Sciences, formerly the Bermuda Biological Station for Research, offers a Coral Reef Ecology field course July 8-28, 2007 and July 12-August 1, 2009 in Bermuda. The course is open to undergraduates and graduate students with strong academic credentials; all students must be certified SCUBA divers. Scholarship and financial aid are available.
http://www.bbsr.edu/Education/summercourses/cre/cre.html
http://www.bios.edu/education/coral_reef_ecology.html

Coral Reef Ecology of Hawai'i Teachers Workshop – Hawai'i
This week-long course will be held twice during July, 2005, in South Kona, Hawai'i. Participants will learn first-hand how humans are impacting the life of the organisms on the coral reef of Hawai'i and what the state is doing about it. Participate in daily snorkel excursions along the shore, explore the coastline, visit Pu'uhonua o Honaunau National Historical Park (Place of Refuge) and more.
http://www.aote.org/menu/prog/haw/index.htm

Coral Reef Task Force Meeting and Bleaching Tools Workshop – American Samoa
The 18th Meeting of the U.S. Coral Reef Task Force will be held August 20-25, 2007 in American Samoa. Additional information will be available on the website in the coming weeks, but if you plan to attend, you are advised to make flight arrangements as soon as possible.

In a follow-on event of the task force meeting, NOAA's Coral Reef Conservation Program and Australia's Great Barrier Reef Marine Park Authority will hold a joint 3-day ***Bleaching Tools Workshop***, designed to increase the ability of coral reef managers to anticipate and respond to coral bleaching events. If you would like to attend this workshop, please email Jessica Morgan for more information. Space is limited, so please indicate your interest now. The workshop is offered free of charge, and some travel assistance may be available.
Workshop contact: Jessica Morgan at Jessica.morgan@noaa.gov
http://www.coralreef.gov/taskforce/index.html

Coral Reef Workshop - California
The Birch Aquarium at Scripps Institution of Oceanography is hosting a Coral Reef Workshop, March 12, 2009 in La Jolla, California. Designed for new and experienced teachers of grades 5-8, science specialists, and informal educators, the workshop will explore ocean science content centered on coral reefs and how climate change is affecting these delicate ecosystems. Scholarships are available for those demonstrating financial need.
Contact Birch Aquarium at Scripps at 858-534-7336

Coral Reefs: Bacterial Worlds - Florida
Researchers and educators from the Smithsonian Marine Station at Fort Pierce and Mote Marine Laboratory have joined efforts to create two free professional development workshops for teachers:

- January 19, 2008, Fort Pierce, Florida
- February 16, 2008, Sarasota, Florida

Workshop registration includes an activity guide, PowerPoint presentations, a classroom poster, and more.
Contact Laura Diederick at diederick@si.edu

Coral Restoration Webinar Series - Online
NOAA and The Nature Conservancy are sponsoring a Coral Restoration Webinar Series, starting February 8, 2017 on Coral Spawning Research and Larval Propagation.
http://www.agrra.org/front-page-news/nature-conservancy-announces-new-webinar-series-caribbean-coral-restoration/

Corals to Classrooms Workshop - Texas
The Corals to Classrooms educator workshop was held April 25-27, 2008, July 11-12, 2006 and June 19-20, 2007 in Galveston, Texas, sponsored by the Gulf of Mexico Foundation and hosted by the Flower Garden Banks National Marine Sanctuary. The workshop will focus on coral reef biology and ecology, and includes information, resources, hands-on activities, and a field trip. This is the same workshop as the Down Under, Out Yonder program, but without the SCUBA component.
www.gulfmex.org/duoy.htm
http://flowergarden.noaa.gov/education/workshops.html

Cordell Bank ROV Teacher Workshop - California
You are invited to participate in the Cordell Bank ROV Teacher Workshop, offered by NOAA's Cordell Bank National Marine Sanctuary in collaboration with the Marine Advanced Technology Education Center, Deep Ocean Exploration and Research, and the National Marine Sanctuary Foundation. This workshop will take place November 4-6, 2005 in Alameda, California. Participants are encouraged to participate with a team member (another teacher or student) as limited kits with parts will be distributed.
http://www.sanctuaries.noaa.gov/education

COSEE Coastal Trends Workshops - Maryland
COSEE Coastal Trends is offering two teacher workshops, hosted at University of Maryland's Horn Point Lab in Cambridge, Maryland. Teachers will receive a stipend for their participation and expenses will be covered.

- Coastal Trends Workshop - August 9-12, 2010
- Teaching Ocean Science Workshop - June 28-July 1, 2010

Note that there is also an opening for a teacher research fellow (see Programs tab)
http://www.coseecoastaltrends.net/programs/workshopsforeducators/

COSEE-Coastal Trends Professional Development – Maryland and Delaware
COSEE-Coastal Trends is offering several professional development opportunities for teachers this summer. The workshops are free; register as soon as possible as both workshops will be filled on a first-come first serve basis. A stipend and travel expenses are available for the research experiences.

- Coastal Trends Workshop, August 4-6, 2009, Cambridge, Maryland
- Teaching Ocean Science Workshop, July 7-10, 2009, Cambridge, Maryland
- Teacher Research Experiences – two positions, in Cambridge, Maryland and Lewes, Delaware.

http://www.coseecoastaltrends.net/

COSEE Informal Education Workshop – Florida
COSEE Central Gulf of Mexico and partners offer a weekend marine education workshop, September 11-13, 2009 in Fort Pierce, Florida. Educators will learn about Florida's coastal ecosystem and marine life from research scientists and marine education specialists. Participants will be provided both lecture and hands-on activities that will provide them with new skills that they can use in conducting field and class-room based experiences with youth.
http://florida4h.org/projects/marine/COSEE.shtml

COSEE Great Lakes Professional Development
COSEE Great Lakes, the only Center on America's North Coast, serves an area that is the home of more than 1/4 of the U.S. population and shares marine sciences through freshwater research. COSEE Great Lakes offers a variety of professional development workshops throughout the summer, and links to valuable curriculum for Great Lakes classrooms.
http://coseegreatlakes.net/

COSEE Scientist/Teacher Institute – Gulf of Mexico
This program invites 12 teachers and 5 scientists from Alabama, Florida, Louisiana, Mississippi, and Texas to participate in a three-week, three-semester-hour, graduate course focused on coastal processes, habitats and organisms, and marine technology. The grant provides room and board, ocean sciences education materials, instruction, and a stipend. The resident/field component is June 3-8, 2007 in Alabama and June 24-29 in Louisiana.
http://dhp.disl.org/newsite/teachertraining.htm

COSEE-SE's Coastal Processes in the Outer Banks Workshop – North Carolina, South Carolina, and Georgia
This free Coastal Processes in the Outer Banks workshop is part of the *Coastal Legacy: Multicultural Marine Science, Professional Development Summer Program* from COSEE-SE. Participants will explore the physical forces which create barrier island dynamics. Multicultural strategies that maximize learning in the science classroom will be examined. Teachers who teach in schools with high percentages of underserved populations are encouraged to apply.
Contact Elizabeth Joyner at elizabeth.rogers@scseagrant.org for complete details. Information and applications will be posted in January on the COSEE SE website, at http://www.scseagrant.org/se-cosee/.

Creating Climate Resilient Communities - Online
The free webinar from Island Institute's Energy Education and Leadership program, Creating Climate Resilient Communities Through Hands-On Energy Education and Conservation, will take place April 3, 2017.
https://attendee.gotowebinar.com/register/2426289391834990338

Creating a Schoolyard Habitat/Outdoor Classroom - Alaska
A Schoolyard Habitat/Outdoor Classroom Program is a coordinated effort between schools, Fish & Wildlife Service (FWS) offices, and other conservation and community organizations to establish ecologically sound restoration projects that are sustainable outdoor learning areas on school sites. OUT8164: Creating a Schoolyard Habitat / Outdoor Classroom develops technical consultants that can assist schools at the local level in project design, curriculum connections, student instruction, and more.
Contact Michelle Dolan at Michelle_Dolan@fws.gov
www.doi.gov/doilearn/index.cfm

Creeks to Coast Educator Workshop - Georgia
During this workshop, July 9-16, 2014, teachers will be immersed in the Chattahoochee watershed as they discover the journey the river takes from North Georgia to the Gulf of Mexico. Participants will examine the various uses of the river while exploring how humans impact the river's journey. This workshop is funded by the Georgia Aquarium and Georgia Pacific; educators from the southeast region are eligible to apply.
http://www.georgiaaquarium.org/education/teachers/professional-development.aspx

Critter Cam Virtual Teacher Workshop
The National Geographic Society and the National Science Foundation offer a 2-week virtual teacher workshop, highlighting the use of National Geographic's research tool, Crittercam, to explore the mysteries of ocean life. Deployed on the backs of whales, sharks, seals, sea turtles and more, Crittercam provides an unprecedented look at the marine world through the animals' perspective. Teacher resources include access to research findings, lesson plans, magazine articles, video clips, and Internet links.
http://www.coexploration.org/crittercam/ .

Cultivating Community Change - Online
The University of Florida, with support from the Florida Energy Systems Consortium, offers this Cultivating Community Change Certificate Program in Social Marketing, a free online certificate program designed to provide an overview of social marketing as applied to extension and outreach programming. Florida-based participants who successfully earn this certificate will be eligible to apply for mini-grants to jump start energy-related social marketing initiatives.
http://gardeningsolutions.ifas.ufl.edu/clce/socialmarketing/

Cultural Resources Professional Development – West Virginia
The 2007 Cultural Resource course will be held at the U.S. Fish and Wildlife Service's National Conservation Training Center in Shepherdstown, West Virginia, during the week of August 13, 2007. The course is aimed at project leaders and refuge managers.
Contact Eugene Marino at Eugene_Marino@fws.gov

Cultural Resources Training Series – On-line
The first module of the Cultural Resources On-line Training Series has been launched. This first module focuses on aspects of cultural resources and includes basic definitions of key concepts as well as information on how cultural resource management fits in the broader conservation context.
Contact Eugene Marino at Eugene_Marino@fws.gov

Currents Symposium - California
The free Currents Symposium, April 14, 2012 in Seaside, California, is an annual event for researchers, educators, students, and the public to learn about current research being conducted in the Monterey Bay National Marine Sanctuary. This year's theme is *From Lions to Luminescence: Linking Land and Sea.*
http://montereybay.noaa.gov/research/currsymp2012/welcome.html

Curriculum Programs Webinar - Online
This free webinar, February 23, 2011, will showcase curriculum materials on topics ranging from computer game development to ocean sciences and more. These curricula, designed for middle/high school teachers and students and available online at no charge, encourage and support innovative STEM learning and teaching and have been adapted through collaboration with partners, educators, and students.
http://www.youthlearn.org/news/webinar-curriculum-developed-nsf-funded-itest-and-cosee-programs

Data and the Estuary - Maryland
The Chesapeake Bay National Estuarine Research Reserve offers programs designed to provide teachers with the resources, knowledge, and experience necessary to integrate estuaries and related issues into their classrooms, achieved through hands-on, field-based investigations. Two workshops are offered: on the Western Shore, June 20-24, 2011, and on the Eastern Shore, August 1-5, 2011. There will be two sessions, starting June 24 and August 5, 2013.
While on the website, check out the other summer opportunities.
http://www.dnr.state.md.us/bay/cbnerr/
http://www.coastaltraining-md.org/Scheduled-Classes/5.aspx

Data Science Orientation - Online
This free, self-paced six-week MOOC (Massive Open On-line Course) is part of the Microsoft Professional Program Certificate in Data Science. It offers an introduction to working with and exploring data using a variety of visualization, analytical, and statistical techniques.
https://www.edx.org/course/data-science-orientation-microsoft-dat101x-1

DataStreme Atmosphere - Online
An online weather course by the American Meteorological Society is offered free for K-12 teachers. DataStreme Atmosphere is a precollege teacher enhancement program. Applications are sought from persons who can demonstrate potential for leadership as resource teachers. They must be willing to act as resource persons for other teachers and as advocates for promoting the use of electronically-delivered environmental data in schools.
http://www.ametsoc.org/amsedu/DataStremeMiddle.html
http://www.ametsoc.org/amsedu/dstreme/extras/dsinfo.html
http://www.ametsoc.org/amsedu/DS-Ocean/index.html

DataStreme Courses - Various
The American Meteorological Society's DataStreme Project is an expenses-paid professional development program for in-service K-12 educators. Graduate-level courses in meteorology, oceanography, and climate science are offered each fall and spring semester by Local Implementation Teams across the country. To register, please contact your nearest LIT leader. January 23-April 24, 2017;
http://www.smdeponews.org/programs-events/ams-datastreme-course-offerings-for-spring-2013-k-12-educators-apply-by-late-fall/
http://amsedu.ametsoc.org/amsedu/DataStremeFrames.html
https://www.ametsoc.org/ams/index.cfm/education-careers/education-program/k-12-teachers/datastreme-program/datastreme-earth-s-climate-system/

DataStreme Ocean - Online
DataStreme Ocean is a free precollege teacher enhancement program of the American Meteorological Society/NOAA Cooperative Program for Earth System Education. The program explores the ocean in the Earth system with special emphasis on the flow and transformations of water and energy into and out of the ocean; the internal properties and workings of the ocean; interactions between the ocean and the other components of the Earth system (hydrosphere, atmosphere, lithosphere, and biosphere); and the human/societal impacts on and response to those interactions. Contact your nearest DS-Ocean LIT (Local Implementation Team) Leader.
http://www.ametsoc.org/amsedu/DS-Ocean/Join.html
http://ametsoc.org/amsedu/ECS/index.html

DataStreme Ocean - Various
DataStreme Ocean is a precollege teacher enhancement program. The program explores the ocean in the Earth system with special emphasis on the flow and transformations of water and energy into and out of the ocean; the internal properties and workings of the ocean; interactions between the ocean and the other components of the Earth system (hydrosphere, atmosphere, lithosphere, and biosphere); and the human/societal impacts on and response to those interactions.
.http://www.ametsoc.org/amsedu/DS-Ocean/index.html

DataStreme Water In The Earth System Online
This free Water in the Earth System course is sponsored by the American Meteorological Society and the National Science Foundation. This Internet-based distance-learning course is directed towards middle-school teachers. The course incorporates inquiry-based instructional strategies and a holistic concept of Earth from oceanic, atmospheric and terrestrial water and problem-focused perspectives. It investigates the mass and energy flows associated with the global water cycle, and with related issues.
http://64.55.87.13/amsedu/WES/index.html .

Dauphin Island Sea Lab Summer Programs for Students and Teachers - Alabama
Dauphin Island Sea Lab, Dauphin Island, Alabama, offers a wide variety of summer programs for students and teachers. Check the website for dates.
For Students

- Oceans Alive!: Half day beach exploration for children 5-8 years with parent;
- Treasure Island: Half day history treasure hunt for children 9-11 years;

- Gulf Island Journey: Marine summer camp on a barrier island for middle school students;
- Summer High School Course: Four week marine science course for high school Art-Sea Discovery Camp: children 8-13 years investigate and sketch the wonders of the maritime forest and beaches;
- students.

For Teachers

- The Delta: Explore the Mobile-Tensaw Delta;
- Coastal Connections: Linking watersheds to the Gulf of Mexico;
- Beaches, Birds and Barrier Islands; the deadline for registration is May 28, 2010;
- Sharks and Rays: Ins and outs of shark biology;
- Applications of Science and Technology: Special, free teacher workshop for Alabama math or science teacher for grades 5-9; availability is limited;
- Regional Issues in the Gulf of Mexico; free, the deadline for registration is June 18, 2010;
- Fins, Fishes and Fisheries; free, the deadline for registration is June 25, 2010;
- Rhizomes, Reefs and Restoration; free, the deadline for registration is July 19, 2010.
- COSEE: Central Gulf of Mexico: For Alabama educators; deadline for registration is May 31, 2009.

For College and Graduate Students: Courses in this intense program will be offered from May to August.
http://press.disl.org/2_03_10summer.htm
http://press.disl.org/1_08_09summer.htm

Dauphin Island Sea Lab Summer Programs for Students and Teachers - Alabama
Dauphin Island Sea Lab, Dauphin Island, Alabama, is offering a wide variety of summer programs for students and teachers.
For Students

- Oceans Alive!: June 9, 23, 2006
- Treasure Island: June 16, 30, 2006
- Gulf Island Journey: May 28-June 2, July 9-14, July 16-21, July 23-28, 2006
- Summer High School Course: June 4-30, 2006

For Teachers

- Spring Fossil Workshop: March 18-19, 2006
- Exploring the Florida Keys: May 28-June 2, 2006
- Marine Application of Science and Technology: June 4-8 and June 18-22, 2006
- Beaches, Birds & Barrier Islands: June 25-29 and July 9-13, 2006
- Coastal Connections - July 16-20, 2006
- Submerged Grassbeds of the Northern Gulf of Mexico: June 11-15 and July 23-27, 2006.

http://dhp.disl.org/k12.html

Dauphin Island Sea Lab Summer Teacher Workshops - Alabama
Dauphin Island Sea Lab in Alabama is offering various teacher workshops this summer.

- Marine Application of Science and Technology, June 17-22 and June 24-29, 2007
- Coastal Connections - Linking Watersheds to the Gulf of Mexico, July 22-26, 2007
- Submerged Grassbeds of the Northern Gulf of Mexico, July 29-August 2, 2007
- Beaches, Birds, and Barrier Islands, June 10-14, 2007

Applications must be received by May 15, 2007.
http://dhp.disl.org/newsite/teachertraining.htm

Dauphin Island Sea Lab Summer Programs for Students and Teachers - Alabama
Dauphin Island Sea Lab, Dauphin Island, Alabama, offers a wide variety of summer programs for students and teachers. Check the website for dates.
For Students

- Oceans Alive!: Half day beach exploration for children 5-8 years with parent;
- Treasure Island: Half day history treasure hunt for children 9-11 years;
- Gulf Island Journey: Marine summer camp on a barrier island for middle school students;
- Summer High School Course: Four week marine science course for high school students.

For Teachers

- The Delta: Explore the Mobile-Tensaw Delta;
- Beaches, Birds and Barrier Islands: A "three island tour" of Gulf Coast barrier islands;
- Sharks and Rays: Ins and outs of shark biology;
- Marine Applications of Science and Technology: Special, free teacher workshop for Alabama math or science teacher for grades 6-12; availability is limited.

For College and Graduate Students: Courses in this intense program will be offered from May to August.
http://dhp.disl.org/newsite/

Dauphin Island Summer Teacher Workshops
Dauphin Island Sea Lab offers an array of summer teacher workshops. Each features hands-on learning experiences and classroom materials.

- Exploring the Florida Keys, May 30 – June 5, 2004
- Beaches, Birds & Barrier Islands, July 11-14, 2004
- Coastal Connections – Linking Watersheds to the Gulf of Mexico, July 18–22, 2004
- Grasses, Groupers & Gastropods, July 25 - 29, 2004
- Marine Application of Science and Technology, June 6-11, June 13-18, and June 20-25, 2004

http://dhp.disl.org/teachertraining.htm .

Deep Atlantic Stepping Stones Teacher Workshops – Maine and Rhode Island
This workshop presents inquiry- and standards-based activities tied directly to the exploration of the Atlantic seamounts. The DVD from the 2003-2004 “Mountains in the Sea” expedition includes video of the technologies and remarkable biodiversity and complex geologic structure of seamounts. Workshops will take place July 26, 2005, Portland, Maine, and July 27, 2005, Narragansett, Rhode Island.
Contact Ms. Chris Marceau at 860.405.9121 or at Chris.Marceau@uconn.edu
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Deep Sea Coral Webinars - Online
The NOAA Deep Sea Coral Research and Technology Program is sponsoring a webinar series to highlight research, exploration, and management of deep sea corals and sponges found in U.S. waters.
https://www.openchannels.org/news/news/upcoming-webinars-noaa-deep-sea-coral-research-and-technology-program

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. The workshop will focus on mission discoveries and include Atlantic deepwater canyons, deep-sea corals, cold methane seep sites, and more.
http://www.coexploration.org/oe2014/

Deep-Sea Science in the Classroom – Online
Following this webinar, January 18, 2017, students will be able to utilize scientific methods to explore the deep sea coral communities found in West Coast National Marine Sanctuaries using research footage from Remotely Operated Vehicles. Be sure to check out upcoming webinars, and search the archives for others of interest.
http://sanctuaries.noaa.gov/education/teachers/webinar-series.html

Deep-Sea Webinar Series - Online
Hosted by Duke WebEx, the Deep-Sea Webinar Series covers economic topics. The next webinar, September 16, 2015, will feature a talk on the Deep Blue Economy. Sign up to attend, check out archived webinars, and more.
http://www.linwoodpendleton.com/upcomingwebinars/

Defend Your Drain - Online
Join EarthEcho International and Seventh Generation Foundation on April 18, 2013 for an Earth Month webinar that explores the connections between everyday products and the health of our water planet. The discussion will address toxins found in personal and home care products and the impacts these have on marine environments.
https://attendee.gotowebinar.com/register/3518052729042130688

Demstifying Weather and Climate Science – New Jersey
The Jacques Cousteau National Estuarine Research Reserve will hold this workshop June 30, 2010 in Tuckerton, New Jersey. Participants will explore the difference between weather and climate, factors determining Earth's climate, how a changing climate is affecting wildlife and our wild lands, and much more.
http://www.jcnerr.org/education/educators.html

DEN SCIcon 2010 - Online
DEN SCIcon 2010, January 9, 2010, is an online conference focused on providing participants with strategies for transforming their science classes through the integration of digital media content. Drop by for an hour or stay for the whole day; it's virtual and it's free.
http://blog.discoveryeducation.com/scienceinaction/denscicon

Designing for Distance Workshop Series
This six-part Designing for Distance workshop mentors you through the design and development of a distance learning course, and then offers methods to teach your creation to your audience. The workshop is taught entirely using distance methodologies. The workshop begins January 26, 2004.
http://www.creative-conservation.com/Flyer2/Flyer2.htm

Designing for e-Learning
This 15 week course explores the essential components of designing and developing an e-Learning course. Participants will explore principles, theories, and paradigms of distance education; review technology issues; and demonstrate design, development and assessment methodologies. You will have the opportunity to design and develop your own course by the end of the learning experience. Credit is available from University of Alaska Anchorage. .
http://www.creative-conservation.com/designinffordistance.htm

Designing for e-Learning – Online
Explore the essential components of designing and developing an e-Learning course through this online course, which runs September 5-December 18, 2005, February 20-May 31, 2006. Learners will explore principles, theories, and paradigms of distance education; review technology issues; and demonstrate design, development and assessment methodologies. Participants will have the opportunity to design and develop their own course by the end of the learning experience.
http://www.creative-conservation.com/designinffordistance.htm

Designing Evaluations - Online
NOAA's Central Library Brown Bag Seminar series will host Dr. Stephanie Shipman and Dr. Valerie Caracelli of the Government Accountability Office (GAO), April 5, 2012, who will discuss the recently released report, *Designing Evaluations: 2012 Revision*. The report addresses the logic of program evaluation design, introduces key issues in planning studies, and describes a variety of designs for answering different types of questions about program performance. Free access to the seminar is available.
http://www.lib.noaa.gov/about/news/brownbagseminars.html

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

Developing Teacher Training Course - California
This face-to-face training course, scheduled for February 28 - March 4, 2005, in San Francisco, California, presents the essential components of work with schools and school systems, designing, conducting and evaluating teacher training. The course culminates with participants applying their skills at actual teacher workshop. Upon return to their sites, each participant is also expected to plan and conduct a workshop for teachers within a year.
georgia_jeppesen@fws.gov
https://otis.fws.gov (OUT8161)

Developing Teacher Training – West Virginia
The U.S. Fish and Wildlife Service offers professional development courses at the National Conservation Training Center campus in West Virginia. *OUT8161: Developing Teacher Training* will be held March 30-April 3, 2009; the deadline for registration is January 5, 2009. This course presents the essential components of working with

schools and school systems, specifically on conducting teacher training. The course culminates with participants applying their skills at an actual teacher workshop.
Contact Georgia Jeppesen at georgia_jeppesen@fws.gov.
http://training.fws.gov/documents/Section1_NCTC_Sponsored_Courses.pdf

Developing Teacher Training – West Virginia
The National Conservation Training Center will offer Developing Teacher Training (OUT8161), February 12-16, 2007, and September 10–14, 2007 in Shepherdstown, West Virginia. This training presents the essential components of working with schools and school systems, specifically on designing, conducting, and evaluating teacher workshops/trainings. The course includes practice through an actual 2-hour teacher workshop, and each participant is also expected to plan and conduct a workshop for teachers within a year.
http://training.fws.gov/catalog/coursecontents.html
Contact Georgia Jeppesen at georgia_jeppesen@fws.gov

Digital Coast Webinar Series - Online
Developed and delivered by the NOAA Coastal Services Center, this free series of online webinars offered on the last Thursday of each month focuses on geospatial products and services. It introduces Digital Coast tools and data through demonstrations, case studies, and opportunities to engage with field experts and colleagues.
http://www.csc.noaa.gov/digitalcoast/webinar/

Digital Science Workshops
Ed.gov from the U.S. Department of Education offers online professional development for teachers in math and science, language arts, and other areas. Watch presentations on inclusive classrooms, using data to improve instruction, inquiry in the classroom, and more.
http://www.paec.org/teacher2teacher/

Discovering the Mysteries of Whales Lecture – California
The Center for Ocean Sciences Education Excellence-West (COSEE-West) offered a lecture and workshop about whales, October 13, 2004, Los Angeles, California. The research focuses on the evolution, natural history, anatomy and conservation of whales, dolphins and porpoises. K-12 teachers pre-registered for the post-lecture session received documentation for professional development hours. Additional content information and classroom materials were provided in the teachers' session.
Peggy Hamner at 310/206-8247 or phamner@ucla.edu .

Discovering the Waters of Tennessee - Tennessee
The Tennessee Educators of Aquatic and Marine Sciences (TEAMS) Spring Professional Development Conference, April 29–May 1, 2011 in Winchester, Tennessee, will offer concurrent sessions, field trips, and more. All conference participants receive a classroom set of Project WET's *Discovering the Waters of Tennessee* booklets.
http://teamsoftn.weebly.com/conference.html

Discovering Wetlands in the Classroom - Online
The Swamp School and NC State University offer this online continuing education class designed for middle and high school teachers. The class includes hands-on activities

that can be taught in the classroom as well as outdoor curricula that can be incorporated into schoolyard habitat programs.
http://swampschool.org/

Dive GIS Summer Course - Italy
Learn Geographic Information Systems and remote sensing methodologies while becoming a certified SCUBA diver through the Dive GIS summer course, July 31-August 10 in Crotone, Italy.
http://www.mappamondogis.it/divegis.htm

Dive into Education Workshop - Georgia
NOAA's National Marine Sanctuary Program invites educators throughout the southeast to participate in the Dive into Education workshop, May 13-14, 2005 on Tybee Island, Georgia. The workshop will feature programs specifically adapted to address science performance standards in ocean science and other disciplines. National level educators will bring their unique programs, materials and perspectives from their part of the country.
http://www.graysreef.nos.noaa.gov/education/workshop051305.html

Diving into the Digital World of Marine Science - Online
PBS Teachers and Classroom 2.0 will present Jean-Michel Cousteau, host of the PBS series Jean-Michel Cousteau: Ocean Adventures, as guest for "Diving into the Digital World of Marine Science," the next webinar in the PBS Teachers LIVE! Series, May 4, 2009. The free webinar will highlight the importance of educating young people about the ocean and the vital role of teachers in inspiring students to become stewards of the environment.
http://www.pbs.org/teachers/webinar/

Down Under, Out Yonder Professional Development Workshop
Flower Garden Banks National Marine Sanctuary invites scuba-certified K-12 educators from around the country for a week-long underwater exploration workshop called Down Under, Out Yonder, June 25-29, 2005; June 24-28, 2006; July 7-11, 2007 and July 21-25, 2007 (2nd workshop for alumni only).. July 11-15, 2009. July 9-13, 2011, July 6-12, 2012, July 12-17, 2013, July 11-16, 2014, July 11-15, 2015, July 9-13, 2016, Covering topics such as coral biology, reef fish identification, geology, sustainable fisheries and natural resource management, the workshop's goals are to inspire and motivate educators to include coral reefs and the resources of Flower Garden Banks National Marine Sanctuary in their lesson plans. It includes two days of land-based workshop followed by three days of SCUBA diving in the sanctuary. Applicants must already be SCUBA certified.
http://www.gulfmex.org/duoy.htm http://flowergarden.noaa.gov/education/DUOY.html
http://flowergarden.noaa.gov/education/workshops.html
http://www.gulfmex.org/duoy.htm
http://www.gulfmex.org/education-training/down-under-out-yonder/
http://flowergarden.noaa.gov/education/workshops.html

Down Under, Out Yonder Workshop Update
The Flower Garden Banks National Marine Sanctuary *Down Under, Out Yonder* education workshop application workshop dates are July 10-14, 2004.
http://www.gulfmex.org/duoy.htm .

Down Under, Out Yonder - Texas
The 2008 Down Under, Out yonder workshops and field expeditions, sponsored by the Gulf of Mexico Foundation and ConocoPhillips, will be held July 19-23, 2008. This unique way to learn about coral reef ecosystems and the National Marine Sanctuary Program, specifically the Flower Garden Banks NMS, consists of two days of land-based workshop followed by three days of SCUBA diving in the sanctuary. All applicants must be previously SCUBA certified and have diving experience.
http://gulfmex.org/duoy.htm

Drawing Nature, Science and Culture: Natural History Illustration - Online
This free, online, six-week MOOC from the University of Newcastle, Australia starts October 26, 2016. Learn how to see and draw nature like an illustrator and build observational and visual interpretation skills in an interactive and enjoyable way.
https://www.edx.org/course/drawing-nature-science-culture-natural-newcastlex-nhi101x

Duke Environmental Leadership Program Information Sessions - Various
The Duke Environmental Leadership Program offers a series of information sessions for working professionals interested in the online and on-campus Master of Environmental Management degree program. The program is an online two-year degree program designed specifically for mid-career environmental professionals and business executives. Check the schedule for upcoming in-person and on-line sessions.
http://www.nicholas.duke.edu/del/del-mem/delinfo/

Duke Environmental Leadership Program – Online
The Duke Environmental Leadership Program is comprised of an online master's degree, continuing and executive education courses, and community outreach programs, the program is driven by interdisciplinary and global themes, strategic approaches to environmental management, communication, and effective leadership.
http://www.nicholas.duke.edu/del/

Dynamic Earth - Online
The American Museum of Natural History, in partnership with Coursera, is offering three free Massive Open Online Courses (MOCC) for teachers. The Dynamic Earth: A Course for Educators runs May 4-30, 2015.
https://www.coursera.org/course/amnhearth

Dynamics of Climate Change – Online
The free webinar, The Dynamics of Climate Change—from the Political to the Personal, will take place July 13, 2016, followed by a live Facebook question and answer period.
https://engage.vevent.com/index.jsp?code=house_email_1&seid=221&eid=1274

EARTH 2012 – North Carolina
The focus of the 2012 EARTH workshop, July 8-13 in Wilmington, North Carolina, will be on ocean observatories and South East Coastal Research. A requirement of the application process is to trial an EARTH activity and complete a rubric. Ten of the twenty participants will be from SECOORA states (North Carolina, South Carolina, Florida, Georgia).
http://www.mbari.org/earth/

Earth Ambassador Training Program for Informal Educators - Online
Informal educators are invited to apply to the Earth Ambassador Program, part of NASA Climate Day. Earth Ambassadors are committed to the support of a series of nationwide NASA Climate Day events hosted at their institution using the NASA Climate Day Kit containing educational and public outreach resources. The free virtual workshop will take place June 4-15, 2012.
http://bit.ly/NCDapp

Earth Expeditions and Global Field Master's Program - Various
Miami University's Project Dragonfly and partners offer Earth Expeditions graduate courses and the Global Field Program master's degree, many with an emphasis on marine science and education. Sites for 2017 include Australia, the Galapagos, and many more.
http://earthexpeditions.miamioh.edu/marine

Earth Expeditions
Earth Expeditions are tuition-free graduate courses open to educators from all disciplines and settings. Different courses and field expeditions are offered and offer inquiry-driven, community-based learning for the benefit of ecological communities, student achievement, and global understanding. The Global Field Program is a master's degree from Miami University offered entirely through tuition-waived Field Expeditions experiences worldwide, with coursework in web-based learning communities.
http://www.earthexpeditions.org/

Earth Gauge Courses - Online
Earth Gauge is a weather and environment program of the National Environmental Education Foundation and the American Meteorological Society. Earth Gauge provides free environmental education materials to broadcast meteorologists that they can use on-air in their TV or radio forecasts and in other media. In addition, they offer free on-line courses, designed to train meteorologists, but also useful tools for educators.
http://www.earthgauge.net/wp/courses

Earth and Marine Science Seminars - Hawaii
The Edge of Kauai (TEOK) offers seminar programs designed for educators to investigate the Hawaiian Archipelago and learn about its environmental systems.

- July 10-16 and Aug. 7-13, 2011, Geoscience on the Big Island
- July 24-30, 2011, The Geological, Ecological and Anthropological History of the Island of Molokai
- June 25-July 2, 2011, The Science of Ecosystems3
- July 8-14 and August 5-11, 2012, Geoscience on the Big Island
- July 22-28, 2012, The Geological, Ecological and Anthropological History of the Island of Molokai
- June 23-30, 2012, The Science of Ecosystems
- July 7-13 and August 4-10, 2013, Geoscience on the Big Island
- June 22-29 and July 20-27, 2013, Kauai Science of Ecosystems
-

Reservations are filled on a space available, first come basis as applications are received.
http://www.teok.com/educationalprograms.html

Earth Right Now: The Sun and the Water Cycle - Online
This NASA webinar for informal educators of grades 3-6, March 6, 2017, will focus on the NASA storybook The Sun and the Water Cycle and its accompanying classroom activities. The webinar also will demonstrate and create a bright, vivid sun for building a 3-D mobile of the sun and the water cycle.
https://www.etouches.com/223559

EARTH Satellite Workshop – North Carolina
EARTH (Education and Research: Testing Hypotheses) provides teachers with means for accessing real-time data and integrating it with existing educational standards and tested curriculum through interactive and engaging activities. EARTH uses near-real-time data from ocean observatories to design and test outreach with the Internet as an interface to scientists, teachers, students, and the public.
Contact Miriam Sutton at miriam.sutton@carteretk12.org
http://www.mbari.org/earth/

Earth Science Information Partners Educators Workshop - California
The Federation of Earth Science Information Partners is a consortium of organizations that collect, interpret, and develop applications for remotely sensed Earth science data. The education committee invites California educators of grades 6-12 to join them at their summer meeting, July 8-9, 2009 in Santa Barbara, California, to learn about federation efforts to study and steward our planet.
http://cimss.ssec.wisc.edu/teacherworkshop/esip/

Earth Science Information Partners Conference – Tennessee
The 2010 Federation of Earth Science Information Partners (ESIP) summer meeting, with the theme *Energy and Climate*, will be held July 20–23, 2010 in Knoxville, Tennessee. Participating educators of grades 6-12 will attend a session on climate change topics, have access to the introductory plenary, and have a 2-day teacher track. Registration fees and lunches will be covered for all teachers and a time and travel stipend is available for twenty educators, with support from NOAA and NASA.
http://cimss.ssec.wisc.edu/teacherworkshop/esip/

Earth Science for Middle School Teachers - Texas
The Texas Space Grant Consortium is hosting this educator workshop, The Little Blue Dot -- Earth Science for Middle School Teachers, June 12-15, 2017 in Austin, Texas. Participants will learn about hands-on activities designed to support the Earth science standards in grades 6-8. A stipend is available to offset costs of housing and travel.
http://www.tsgc.utexas.edu/earth-science-workshop/

Earth Science in the Polar Regions - Online
This class from PolarTREC, July 30-August 15, 2012, will address earth sciences and climate change in the polar regions with a focus on geology, glaciology, limnology and the use of technology in polar science. Participants will utilize journals, live events, and other resources through PolarTREC.
http://www.polartrec.com/teachers/online-course

Earth Science Webcast Series
NASA Langley Research Center, in co-operation with NOAA and the Virginia Department of Education Region 2 Math/Science Coalition, will offer a series of professional development programs for teachers of grades 3-8. The webcasts may be

accessed on the NASA Digital Learning Network. Upcoming webcasts include Tides, The Story of Ocean Heat Storage, and Global Warming, Causes and Consequences.
http://dln.nasa.gov/dln/

Earth as a System is Essential: Seasons and the Seas – MA, NH, ME
Earth as a System is Essential: Seasons and the Seas aims to transform the traditional middle school study of seasons and weather into an exploration of the dynamic interactions between Earth's land, oceans, atmosphere, and living world. Middle school teachers from Massachusetts, Maine, and New Hampshire will work with scientists to develop a unifying systems theme that bridges the gap between existing materials and concepts related to seasonal and climatic changes in the Gulf of Maine.
http://www.mmsa.org/easie/

Earth System Science Course - Online
SCED 507 is an Earth system science course designed for middle school teachers, offered this fall through Texas A&M University–Texarkana. Students develop Earth system analyses in relation to specific environmental events; create collaborative, inquiry-based classroom applications; and use technology as a learning and teaching tool for grades 5-8 students.
Contact David Allard, David.Allard@tamut.edu

Earth Then, Earth Now: Our Changing Climate - Online
NOAA and Sally Ride Science offered this educator conference, July 23-24, 2008, to teach K-12 educators how to integrate the science of earth's changing climate into their classroom lesson plans. The webcasts, available as streaming video, are now available online for those who were unable to attend.
http://www.sallyridescience.com/for_educators/conferences/climate/live

EarthEcho Expeditions: Into the Dead Zone Hangout - Online
Join EarthEcho staff and partners to Continue the Journey with EarthEcho Expeditions: Into the Dead Zone, December 10, 2014 via Google+ Hangout on Air. Explore curriculum, resources, and incentive opportunities; learn about progress monitoring for service-learning; and ask questions live on the air. Hurry – free registration is required.
http://earthecho.org/news/HOA-121013

EarthEcho Learning and Advisory Panel
EarthEcho International is seeking educators to be a part of a Learning and Advisory Panel, a collaborative educator network tasked with the review and creation of high quality educational materials that align with scope and complexity of the Next Generation Science Standards, and utilize, review, and improve existing EarthEcho resources.
http://earthecho.org/news/EELEAP

Earthworks: Earth System Science Workshop - Colorado
The Cooperative Institute for Research in Environmental Sciences at the University of Colorado at Boulder offers *Earthworks*, a free, one-week workshop designed to help secondary teachers create earth system science research projects for their students. *Earthworks*, June 24 - July 1, 2006 in Boulder, Colorado. Teachers will work in small groups with scientists in designing and conducting research projects and investigating Earth system science at the local level through the interconnections between the geosphere, atmosphere, biosphere, and hydrosphere.
http://cires.colorado.edu/education/k12/earthworks/

Eco-Art Adventures - Texas
Artist Boat recently received a grant from the Coastal Management Program to serve middle and high school students and their teachers in Galveston, Corpus Christi, and Port Aransas schools. Artist Boat is offering Eco-Art Adventures, a WaterIQWet training program, to students living in coastal areas. This program includes a two-hour, on-site Eco-Art Workshop, a four-hour Eco-Art Kayak Adventure, access to a WaterIQWet Blog Site, and the Coastal Waters Institute.
Contact LuAnne Ashley at lashley@artistboat.org
http://www.artistboat.org/eco-art-adventures.html

Eco-Art Professional Development via Kayak - Texas
This free professional development workshop, October 11, 2008, is designed to show Galveston County teachers different methods of learning via a science and art integrated kayak adventure. Learn about Galveston Bay, non-point source pollution, and more while interpreting nature's beauty into a watercolor painting.
Contact Rani Henderson at rhenderson@artistboat.org

Eco-Art Workshops - Texas
Artist Boat is now scheduling Eco-Art Workshops and Adventures for the Fall 2015 semester, which include a 2-hour workshop and 4-hour kayak adventure for grades 6-12. In addition, there are still a few scholarships to Cypress Swamp available, but spaces are going fast.
Contact Amanda Rinehart at atarinehart@artistboat.org
http://www.artistboat.org/youth-programs.html

Ecological Basis of Environmental Education OUTUWSP09 - Online
The objective of this free course from the U.S. Fish & Wildlife Services' National Conservation Training Center, is to familiarize K-12 educators and pre-service educators with modern ecological theory, issues, and practices. The basic principles of ecology will be applied to contemporary environmental issues and will focus on the values and roles of ecology in diverse human cultures, and the problems and solutions that arise due to competition between humans and other living organisms for common resources.
http://training.fws.gov/nctcweb/catalog/CourseDetail.aspx?CourseCodeLong=FWS-OUTUWSP09

Ecological Field Studies – Online
The Montana State University On-Line Course - Environmental Science Education: Fall Ecological Field Studies, which will take place from September 19 - December 9, 2005, is designed for educators of students in grades 6-12 who are interested in integrating inquiry oriented, experienced-based, environmental studies into their educational program. Participants will learn basic ecological field study techniques and conduct studies in their local environment.
http://www.scienceteacher.org/courses/edci580FldStdA.htm

Ecological Teaching and Learning Program – Massachusetts and Online
The Audubon Expedition Institute at Lesley University in Cambridge, Massachusetts offers a Master of Science in Ecological Teaching and Learning, an 18 month program for working educators in schools, museums, and nature centers. Students explore the integration of ecological concepts into the curriculum. The program includes field

experiences and online courses while the educators use their own classrooms as practicum settings and create a self-designed project.
http://www.lesley.edu/gsass/audubon/etl_index.html

Ecology of Harmful Algal Blooms - Online
The Center for Ocean Sciences Education Excellence-West invites educators to join in an online workshop to learn about Harmful Algal Blooms (HABs), March 4-19, 2006. Learn about HABs: what they are; how they occur; their importance, and how you can use them to teach science. The workshop is free but the number of participants is limited.
http://www.coexploration.org/cosee_west/index.html

Ecosystem-Based Management Tools Webinars - Online
The Ecosystem-Based Management (EBM) Tools Network hosts presentations and demonstrations of EBM tools and strategies. Interested parties can view the demonstrations real time through the Internet, or by downloading pdfs and/or audio recordings from the website at a later date. Upcoming webinars include management strategy evaluation tools, Fishery Analyst (ArcGIS), and more.
http://www.ebmtools.org/tools_training/presentations.html

EDGE Fellowships
The Zoological Society of London's EDGE of Existence program focuses on threatened species that represent a significant amount of unique evolutionary history. They are accepting applications for the 2014-16 Fellowship Program from early-career conservation biologists or wildlife managers.
http://www.edgeofexistence.org/conservation/become_fellow.php

Educating for Sustainability in K-12 Schools Webinar
This webinar, November 5, 2009, offers a presentation and discussion on education for sustainability in K-12 schools. Educators will present case studies and share resources on how they are successfully using sustainability as an integrative theme in diverse elementary, middle, and high schools across the country. Together the presenters will provide an overview of the national trends, related research, and more.
http://www.uspartnership.org/.../EDUCATING_FOR_SUSTAINABILITY_announcement.pdf

Education in a Changing Climate Workshop - Maine
Education in a Changing Climate, August 1 - 4, 2010 in Unity, Maine, is an annual workshop jointly sponsored by the Orion Magazine and Unity College. The workshop offers a primer on basic climate science; likely effects on ecosystems and people; ethical, literary, and artistic responses; and a sampling of potential solutions that range from political to personal, technological to philosophical.
http://www.unity.edu/Visitors/SummerPrograms/Orion/Welcome.aspx

Education and the Environment Initiative Workshops - California
The California Environmental Protection Agency and the California Integrated Waste Management Board invite participants to learn more about the Education and the Environment Initiative and become part of the statewide effort to implement this initiative. Participate in one of six regional professional development workshops across the state followed by two rounds of technical assistance workshops in those same regions, in May, July, and August, 2006, to inform California's environmental organizations.

http://www.calepa.ca.gov/Education/EEI/

Education Programs for Youth: School's Out! – West Virginia
This three-day course from the Fish and Wildlife Service, March 20-22, 2006 in Shepherdstown, West Virginia, presents participants with the elements of designing outdoor programs for youth in a non-formal setting, such as wildlife refuges, parks, and elsewhere. The course offers opportunities to create or modify natural resource focused youth programs and staff training for these programs that help to address site missions and/or management objectives. Participants will use a program design model to work on their own youth program during the course, then complete and implement it as a required post-course assignment. Apply on-line (program OUT 8162) or contact Georgia Jeppesen at Georgia_jeppesen@fws.gov for an application. The registration deadline is January 23, 2006.
http://training.fws.gov/applic.html

Education Program Evaluation
The U.S. Fish and Wildlife Service's National Conservation Training Center will host *The Education Program Evaluation course* (OUT8102), January 27-30, 2004, Shepherdstown, West Virginia. The course provides an overview of conducting evaluations for education and outreach programs and a chance to practice skills in designing and using evaluation tools for surveys, interviews, and observations.
http://training.fws.gov/courses.html

Education Programs For Youth; School's Out! – West Virginia
Education Programs For Youth; School's Out! (OUT8162) is a 3-day course offered by the U.S. Fish and Wildlife Service at the National Conservation Training Center in Shepherdstown, West Virginia. The course presents participants with the elements for designing outdoor programs for youth (e.g. after school, day and residential camps, and weekend programs) in a non-formal setting, such as wildlife refuges and parks.
http://training.fws.gov/courses.html
Contact Georgia Jeppesen at georgia_jeppesen@fws.gov

Education and Science Forum – Washington, D.C.
Howard University, in conjunction with NOAA's Educational Partnership Program, will host the fifth Bi-Annual Education and Science Forum, November 12-14, 2009, in Washington, D.C. Students and instructors, representatives from federal and local government, private industry, and the general public will convene to view and present research on atmospheric, oceanic, and environmental sciences; engineering; and technology that support NOAA's mission.
http://ovprc.howard.edu/epp/

Education Tour of Historic Lewes - Delaware
The workshop, A Day in Lewes: Exploring Collaborative Field Trip Opportunities, August 7, 2013 in Lewes, Delaware, tours locations which provide settings for lessons on science, history, and natural resources and offer options for multidisciplinary learning in the seaside city of Lewes.
http://www.historiclewes.org/catalog/education-tour-historic-lewes/education-tour-historic-lewes

Educational Value of Coastal Observing Systems – Hawai'i
The special session, *The Educational Value of Coastal Observing Systems,* will be held during the 2006 Ocean Sciences Meeting, February 20-24, 2006 in Honolulu, Hawai'i. This session is designed for those interested in and involved in translating ocean observing data, research, and content to students of all levels. The goals of this session are to share methods, practices, and lessons learned involved in teaching and translating near- and real-time data to classrooms and outreach programs.
Contact Amy Holt Cline at amy.cline@unh.edu, or Tom Shyka, tom@gomoos.org
http://www.agu.org/meetings/os06/

Educator Opportunities from NOAA
NOAA's Education Resources' Educator Opportunities website is designed to provide information about educational opportunities that are available to educators through NOAA. Educators can find information on in-person workshops, online trainings, field experiences, and events where NOAA staff will be in attendance.
http://www.education.noaa.gov/Educator_Opportunities/index.php#page=All

Educator-Scientist Collaborative Workshop – New Hampshire
COSEE-Ocean Systems is offering this workshop for science educators of grades 9-12, March 13-14, 2009 in Durham, New Hampshire, with an optional informal event with scientists and possible overnight accommodations March 12, 2009. Middle school educators are also welcome to apply. The workshop will center on teams of educators and scientists (1 scientist : 3 educators ratio) who will create online learning resources.
http://cosee.umaine.edu/events/index.cfm?FuseAction=ShowEvent&EventID=60&timeFilter=Future

Educator Workshop: Earth Science Workshop - California
NASA's Jet Propulsion Laboratory will host this free workshop, January 14, 2017 in Pasadena, California, for formal and informal K-8 educators. Participants will explore the impact of increasing global temperature on glaciers and sea level using satellite data and learn how to turn these resources, and others, into engineering, mathematics, and science lessons for students.
http://www.jpl.nasa.gov/edu/events/2017/1/14/earth-science-workshop/

Educator Workshops - Georgia
The University of Georgia Marine Extension Service, Marine Education Center and Aquarium, offers a variety of professional development for marine educators. Upcoming workshops include the Georgia Shore Program, Georgia Coastal Ecosystems Long Term Ecological Research Program, and more. Check the website for details; funding may be available for Georgia educators.
http://marex.uga.edu/educator_workshops/

Educators Workshops -Texas
The Houston Zoo offers a variety of spring workshops and events for educators, including Teachers as Field Workers, Zoo Science, Educators Night Out, and more.
http://www.houstonzoo.org/education/educators/

Educators Workshop at the NASA/Jet Propulsion Laboratory - California
To celebrate the upcoming launch of the Aquarius/SAC-D satellite, the Center for Ocean Science Education Excellence – Ocean Systems will conduct a free workshop for K-12 educators, June 3-4, 2011 in Pasadena, California. Aquarius will employ advanced

technologies to make space-based measurements of ocean salinity across the globe. This workshop will examine connections between the water cycle, ocean circulation, climate, and sea surface salinity.
http://cosee.umaine.edu/programs/nasaaquarius/

Educators' Workshop and Public Lecture - California
The Cabrillo Marine Aquarium will host a free educators' workshop, *Catch on! Fish Contamination, Bioaccumulation and Healthy Fishing*, June 9, 2007 in San Pedro, California, featuring inquiry-based, hands-on exercises for K-12 educators. The lecture, "DDT, PCB, past mistakes and the legacy left behind: what can we do now?" for both workshop participants and the public, will take place from 10:30 a.m.–noon. To register for the K-12 educators' workshop, contact the COSEE-West office at cosee.west@gmail.com; no registration is needed to attend the lecture.

EdX - Online
EdX is governed by MIT and Harvard and offers Massive Open Online Courses in a wide variety of subjects. The virtual classroom is open 24/7 and everyone is accepted. Courses range from science to art to technology. .Introduction to Water and Climate starts August 26, 2014. They also have a series of Professor Ask Me Anythings (AMA) through reddit – use the search function for ease of exploration
https://www.edx.org/xseries

EE and Diversity Workshops
EETAP and Intercambios offer professional development diversity workshops for environmental educators. The workshops explore multicultural issues as they occur in the real world of environmental education through case study discussion. Participants explore the intersection of EE and cultural diversity and identify steps that can be taken to make one's own organization and program more inclusive and culturally diverse.
http://eetap.org/html/workshops.php

EE en Español - Online
The EECapacity Project will host a diverse group of 30 educators and community leaders from North America who will participate in webinars, exchange experiences, access publications, and work together to develop a resource that can help EE practitioners work with the Latino/Hispanic community. This free project-based online learning community will take place June 19-December 19, 2014.
https://docs.google.com/a/noaa.gov/file/d/0B764Qmh_VHExTzVfZVdFc0RaT3c/edit
https://docs.google.com/a/noaa.gov/forms/d/1b6yAfg98pAiJ0KP_B9kn2dfhRDbJA9cdvI9ZLxa5RTo/viewform

E.E. Just Environmental Leadership Institute – New Hampshire
The E.E. Just Environmental Leadership Institute for Educators and Students at Kimball Union Academy in New Hampshire is an integrated summer environmental studies program for students and educators. Their mission is to train and empower participants to become the environmental leaders of tomorrow. Educators will learn how to weave inquiry-based learning units into their curricula. Includes three-weeks of field trips, laboratory investigations, and group problem-solving.
http://www.eejust.org/

EETAP Diversity Workshops for Environmental Educators
The Environmental Education and Training Partnership (EETAP) offers professional development diversity workshops for environmental educators. The workshops explore multicultural issues as they occur in the real world of environmental education through case study discussion. Participants explore the intersection of EE and cultural diversity and identify steps that can be taken to make one's own organization and program more inclusive and culturally diverse.
http://www.eetap.org/html/new_products.php#PRODUCT_5 .

EETAP Courses - Online
The University of Wisconsin-Stevens Point and the Environmental Education and Training Partnership (EETAP) offer the following online courses

- Applied Environmental Education Program Evaluation, September 8-December 5, 2008
- Fundamentals of Environmental Education, September 8 - November 28, 2008
- Leadership Development in Natural Resources: Strategic Planning and Implementation, September 22-November 21, 2008
- Fundamentals of Environmental Education, September 8-November 25, 2009
- Making EE Relevant for Culturally Diverse Audiences, September 8-November 13, 2009.
- Applied Environmental Education Program Evaluation, September 7-December 4, 2009
- Leadership Development in Natural Resources: Strategic Planning and Implementation, September 22–November 21, 2009
- Fundamentals of Environmental Education, February 1-April 23, 2010
- Making EE Relevant for Culturally Diverse Audiences, February 1-April 9, 2010
- Applied Environmental Education Program Evaluation, February 1-April 30, 2010.
- Fundamentals of Environmental Education, September 13-December 3, 2010
- Making EE Relevant for Culturally Diverse Audiences, September 13-December 3, 2010
- Applied EE Program Evaluation, September 13-December 10, 2010
- Leadership Development in EE: Strategic Planning and Implementation, September 20-November 19, 2010.
- Fundamentals of Environmental Education, January 31-April 22, 2011
- Making EE Relevant for Culturally Diverse Audiences, January 31-April 22, 2011
- Applied EE Program Evaluation, January 31-April 29, 2011
- Needs Assessment in Environmental Education and Interpretation, January 27-March 11, 2011 – Note that this is a new course,

Advanced Topics in PR: Conflict Resolution, Applied EE Program Evaluation, and more.
Scholarships may be available. Be sure to bookmark the website for future courses.
http://www.uwsp.edu/cnr/AMP/Documents/FlyerOnlineSpring2013%20110112.pdf
http://www.uwsp.edu/natres/eetap/index.aspx

EETAP Spring Courses - Online
The University of Wisconsin-Stevens Point and the Environmental Education and Training Partnership (EETAP) offer the following online spring courses

- Applied Environmental Education Program Evaluation, February 2-May 1, 2009
- Fundamentals of Environmental Education, February 2-April 24, 2009

- Making EE Relevant for Culturally Diverse Audiences, February 2-April 10, 2009
  Applied EE Program Evaluation, January 26-April 27, 2012
- Environmental Education Theory & Practice, January 26-April 27, 2012
- Advanced Oral Interpretation Methods, January 30-May 4, 2012
- Natural Resources Policy & the Legislative Process, February 13-May 4, 2012.

Scholarships may be available.
http://www.uwsp.edu/natres/eetap/index.aspx

EETAP Summer Courses - Online
The University of Wisconsin-Stevens Point and the Environmental Education and Training Partnership (EETAP) offer the following online summer courses:

- Fundamentals of Environmental Education, June 1-August 21, 2009
- Making EE Relevant for Culturally Diverse Audiences, June 1-August 7, 2009

Scholarships may be available. Check out the fall offerings, also, as courses often fill up early.

- Fundamentals of Environmental Education, June 1-August 20, 2010
- Making EE Relevant for Culturally Diverse Audiences, June 1-August 10, 2010
- Applied Environmental Education Program Evaluation, September 7-December 4, 2009
- Fundamentals of Environmental Education, September 7-November 27, 2009
- Leadership Development in Natural Resources: Strategic Planning and Implementation, September 22–November 21, 2009
- Making EE Relevant for Culturally Diverse Audiences, September 7-November 13, 2009
- Environmental Education Theory & Practice May 31–August 24, 2012
- Advanced Topics in Natural Resources and PR: Social Marketing June 18–July 13, 2012
- Natural Resources Policy and the Legislative Process July 16–August 9, 2012
- Water Resources and the Science, Policy and Politics of Climate Change June 4–June 22, 2012

Scholarships may be available.
http://www.uwsp.edu/natres/eetap/index.aspx

Effective Practices in Ocean Acidification Communication
Join this K-12 working group for Effective Practices in Ocean Acidification Communication. This will include monthly skype/conference calls; identifying and vetting classroom resources for accuracy and effective messaging; and more.
Email Jason Hodin at seastar@stanford.edu

e-Learning Design Workshop - Online
This e-Learning Design workshop, July 10-October 21, 2006, will engage participants in the process of designing an e-Learning project for their organization. Learn the differences between classroom and online instruction, review technology and the issues surrounding them, and learn a quick model for e-Learning instructional design. In the end, participants will have a draft design of their project. Credit is available through University of Alaska.
Contact Sandi Sturm at ssturm@creative-conservation.com

E-Learning Opportunities from Creative Conservation
Creative Conservation designs, develops, and teaches professional development e-Learning programs. Upcoming offerings include Project WILD and Project Learning

Tree professional development workshops. Special professional development for K-12 and non-formal educators in Alaska includes Alaska Wildlife Curriculum, Fire! In Alaska, and Project Learning Tree/Project WILD.
http://www.creative-conservation.com/trainingopps.htm

Emerging Scientist Project – Washington, DC
The NOAA Chesapeake Bay Office's Emerging Scientists Project (ESP) provides urban high school teachers with the means to bring oceanic and atmospheric sciences into their classrooms and the opportunity to get their students into the field. The project encourages youth to pursue careers in science, technology, engineering, and math as well as increases understanding of and appreciation for the resources of the Chesapeake Bay. NOAA is currently recruiting a new class of ESP teachers in the Washington, D.C. area.
http://noaa.chesapeakebay.net/EmergingScientist.aspx

Endeavor Science Teaching Certificate
The NASA Endeavor Science Teaching Certificate Project awards one-year fellowships to current and prospective teachers. The project is administered by U.S. Satellite Laboratory, Inc. in partnership with State Departments of Education. Fellows take five online graduate courses, learning to apply research-based pedagogical strategies and STEM (Science, Technology, Engineering and Mathematics) content to their classroom contexts.
http://www.us-satellite.net/endeavor/index.cfm

Enduring Resources for Earth Science Education
The Enduring Resources for Earth Science Education (ERESE) Teachers Workshop will be held at the Scripps Institution of Oceanography, July 11-24, 2004. The two-week summer workshop is open to middle and high school teachers who teach Earth science concepts. Participants will learn how to create Enduring Resources.
http://earthref.org/events/ERESE/2004/

Energy: Stop Faking It! - Online
Plan ahead. Sign up for free web seminars, offered by the National Science Teachers Association, featuring the author of the publication, *Energy: Stop Faking It!* designed for grade 4-8 level educators. The author will guide participants through easy-to-understand explanations and perform activities that will enhance participants' knowledge of common physical science concepts, including potential energy, kinetic energy, work, and the transformation of energy.
http://institute.nsta.org/Anaheim/energy/webseminar.asp

Energy Within Environmental Constraints - Online
Harvard University offers the free HarvardX MOOC, Energy Within Environmental Constraints, a quantitative introduction to the energy system and its environmental impacts. The ten-week course starts June 8, 2016.
https://www.edx.org/course/energy-within-environmental-constraints-harvardx-engsci137x

Engaging Military Communities - Online
This professional development course, May 12-June 8, 2014, is designed for environmental educators and community development professionals interested in working with members of the military community. The objective of this course is to

increase participants' capacity to develop programs that increase environmental awareness and utilize the therapeutic value of nature in building resilient communities.
https://sites.google.com/a/eelearn.net/eelearning-portal/courses/environmental-education-engaging-military-communities

Engaging and Supporting Latinas in STEM - Online
Join practitioners from informal and formal education April 7, 2011 for this webcast, to discuss strategies and programming ideas for engaging and supporting Latinas in Science, Technology, Engineering, and Mathematics. Free registration is required.
http://www.ngcproject.org/events/register.cfm?eventid=192

Engineering in Nature Challenge
ARKive and Iridescent/The Curiosity Machine are offering the Engineering in Nature Challenge, a three week program where students ages 11-14 can learn up to five different engineering concepts from the natural world and test their skills through invention. Teachers will be offered support through weekly Google Hangouts, while each student will be paired up with a scientist working in the field that will offer advice and feedback on the student's work.
http://blog.arkive.org/2013/10/the-engineering-in-nature-challenge/

Environmental Affairs - Global Issue, Local Action – Online
This free community-based online course aims to lead students to resources on threats to the environment, and to information on approaches to understand and manage these threats. The resources include case studies, online exercises, and interactive sessions.
http://www.suite101.com/course.cfm/17295/overview

Environmental Art Exhibit - California
This Environmental Art Exhibit takes place in Riverside, California on April 7, 2005. This year's theme is water. All artwork must pertain to water and/or water-related issues. The website has environmental art lesson plans and standards-aligned ideas. The entry deadline is March 19, 2005.
http://www.creec.org/region10/stories/storyReader$20

Environmental Communication for Behavior Change - Online Short Course
This course, from February 7 - March 4, 2005 and January 17 – February 24, 2006, provides environmental professionals with a practical introduction to the strategies, methods, and tools of environmental communication that effectively lead to changes in behavior. The field-based skills gained through this course will benefit all practicing environmental professionals faced with the challenge of changing behaviors. The course is facilitated by the Duke Environmental Leadership Program at Duke University. Duke University's Environmental Leadership Program offers the online course, Environmental Communication for Behavior Change, January 16-February 25, 2007.
http://www.nicholas.duke.edu/del/continuinged/envcommunication.html
http://www.nicholas.duke.edu/del/continuinged/envcomm.html

Environmental Communication for Behavior Change - Online
The Duke Environmental Leadership Program offers the online course, Environmental Communication for Behavior Change, January 15-February 24, 2008 and again January 13-February 22, 2009 January 26-March 7, 2010. January 16-February 24, 2012,. February 2-March 20, 2015 The course provides environmental professionals with an introduction to the strategies and tools of environmental communication that effectively

lead to changes in behavior. The environmental social marketing tools gained will benefit all practicing environmental professionals faced with the challenge of changing behaviors. Scholarship funding for the course may be available for teachers and educators who reach a K-12 audience through the Coca-Cola Advancement in Teaching in the Environment Scholarship (CATES).
http://www.nicholas.duke.edu/del/continuinged/envcommunication.html
http://www.nicholas.duke.edu/del/continuinged/envcommspg.10.html
http://www.nicholas.duke.edu/del/executiveed/courses/environmental-communication-for-behavior-change
http://www.nicholas.duke.edu/del/executiveed/courses/environmental-communication-for-behavior-change-1
http://nicholas.duke.edu/del/environmental-communications-planning
http://nicholas.duke.edu/del/cates-program

Environmental Communications Planning - Online
The Duke Environmental Leadership Program at the Nicholas School of the Environment at Duke University offers the online interactive course, Environmental Communications Planning, September 23-November 1, 2013. September 22-October 31, 2014. The course provides participants with the necessary tools for developing a successful communications plan. Scholarship funding for the course may be available for teachers and educators who reach a K-12 audience through the Coca-Cola Advancement in Teaching in the Environment Scholarship (CATES).
http://nicholas.duke.edu/del/environmental-communications-planning
http://nicholas.duke.edu/del/cates-program
http://www.nicholas.duke.edu/del/executiveed/courses/environmental-communications-planning

Environmental Concern's Wetlands Training Schedule for 2004
Environmental Concern, Inc. has posted their schedule for wetlands training for the upcoming year. In addition to advanced delineation techniques, topics include Fern and Fern Allies ID, Grasses, Sedges and Rushes, Wetland Botany for Non- Botanists, Wetland Mitigation Design. There are also plans to offer their WOW! and POW! workshops in Puerto Rico.
www.wetland.org .

Environmental Courses - Online
The University of Wisconsin-Stevens Point offers summer online courses. Check the website for offerings, deadlines for registration (May and June), and course dates.
http://www.uwsp.edu/cnr/AMP/Pages/Course%20Info/Registration.aspx

Environmental Education in the Albemarle-Pamlico Sounds Region Workshop
The North Carolina Department of Environment and Natural Resources offers the 2004 Environmental Education Institute, *Environmental Education in the Albemarle-Pamlico Sounds Region*. This is a free professional development opportunity for K-12 teachers to integrate Environmental Education into North Carolina's Standard Course of Study Curriculum focusing on inquiry-based field investigations and hands-on activities. Curriculum materials are provided.
http://www.ee.enr.state.nc.us/Institutes/APNEP%20Institute%20Info%202004.htm .

Environmental Education Courses - Online
The Environmental Education and Training Partnership (EETAP) and the University of Wisconsin, Stevens Point offer these twp online courses for the summer and fall of 2008. Scholarships are available.

- Applied Environmental Education Program Evaluation, June 2-Augus 22 and September 8-December 5, 2008
- Fundamentals of Environmental Education, June 2-August 15 and September 8-November 28, 2008

http://www.uwsp.edu/natres/eetap/index.aspx

Environmental Education Master's Series - Maryland
The College of Notre Dame of Maryland and Environmental Concern, Inc. are collaborating to support the development of highly qualified science teachers in Maryland with an environmental education master's series focusing on wetlands education. Courses include Watershed Field Ecology for Educators, Bay Animals for Educators, Wetlands for Educators, and more. Each course requires the completion of a project. The 2007/8 series will be held in Anne Arundel County in Maryland.
Contact Sr. Sharon Slear at sslear@ndm.edu or Bronwyn Mitchell at dir.educate@wetland.org

Environmental Education Methods - Alaska
U.S. Fish & Wildlife and partners offer the Environmental Education Methods workshop every 2 years; this year it will be held April 17-20, 2012 in Homer, Alaska. The course helps participants incorporate evaluation strategies into program planning and implementation. Participants also learn how to work with students, teachers, youth groups and their leaders, both on public land and private lands.
Contact Scott Owen at Scott_T_Owen@fws.gov

Environmental Education Methods: OUT8160 – California
Discover effective education strategies to target specific resource management issues to the correct audiences. This course helps participants incorporate evaluation strategies into program planning and implementation. Participants also learn how to work with students, teachers, youth groups and their leaders, both on public land and private lands. The course will include two webinars along with a two-day in-person workshop, February 25-27, 2014 in San Jose, California.
Contact Scott Owen at Scott_T_Owen@fws.gov

Environmental Education Methods – Minnesota
The National Conservation Training Center offers the course, OUT8160: Environmental Education Methods, every two years. The course helps participants incorporate evaluation strategies into program planning and implementation, and learn about working with students, teachers, youth groups, and their leaders on and off public lands. Participants will begin developing a project for their site during the course, then complete and implement it as a required post-course assignment. October 18 – 21, 2011 in Fergus Falls, Minnesota
http://training.fws.gov/nctcweb/catalog/CourseDetail.aspx?CourseCodeLong=FWS-OUT8160
Contact Michelle Donlan at Michelle_Donlan@fws.gov

Environmental Education Methods
Environmental Education Methods (OUT8160) is a 4-day course offered by the

U.S. Fish and Wildlife Service at the National Conservation Training Center in Shepherdstown, West Virginia, September 13-16, 2004, September 11-14, 2006. It helps participants incorporate evaluation strategies into program planning and implementation, and learn about working with students, teachers, youth groups, and their leaders, both on and off public lands. This course is only offered alternate years.
http://training.fws.gov/courses.html,
georgia_jeppesen@fws.gov, 304-876-7366.
http://training.fws.gov/catalog/coursecontents.html

Environmental Education in Urban Communities - Online
Cornell University's Civic Ecology Lab announces this online course offered through EECapacity, the EPA-funded national environmental education program, February 6-April 29, 2012. The non-credit professional development course will cover novel practices and conceptual frameworks of urban environmental education.
http://civicecology.org/course-uee.php

Environmental Education Professional Development - California
Join a statewide community of educators for free online professional development that will include Annenberg Learner and National Geographic resources, live interactions with National Geographic Explorers and scientists, and Google tools. Framed around California's Education and the Environment Initiative curriculum for educators, *Water: The Essential Resource* will focus on ocean and freshwater systems and incorporate strategies for teaching environmental topics in grades 4-8.
http://www.learner.org/about/signup.html

Environmental Educator Workshop - Alaska
This teacher workshop is sponsored by Center of Instruction, Professional Development, and Evaluation, and will take place June 18-24, 2006 in Seward, Alaska. Participants will experience six days of glaciers, fjords, and wildlife in Alaska while learning Investigating and Evaluating Environmental Issues and Actions (IEEIA), an environmental education curriculum and the focus of the workshop.
http://eelink.net/cgi-bin/ee-link/newclick/515645

Environmental Educators Training Program - California
The Environmental Educators Training Program, cooperatively presented by the Headlands Institute, the National Park Service and UC Berkeley Extension, is a residential training program for formal and nonformal educators to enhance knowledge of environmental sciences, concerns, and skills for teaching integrated, hands-on curriculum. This five-day residential course was offered July 26-30 or August 9-13, 2004, and August 1-5 or August 8-12, 2005, and July 31-August 4, 2006 and August 14-18, 2006 in Sausalito, California.
http://www.yni.org/hi/educator.html .

Environmental Educators Training Program – California
The Marin Headlands Environmental Educators Training Program provides teachers and non-traditional educators with skills to create hands-on science standard relevant curriculum for students. The program is presented in partnership with the National Park Service and includes five days of instruction, field trips, seaside lodging, and all meals. Scholarships are available. Two sessions are offered: July 28–August 1, 2008 and August 11-15, 2008, in Sausalito, California.
http://yni.org/hi/adulted/index.php

Environmental Film and Video Festival - Call For Submissions
The Toronto International Environmental Film and Video Festival has issued a call for submissions for *Planet in Focus: Toronto International Environmental Film and Video Festival*, September 28 - October 2, 2005. Toronto, Canada. Submissions of films and videos are invited that critically examine the concept of 'environment' and challenge current human/nature relations.
http://www.planetinfocus.org/festival/submissions.shtml

Environmental Learning Institute
The Environmental Learning Institute is a not-for-profit organization working with host-country communities, scholars, and institutions to conduct community-based environmental research and offer undergraduate and graduate field study courses in various natural and cultural scientific disciplines. The courses employ an action-research model working with communities on locally identified projects that serve the public good.
http://www.environmentallearning.org/index.htm

Environmental Science Summer Teacher Institute - Maryland
The Potomac River and Chesapeake Bay Issue Investigation: Hands on Science in Action, July 20-31, 2009 in Accokeek, Maryland, is a professional development opportunity for grades 4-6 teachers in the Chesapeake Bay Watershed. Teachers will actively explore the Hard Bargain Farm Environmental Center curriculum and field studies by participating in hands-on activities, models, and conducting in depth field study investigations amid diverse habitats.
http://www.fergusonfoundation.org/hbf/teacher_training.html

Eonfusion 4D Analysis Tool Webinar - Online
The Ecosystem-Based Management Tools Network will host a web-based demonstration of Eonfusion, January 14, 2009, a new software tool that provides 4D analysis and visualization of time-varying spatial data. It allows users to streamline the integration of large and diverse data sets, explore relationships among multiple variables, and communicate complex results. A recording of this presentation will be made available on the EBM Tools Network a few days after the presentation.
https://www1.gotomeeting.com/register/146610135
http://www.ebmtools.org/tools_training/presentations.html

EPA Climate and Health Resources - Online
The EPA will be hosting a webinar, January 11, 2017 to discuss the multiple climate and health related resources available on their website. These include communication kits and factsheets for populations of concern, state-by-state information and factsheets, and new reports such as the Extreme Heat Guidebook and Climate Change Indicators.
https://naaee.org/eepro/learning/webinars/epa-webinar-climate-and-health-resources

ESIP Teacher Workshop – New Mexico
The Federation of Earth Science Information Partners teacher workshop for teachers of grades 6-12, July 12-13, 2011 in Santa Fe, New Mexico, will offer an overall theme of Earth Science Education with an integral strand dedicated to climate change education. Participating educators will learn about climate change science, climate resources, and ways to effectively communicate climate change topics. A stipend may be available; see the website for details.

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

ESIP Teacher Workshop – North Carolina
The Federation of Earth Science Information Partners workshop for teachers of grades 6-12, July 9, 2013 in Chapel Hill, North Carolina, will offer an overall theme of Earth Science Education with an integral strand dedicated to climate change education. Registration is limited to 20 participants.
http://cimss.ssec.wisc.edu/teacherworkshop/esip/

ESIP Teacher Workshop – Wisconsin
The Federation of Earth Science Information Partners workshop for teachers of grades 6-12, July 17-18 in Madison, Wisconsin, will offer an overall theme of Earth Science Education with an integral strand dedicated to climate change education. Participants will be able to choose from several breakout sessions demonstrating ways that Earth science tools and data can be used in science classrooms. A stipend may be available; see the website for details.
http://www.smdeponews.org/programs-events/esip-teacher-workshop-grades-6-12-july-17-18-2/

Esri Ocean GIS Forum - California
Esri (Environmental Systems Research Institute), the geographic information systems company, will host the Esri Ocean GIS Forum, November 1-3, 2016 in Redlands, California. This year's theme is Advancing Ocean Science with GIS. Attendees will explore the value of GIS in Discovery and exploration, Ocean-use planning, and much more. See the website for additional opportunities.
http://www.esri.com/events/ocean

Estimation of Population Change From Survey Data - Online
The USGS is offering a free short course to assist resource managers in estimating population change from monitoring surveys of natural resources. Those interested are encouraged to register, even if conflicts prevent you from participating in some or all of the sessions or if you are only interested in some sessions. You can participate in the sessions that you are interested in and that are at a convenient time. You can watch the recordings of other sessions at a more convenient time.
http://www.fort.usgs.gov/brdscience/PopulationChange.htm

Estuaries 101 and Chesapeake Exploration - Virginia
The Chesapeake Bay National Estuarine Research Reserve and the Virginia Institute of Marine Science offer this 4-day curriculum training opportunity, August 11-14, 2008, in Gloucester Point, Virginia. This workshop is designed to provide teachers from throughout the Chesapeake Bay region with the resources, knowledge, and experience necessary to facilitate the integration of estuaries and their related issues into the classroom using the curriculums *Estuaries 101* and *Chesapeake Exploration*.
Contact Sarah McGuire at mcguire@vims.edu

Estuaries 101 Middle School Curriculum Teacher Workshop - Georgia
The National Estuarine Research Reserve (NERR) System has developed an on-line curriculum for Middle School and will host a workshop introducing the curriculum and highlighting three activities related to sharks, tides, and oyster restoration, November 22, 2013 in Brunswick, Georgia. E101 is a multimedia curriculum focusing on the theme, *Estuaries & You*.

Contact Georgia Graves at georgiabeachwalk@bellsouth.net

Estuaries to the Abyss Expedition Professional Development Institute – South Carolina
A Professional Development Institute for the Estuaries to the Abyss Expedition, from August 20-September 1, 2004, focused on the expedition, which used a variety of tools to map and describe the unique bottom features, faunas, and ecology of the Florida-Hatteras Slope, the Charleston Bump, and Blake Escarpment off the Southeastern coast of the U.S. Scientists explored faunal change and human impact along a gradient that includes increasing depth and distance from land.
http://oceanexplorer.noaa.gov/explorations/04etta/welcome.html .

Estuaries Education Calendar of Events
The Estuaries.gov website offers a great variety of useful information, resources, and links. One section to keep an eye on is the Education Calendar of Events, identifying professional development workshops, along with community outreach events. Make sure your students check out the "Muddy Opportunities", too.
http://estuaries.gov/estuaries101/GetInvolved/Calendar.aspx

Estuaries to Oceans Teacher Workshop – North Carolina
The North Carolina Maritime Museum will host the Estuaries to Oceans: Conserve the Connection teacher workshop, February 15, 2010 in Beaufort, North Carolina. The free workshop is designed to create cross-curricular activities that merge natural and human influences with the estuarine environment. The workshop will offer hands-on inquiry activities, scientific data presentations from local researchers, and guided tours of the museum and estuary.
Contact Allison Besch at allison.besch@ncdcr.gov

Estuary Escapades - Georgia
Join the University of Georgia Marine Education Center and Aquarium on November 5, 2005, in Savannah, Georgia for the *Estuary Escapades Workshop*. Explore the world of Georgia's estuaries during the SouthEast Center for Ocean Sciences Education Excellence's third annual Ocean Awareness Day. This workshop includes an aquarium tour, hands-on activities on mapping, the Grays Reef education program *Rivers to Reefs*, and more.
http://eeingeorgia.org/net/calendar/details.aspx?c=27711&s=34956.0.68.4863

EstuaryLive: NOAA in the Carolinas 2007 - Online
Registration is now open for EstuaryLive: NOAA in the Carolinas, a celebration of 200 years of NOAA, which will be held May 9-11, 2007 in Beaufort, North Carolina. Lessons highlighted during this three-day, interactive, Internet field trip will provide information on basic estuarine features and species including seagrass, beach geology, oysters, dolphins, and more. Other lessons will focus on the scientists and agencies that study these estuaries, providing insight on the history of coastal studies.
http://estuaries.gov/elivenc07.html

E-Teaching: Preparing Successful Online Instructors
E-Teaching: Preparing successful online instructors is a five-week distance delivered course designed to prepare instructors to teach distance education. It explores the differences of traditional and virtual classrooms and many of the options in between, as

reported by experts in the field of e-learning. It also shows applicable techniques for effective e-teaching and common mistakes to avoid.
http://www.creative-conservation.com/classes_eteach.htm

Eureka! Series - California
The California Institute for Biodiversity, in partnership with California State Parks, offers the Eureka! Series, field-based science education for California's students, including standards-based multimedia curriculum, intensive training for teachers that directly enables them to use the curriculum to its full potential and lead field trips, and material that is tailored to specific regions of California, making it more relevant to students' lives and their surrounding environment. The Eureka! Series is a collection of regionally-based programs throughout California that strategically combine high-quality, multimedia classroom materials with local field experiences in California's state parks and other natural areas. The goal of the program is to improve teaching, increase students' interest in science, and encourage academic achievement in the areas of science, math, and reading for students in grades 5-10.
http://eurekaseries.org/main/

Everglades National Park eFieldTrips
The eFieldTrips have three major components – a virtual visit, a trip journal, and Ask the Experts. Ask the Experts for *Don't Let It Loose! Invasive Species of Everglades National Park*, will be open April 6-7, 2010 and for the *Reptiles and Amphibians of Everglades National Par*k, it will be open April 13-14, 2010.
http://www.efieldtrips.org/EvergladesInvasives/index.htm
http://www.efieldtrips.org/Everglades/index.htm

Every Kid in a Park Webinar - Online
The Department of Interior offers three webinars in January 2016 covering the Every Kid in a Park initiative. Every Kid in a Park provides the nation's fourth graders and their families with free admission to federal lands and waters for a full year. Learn about upcoming activities, transportation funding opportunities, and more.
http://www.neefusa.org/nature/land/every-kid-park-offering-webinar-january-2016

Evolution in the Marine Environment - Online
COSEE-West and the College of Exploration will host a free online webinar for formal and non-formal educators, *Tracking a Sea Change: Evolution in the Marine Environment*, November 1-19, 2010. Presentations will include Evolutionary Biology: A story of thinkers, adventurers, and the history of life on earth, Evolution and Fisheries Management: Gone fishing or fishing gone? and Sperm Behavior: a key to the past and future of Californian abalone.
http://www.coexploration.org/cosee_west/

Evolution in the Marine Environment - Online
Join this free online workshop offered by COSEE-West and the College of Exploration, November 1-19, 2010. The workshop provides content on evolution, resources, lesson plans, and discussion rooms. Each week will have a new presentation and new resources, and you can join discussions throughout the workshop.
http://www.coexploration.org/cosee_west/fall2010/

Exhibit Design for an Integrated Ocean Observing System - Online
COSEE NOW invites you to participate in a free, online seminar series that will discuss the challenges of designing exhibits using real-time data from ocean observing systems. The webinar series will focus on sharing ideas and resources on the development of interactive exhibits or kiosks for use in informal learning institutions. Three seminars are planned for December and January. Preregistration is required.
http://coseenow.net/2009/11/exhibit-design-for-ioos/

Expanding the Ark: The Emerging Science and Practice of Invertebrate Conservation
Of particular note to New York area students due to the special student registration rate: The American Museum of Natural History's Center for Biodiversity and Conservation, in collaboration with Conservation International, the National Parks Service, NatureServe, the U.S. Fish and Wildlife Service, and the Xerces Society, convenes a two-day symposium, March 24-25, 2004, New York City, New York, to examine the status of invertebrate biodiversity.
http://research.amnh.org/biodiversity/symposia/expandingthearc/ .

Experimental Design and Ecological Statistics - Virginia
This course, August 17-27, 2010 in Front Royal, Virginia, co-taught by Smithsonian Conservation Biology Institute researchers and George Mason University faculty, provides an overview of quantitative methods for ecological research and conservation.
http://nationalzoo.si.edu/SCBI/MAB/GMU/expdesign.cfm

Exploration Science Master's Degree - Florida
The University of Miami's Abess Center for Ecosystem Science and Policy and the Rosenstiel School of Marine and Atmospheric Science have launched a new Master's degree in Exploration Science. The goal of the program is to combine field skills, the use of digital media and technology, outreach strategies, and citizen science approaches to research into a comprehensive degree program preparing students for work in a variety of areas.
http://mps.rsmas.miami.edu/degree-program/exploration-science/

Explore Costa Rica
Join Mid-Atlantic Marine Education Association (MAMEA) members on a trip to Costa Rica, September 27-October 5, 2008, to experience the diverse terrain of the tropics. Highlights include lowland rainforests, active volcano, and transitional coastal ecosystems. Experience whitewater rafting, snorkeling, and much more.
http://www.holbrooktravel.com/MAMEA
For more information, contact Debbie Sturdivant at debbie@holbrooktravel.com or Terri Kirby Hathaway at terrikh@csi.northcarolina.edu

Explore Your Own Watershed with Underwater ROVs - Online
The next webinar from NOAA's National Marine Sanctuary Series, March 22, 2017, will follow students in a sanctuary community who are designing and building their own ROVs to explore the Thunder Bay River and Lake Huron, as well as participate in environmental stewardship projects.
http://sanctuaries.noaa.gov/education/teachers/webinar-series.html

Exploring the Coastal Wetlands of Texas
This workshop, sponsored by Texas Marine Education Association from September 26-28, 2008 in Port Aransas, Texas, will explore wetlands along coastal Texas as participants cruise Aransas Bay.
http://statweb.org/TMEA/wetlandsworkshop.html

Exploring the Gulf of Mexico's Deep-Sea Ecosystems - Online
NOAA's Office of Ocean Exploration and Research in partnership with the College of Exploration announces *Lessons from the Deep: Exploring the Gulf of Mexico's Deep-Sea Ecosystems*, an online professional development workshop for educators of all grade levels, October 11-29, 2010. All materials will be archived following the event. Be sure to check out the education materials collection, a selection of lessons about deep-sea ecosystems in the Gulf of Mexico based on ten ocean exploration expeditions.
http://www.coexploration.org/oe/

Exploring the Intersection between Oil Spill Science and Response - Online
The Sea Grant Oil Spill Science Outreach Program will host a free workshop, February 6, 2017 in New Orleans, Louisiana and online. Be sure to check out the downloadable publication, Frequently asked questions: Oil edition, along with many other outreach publications on oil spill science.
https://gulfseagrant.wordpress.com/oil-spill-science-workshop-exploring-the-intersection-between-oil-spill-science-and-response/
https://gulfseagrant.wordpress.com/oilspilloutreach/publications/

Exploring Marine GIS: An ArcGIS Field and Lab Course - Mexico
Coastal Ecosystems Research Foundation is hosting an immersion week in geospatial sciences and marine biology, March 6-12, 2006 in San Ignacio Lagoon, Mexico.
This course is for both beginning and advanced GIS users. Participants will integrate these skills and perform exercises and explore data modeling in GIS. Participants will work with graduate students and marine mammal biologists, collecting data on the distribution, behavior and ecology of gray whales occupying winter breeding grounds.
Contact Michelle Kinzel at kinzel@cox.net

Exploring Ocean Literacy through Science and Children's Literature - Maine
Participants in this professional development opportunity, June 28-30, 2010 June 25-27, 2012 in South Portland, Maine, will use hands-on science activities, field experiences, relevant children's literature, and local scientific data to learn about the marine life, water quality, and environmental issues of coastal waters.
Contact keeper@cascobay.org

Exploring the Ocean through Science and Children's Literature - Maine
The workshop, Exploring the Ocean through Science and Children's Literature, June 25 - 27, 2012 in South Portland, Maine, is geared to elementary, middle school, and informal educators. The workshop incorporates seaside experiences, a chartered boat trip on Casco Bay, children's books, and current scientific data to explore the marine life and environmental health of our coastal waters. Participation is limited.
http://cascobay.org/events/exploring-the-ocean-through-science-and-childrens-literature/

Exploring the Ocean through Science and Children's Literature - Maine
This three-day course for educators, June 27-29, 2011 from South Portland, Maine, features hands-on activities geared to grades 4-6, relevant children's literature, and current scientific data.
http://friendsofcascobay.org/default.aspx

Extremes of Life: Microbes and their Diversity - Online
This self-paced MOOC from Kyoto University investigates microbes that are able to survive in extreme environments and temperatures. The materials are divided into four units: Evolution and the Diversity of Life; Life in Boiling Water; Diversity of Extremophiles; and Genome Sequences.
https://www.edx.org/course/extremes-life-microbes-diversity-kyotoux-003x-0

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

Faculty Development Institute for Middle School and High School teachers - Oregon
The Northwest Center for Sustainable Resources' next Faculty Development Institute for Middle School and High School teachers, Connecting Classrooms to the Community, August 8-13, 2010 in Salem, Oregon, will lead teachers in the process of adapting a community-based instructional process in developing environmental science and field biology lessons.
http://www.ncsr.org/

Farallones Marine Sanctuary Association Professional Development - California
The Farallones Marine Sanctuary Association offers a series of free lectures, workshops, and field excursions to support community teachers and connect them with the national marine sanctuaries. Workshop presentations, activities, and content are geared for middle and high school science teachers; however, all teachers and educators are welcome.
http://www.farallones.org/education/teacher_workshops.php

Farallones Marine Sanctuary Association Workshops - California
The Gulf of the Farallones National Marine Sanctuary is celebrating its 25th anniversary, and is offering a variety of teacher workshops for educators to learn about ocean concepts, student monitoring projects, and current research related to the Gulf of the Farallones. The lectures and field trips will take place in and around San Francisco, California.

- LiMPETS Introduction to Rocky Intertidal Monitoring, February 24, 2007
- LiMPETS Introduction to Sandy Beach Monitoring, March 10, 2007
- Intertidal Invertebrate Ecology, March 17, 2007
- Shifting Seas of Sand and Other Geologic Processes, April 21, 2007

All workshops and seminars are free; K-12 teachers will receive a stipend for their attendance.
http://farallones.org/education/teacher_workshops.php

Farallones Teacher Workshops - California
The Farallones Marine Sanctuary Association is offering a series of teacher workshops throughout the 2007-2008 school year. Workshops are geared for middle and high school teachers, though all are welcome. All workshops are free and continuing education credits are available.

- Feeling The Heat: Thermal Biology And Responses To Climate Change, March 21, 2009
- Life & Death, Love & Sex, Drama in the Intertidal Zone, May 2, 2009

http://www.farallones.org/education/teacher_workshops.php

Farallones Workshop Series - California
The Farallones Marine Sanctuary Association is offering a series of free lectures, workshops, and field excursions. Workshop presentations, activities, and content are geared for middle and high school biology and environmental science teachers; however, all teachers and educators are welcome.

- Cephapalooza - A Squid Spectacular, October 30, 2010
- LiMPETS Introduction to Rocky Intertidal Monitoring, January 29, 2011
- LiMPETS Introduction to Sandy Beach Monitoring, March 26, 2011
- Advanced LiMPETS: Data Analysis Activities for the Classroom, April 16, 2011

Check the website for location and registration.
http://www.farallones.org/education/teacher_workshops.php

FedGIS – Washington, D.C.
The 2017 Esri Federal GIS (FedGIS) Conference, February 13-14, 2017 in Washington, D.C., will bring together government leaders, elected officials, GIS professionals, and tech experts. Explore ways people are using geospatial technology to accomplish their mission and meet the world's challenges. DevSummit DC takes place the following day. Registration is complimentary for all federal government employees.
http://www.esri.com/events/federal

Fellowship Program for Emerging Leaders - Southeast
The Environmental Leadership Program Southeast Regional Network Training Series for Emerging Leaders is designed to build the leadership capacity of the environmental and social change field's most promising emerging practitioners in the Southeast region. The year-long training series offers networking opportunities, intensive leadership and skills training, support, and time for personal and professional reflection.
http://www.elpnet.org/southeastnetwork/training.php

FESIRSE
The Institute for Earth Science Research and Education is seeking participants in its Facilitating Environmental Science Inquiry and Research for Students and Educators project (FESIRSE), funded by a three-year grant from the Toyota USA Foundation. The project promotes and supports student research in environmental and climate science.
http://www.instesre.org/Toyota/ToyotaHome.htm

Festival of Whales Ocean Awareness Day - California
Dana Point Harbor will celebrate its 35th year with The Dana Point Festival of Whales, March 4-11, 2006, in Dana Point Harbor, California, to provide a greater awareness and understanding of the migrating California Gray Whale and the preservation of the ocean environment. The Ocean Awareness day will take place March 12, 2006, bringing together city, county, state, public and non-profit groups to reach out to the community to educate about the many different issues our oceans and its environment face.
Contact Kim Tilly at dkckc@cox.net

Field Ecology Course - Maryland
Montgomery College offers BI 208, Field Ecology, at its Rockville, Maryland campus. A combination of lecture, laboratory, and field exercises will be used to study a variety of ecosystems, with an emphasis on coral reefs and the Chesapeake Bay. On-campus instruction will be combined with six or more days of field trip studies. Field studies may be conducted at biological field stations located in the Florida Keys, the Bahamas, the Chesapeake Bay, or other sites.
http://www.mc.cc.md.us/Departments/biorv/courses.htm

Field Marine Study of Coastal Ecosystems - Maine
August 18-21, 2008, teachers will travel aboard the *Erica Lee* to survey the ecosystems of the lower portion of the Merrimack River, coastal Plum Island and Ipswich Bay, the Isles of Shoals, and Thacher Island. Particular emphasis will be paid to the rocky intertidal zone, fishing and the fishing industry, and the gull rookery.
Contact Kate Yeomans at Kate@boatcamp.org

Field Trip Basics and Curriculum Connections - Illinois
The Shedd Aquarium offers the free workshop, Field Trip Basics and Curriculum Connections, December 10, 2009 in Chicago, Illinois, for K-8th grade teachers, every third Thursday in the fall, starting September 18, 2008, in Chicago, Illinois. Teachers will learn strategies for planning a focused and successful field trip, practice creating a pre-trip lesson plan, and more.
Contact Amy Christiansen at AChristian@sheddaquarium.org
http://www.sheddaquarium.org/teacherprogram_listings.html#ixzz0W748YNLX

Financing for Development: Unlocking Investment Opportunities - Online
Learn from government and international organization leaders about innovations to finance the Sustainable Development Goals in this free MOOC from the World Bank Group. The four-week course starts March 1, 2017 but participants can catch up from a late start.
https://www.edx.org/course/financing-development-unlocking-wbgx-f4d01x

Financing for Marine Conservation - Online
Open Channels and partners will host three free webinars in February on financing for marine conservation and management. Check these out, along with archived presentations of past events.
https://www.openchannels.org/upcoming-events-list

FINESSE Workshops – California and Maryland
Faculty Institutes for NASA Earth and Space Science Education (FINESSE) is accepting applications for two free workshops, January 12-13, 2010 in Sacramento, California and March 25-26, 2010 in Baltimore, Maryland. The workshops will assist university and

community college faculty and graduate students in preparing future teachers in science. The two upcoming workshops will include a focus on NASA Earth science data and the theme of climate change.
http://www.lpi.usra.edu/education/facultyInstitutes/

Fish Culture Techniques – Florida
Fish Culture Techniques will be held at Harbor Branch Oceanographic Institute, October 18-20, 2010 in Fort Pierce, Florida. This three-day beginner to intermediate workshop highlights techniques used in maturation, spawning, larvae culture, and production of fresh water and marine food fish. Students will interact with HBOI and USDA scientists at the Harbor Branch research facilities and learn techniques through laboratories and classroom presentations.
http://www.fau.edu/hboi/Aquaculture/AQacted_WorkshopSchedule.php

Fish Field Methodology Course – Florida
REEF will host a Fish Field Methodology Course, June 4-11, 2017 in Key Largo, Florida. This course is designed for college undergraduates and recent graduates aspiring towards a career in marine biology or a related field. It covers commonly used tools and techniques for visual assessments of reef fishes.
http://www.reef.org/fieldcourse

Fish & Wildlife Workshops – West Virginia and Oregon
The U.S. Fish and Wildlife Service offers professional development courses at the National Conservation Training Center campus in West Virginia and with partners throughout the country.

- OUT8163: Connecting People with Nature through Birds, June 3-6, 2013 in Shepherdstown, West Virginia. Contact Michelle Donlan at Michelle_Donlan@fws.gov
- OUT8164: Creating a Schoolyard Habitat/Outdoor Classroom, September 23-26, 2013 in Portland, Oregon; September 10 & October 29, webinars. Contact Scott Owen at scott_t_owen@fws.gov

http://training.fws.gov/documents/Section1_NCTC_Sponsored_Courses.pdf

Fishing People of the North Symposium - Alaska
Alaska Sea Grant is hosting Fishing People of the North: Cultures, Economies, and Management Responding to Change, September 14-17, 2011 in Anchorage, Alaska. This international symposium is a forum for fishery managers, fishing families, and others to explore the human dimensions of fishery systems and the growing need to include social science research in policy processes. Themes include Indigenous and Rural Knowledge and Communities, Human-Environment Relationships, and more.
http://seagrant.uaf.edu/conferences/2011/wakefield-people/index.php

FLEXE: From Local to EXtreme Environments - Mississippi
The Pennsylvania State and partners are offering this FLEXE/ GLOBE Teacher Workshop, *FLEXE: From Local to EXtreme Environments, Bringing Deep-sea Science into the Earth Science Classroom*, July 24-25, 2008, in Ocean Springs, Mississippi. FLEXE aims to help students understand remote environments through direct exploration of analogous systems in their local environment. The course will teach about extreme environments and implement a number of activities into their curriculum. Contact Shelia Brown at shelia.brown@usm.edu

Floating Classroom Program - Texas
The Sea Grant Extension Floating Classroom Program of Texas A&M University will visit Galveston Bay from May 14-June 1, 2007. The purpose of this excursion away from its homeport of Matagorda is to provide Houston-Galveston Area students the opportunity to explore the waters and shores of this rich and dynamic estuary in a hands-on fashion.
http://www.mtshouston.org/floating_class.htm

Floods and Flows: Exploring Mars Geology on Earth – Montana
In this NASA-sponsored field-based workshop for middle school science teachers, participants will visit the site of Ancient Glacial Lake Missoula and tracing its flood waters through Montana, Idaho, and into Washington. From these field experiences and accompanying classroom activities, participants will build an understanding of surface processes on Earth, including water flow, volcanism, glaciation, and sedimentation, and extend their understanding to interpret the features on the surface of Mars.
http://www.lpi.usra.edu/education/fieldtrips/2008/

Florida Ecosystems in an Era of Rapid Change - Florida
This workshop from the University of Florida Center for Precollegiate Education and Training, Florida Ecosystems in an era of Rapid Change – What Sustains Us, will be held June 20-24, 2016 in Gainesville, Florida. The workshop brings perspectives from the humanities into dialogue with current research in ecosystem science. Support is provided by the Florida Humanities Council. See the website for complete details.
http://www.cpet.ufl.edu/teachers/florida-ecosystems-in-an-era-of-rapid-change/

Florida Keys Sea Turtle Workshop - Florida
The Turtle Hospital is once again hosting the annual Florida Keys Sea Turtle Workshop, December 3-4, 2011 in Marathon, Florida. The workshop is open to professionals who work with sea turtles in the medical, rehabilitation, captive, and long term care fields. Registration is required.
Contact Sue Schaf at Turtlehosp@aol.com

Florida Reef Resilience Program Workshop
This workshop, offered March 9 and 10, 2006, will be the first in a series of public workshops that will include one or two-day sessions in 2006 and 2007. The program is designed to improve our understanding of coral reef resilience by exploring the biological and environmental aspects of reef health. Ultimately the program seeks to develop strategies to improve the health of Florida's reefs and enhance the economic sustainability of reef-dependent commercial enterprises.
Contact Anna Symington at asymington@tnc.org

Florida's Wildlife: On the Frontline of Climate Change - Florida
The Florida Fish and Wildlife Conservation Commission invites participation, August 20-22, 2008 in Orlando, Florida for an event focusing on Florida's Wildlife: On the Frontline of Climate Change. Learn from presenters and share your knowledge and expertise in one of five workshops to identify key research needs, improve awareness of impacts on wildlife, and develop ideas to optimize species conservation for integration into Florida Fish and Wildlife's comprehensive climate change strategy.
http://www.ces.fau.edu/floc/

Florida's Wildlife: On the Frontline of Climate Change
The Florida Fish and Wildlife Conservation Commission invites you to participate in the workshop, *Florida's Wildlife: On the Frontline of Climate Change*, August 20-22, 2008, in Orlando, Florida. Learn from presenters and share your knowledge and expertise in this workshop to identify key research needs, improve awareness of impacts on wildlife, and develop ideas to optimize species conservation for integration into Florida Fish and Wildlife's comprehensive climate change strategy.
http://www.ces.fau.edu/floc/index.php

Flower Garden Banks National Marine Sanctuary Education Workshop
K-12 educators are invited to participate in a two-part workshop, July 10-14, 2004, that concludes with a field experience in SCUBA diving in the Flower Garden Banks National Marine Sanctuary (FGBNMS). The land-based portion of the workshop includes lectures on basic coral biology, the National Marine Sanctuary Program, the FGBNMS and its current issues, and an introduction to reef fish identification.
http://flowergarden.noaa.gov

Flying Wild Educator Workshop - Georgia
This two day Flying Wild Workshop, June 27-28, 2007 or July 12-13, 2007 in Covington, Georgia, demonstrates activities from the Flying Wild Guide, provides instructions on how-to establish a schoolyard wildlife habitat, and helps teachers learn how to integrate bird education into their classroom curriculum.
http://www.eeingeorgia.org/net/calendar/details.aspx?c=32283&s=52045.0.68.4863

Flying WILD with Project WILD Workshop - Georgia
Flying WILD, from the Council for Environmental Education, introduces students to bird conservation through standards-based classroom activities and environmental stewardship projects. This workshop will take place October 13, 2005 in Acworth, Georgia. Flying WILD encourages schools to work closely with conservation organizations, community groups, and businesses involved with birds to implement school bird festivals and bird conservation projects. Space is limited to 30 participants.
http://eeingeorgia.org/net/calendar/details.aspx?c=27390&s=32849.0.68.4863

Fort Fisher Teacher Workshops – North Carolina
The North Carolina Aquarium at Fort Fisher offers professional development workshops for classroom teachers and informal educators. The following workshops will be offered July 16-20, 2007.

- ***MAURY Project*** is a six-hour workshop for middle- and high-school teachers interested in integrating marine research and oceanography into classroom science.
- ***Aquariums Teacher Workshop*** introduces K-12 teachers to pre- and post-visit activities designed to enhance an aquarium field trip as well as integrate ocean awareness in the classroom across disciplines.
- ***Project WET*** provides water-education curriculum for K-12 teachers.
- ***Aquatic WILD*** introduces K-12 teachers to innovative and interactive curriculum designed to integrate aquatic environmental education in the classroom.
- ***Land of a Thousand Nests*** is designed to introduce participants to colonial nesting water birds.
  http://web.eenorthcarolina.org/net/org/info.aspx?s=43746.0.0.37430

Fort McHenry Field Day
The National Aquarium in Baltimore, in partnership with the National Park Service and others, announces a community volunteer field day on December 3, 2005 at Fort McHenry, Maryland. Volunteers will work together to remove debris, maintain trails, restore habitat, record wildlife observations, and more. Space is limited, so please register in advance.
Contact the Conservation Department at conserve@aqua.org or (410) 659-4274.

Fortune Brainstorm Green - Online
Fortune will team up with program partners including Conservation International, The Nature Conservancy, and others, for this green business conference. Free virtual participation for select sessions is available. Registration is required.
http://events.unisfair.com/index.jsp?eid=661&seid=1722

Fossils in the Classroom - Alabama
The Dauphin Island Sea Lab will offer a fossil workshop, March 17 and 18, 2007 in Coffeeville and Thomasville, Alabama. The workshop will introduce teachers to organisms from past seas of Alabama. Participants will spend a day in the field collecting fossils and then label these treasures to be carried back to their classrooms.
Contact Denise Keaton at dkeaton@disl.org

Fostering Sustainable Behavior Workshop – Massachusetts
Several Cape Cod organizations concerned with sustainability are hosting a workshop on January 24, 2005, in Hyannis, Massachusetts with respected world expert, Doug McKenzie-Mohr. The cornerstone of sustainability is behavior change. Sustainability requires individuals and businesses to act (e.g., reduce waste, increase water and energy efficiency and prevent pollution). Community-based social marketing, has emerged as an effective alternative for promoting sustainable behavior.
http://www.coastaltraining.org/events/jan_feb_mar_05.htm

Fostering Sustainable Behavior Workshop – Florida
This workshop, June 13-14, 2012 in Clearwater, Florida provides an introduction to community-based social marketing and how it is applied to foster sustainable behavior. Participants will learn the five steps of community-based social marketing (selecting behaviors, identifying barriers, developing strategies, conducting pilots, and broad scale implementation), and will be exposed to numerous case studies illustrating its use. Check out the website authored by the instructor.
https://www.htfsolutions.com/HTFSolutions/forms/mma/index.htm
http://www.cbsm.com/public/world.lasso

Foundations of Interpretation - Online
The Eppley Institute for Parks and Public Lands at Indiana University offers the free online course, Foundations of Interpretation, designed to provide a basic understanding of the theory and practice of interpretation. The course integrates text, interactive practice activities, videos, and more in a self-paced, online format.
http://idp.eppley.org/training/entry/tools/foundations

Fragile Ice Seminar - Online
In honor of the International Polar Year, NASA, NSTA, NOAA, and NSF present The Fragile Ice, a web seminar for grades 5-8 educators. Dr. Waleed Abdalati, head of the Cryospheric Sciences Branch at NASA's Goddard Space Flight Center, will be

presenting online to share his expertise. Hurry – register online for the February 6, 2007 web seminar. The seminar will also be presented live at the NSTA National Conference March 30, 2007.
http://institute.nsta.org/fall06/ipyice/webseminar.asp

Fragile Ice Symposium - Utah
Celebrate the International Polar Year at the regional NSTA conference, December 8, 2006 in Salt Lake City, Utah. The Fragile Ice Symposium is designed for grade 5-8 educators in celebration of the International Polar Year. This event is a blended professional development experience that includes this face-to-face learning opportunity at the conference followed by online experiences (a discussion listserv and two NSTA Web Seminars) designed to extend the interactivity between the participants and the presenters.
http://institute.nsta.org/fall06/ipyice/symposium.asp

From H-2-O - Louisiana
This free workshop presented by the Louisiana Universities Marine Consortium, June 13-16, 2012 in Cocodrie, Louisiana, will provide teachers with the knowledge, skills, and equipment to do water quality monitoring as an inquiry-based environmental education experiences with their students using LUMCON's Bayouside Classroom program. Teachers can show students their connection to the Gulf of Mexico through watershed science while conducting meaningful science and stewardship activities.
http://www.lumcon.edu/education/MarineEducation/H-2-O_2012.pdf

From Science to Stewardship in the Sanctuary - California
Hosted by Channel Islands National Marine Sanctuary, the free secondary teacher workshop, Science to Stewardship in the Channel Island National Marine Sanctuary, April 16, 2016 in Santa Barbara, California, weaves NGSS three-dimensional teaching into the EEI Curriculum, a proven curricular tool, with support from NOAA's Principles of Ocean Literacy.
http://creec.org/events/3508

From Shore to Sea Lecture Series - California
The Channel Islands National Marine Sanctuary's *From Shore to Sea Lecture* series will be presenting *SPLASH – Update on Blue and Humpback Whale Pacific NE Populations*, May 12 and 13, 2009, and *Investigating the Mass Extinction of 12,000 Years Ago*, June 9 and 10, 2009.
http://channelislands.noaa.gov/focus/calendar.html

From Stream to Sea Seminar – New Mexico
The Albuquerque Aquarium will be hosting a professional development seminar for educators on February 17-19, 2006 in Albuquerque, New Mexico. The seminar, *From Stream to Sea: Connecting Classrooms, Local Watersheds and Marine Education*, will provide creative ways for teachers to utilize their student's local landscape--be it the bosque, the foothills, the desert or even the playground--to teach them about the importance and wonders of the ocean.
Contact Allyson Wallace at awallace@cabq.gov

From the Surface of the Sun to the Depths of the Ocean – Maryland
Session 2 of the free 2017 NOAA Science - From the Surface of the Sun to the Depths of the Ocean Workshop Series, will feature how changes in Earth's systems are

changing water levels in the Chesapeake Bay, and how this could affect coastal communities. In addition, the workshop will host a Maker Fair, creating models, games, and monitoring tools to support student understanding of Earth System Science.
http://events.r20.constantcontact.com/register/event?oeidk=a07edticn4616368fec&llr=4gpktedab

From Watersheds to Oyster Beds
SouthEast Center for Ocean Sciences Education Excellence (SE-COSEE) and NOAA's SouthEast Phytoplankton Monitoring Network will host *From Watersheds to Oyster Beds,* a teachers' workshop. The workshop is open to 20 middle and high school teachers, and CEUs are available. Participants will engage in hands-on activities and receive free educational resources.
julie.cahill@noaa.gov or wendy.perry@noaa.gov.

Fundamentals of Environmental Education - Online
The University of North Carolina Wilmington will offer the Fundamentals of Environmental Education online course August 19-December 2, 2009. The course is appropriate for both classroom teachers and for non-formal educators who work with students and/or teachers. For general information about the course, check out the EETAP website; for specifics about enrollment, contact UNCW.
http://www.uwsp.edu/natres/eetap/fee_course_page.aspx
Contact the Environmental Studies Department at evs@uncw.edu

Fundamentals of Environmental Education
The 10-week long, on-line course provides educators with the knowledge and skills necessary to incorporate environmental education into their instruction. Participants discuss the history, definition, and goals of environmental education, develop an understanding of the professional roles and instructional methods of environmental educators, and interact with other educators from across the country.
http://www.eetap.org/html/online_ee_course.php
http://www.uwsp.edu/natres/rwilke/eetap/ .

Fundamentals of Environmental Education - Online
This online course, developed at the University of Wisconsin, Stevens Point, is now offered through the Department of Environmental Studies at the University of North Carolina Wilmington. Learn about the foundations of environmental education and how it is implemented and evaluated by professionals. The course may be taken for undergraduate, graduate, or distance learning [graduate] credit. No text or face-to-face meetings are required.
Contact Dr. Rosanne Fortner at fortnerr@uncw.edu

Fundamentals of Environmental Education - Online
The Fundamentals of Environmental Education online course will be offered June 4-August 17, 2007 and September 10-November 23, 2007, February 4-April 18, 2008. The course provides educators with the knowledge and skills necessary to incorporate quality environmental education into their instruction. Participants discuss the history, definition, and goals of environmental education; develop an understanding of the professional roles and instructional methods of environmental educators; and interact with other educators.
http://www.uwsp.edu/natres/rwilke/eetap/Website2006/FEE.htm

Fundamentals of Natural and Cultural Interpretation - Online
The University of Wisconsin-Stevens Point and the Environmental Education and Training Partnership (EETAP) are offering a new fall course, Fundamentals of Natural and Cultural Interpretation, September 13-December 3, 2010.
Contact Jessica Tomaszewski at jtomasze@uwsp.edu

Galveston Bay Community Open House - Texas
The Galveston Bay Estuary Program invites you to attend a *Charting the Course to 2015 Galveston Bay* Community Open House. Learn about Galveston Bay's impact on our economic well-being, health, and quality of life, and how you can become involved in shaping its future. Open houses will be held throughout the Houston-Galveston region through the beginning of April. Be sure to check out the extensive information available on the website, including links to estuary education programs.
http://www.gbep.state.tx.us/hot-topics/ctc%20page.asp

GAME 2013 Annual Conference - Georgia
The theme of the Georgia Association of Marine Educators (GAME) annual Fall Conference, September 27-28, 2013 on Jekyll Island, Georgia, is Coastal Collaborations: Working Together for Marine Education. The conference will focus on how members are using limited-to-no funds for projects and programs, forging new partnerships, and utilizing networks and collaborations.
http://gamarineeducation.org/?q=AnnualConference

GEMS Curriculum Sequence Workshop - California
University of California, Berkeley's Lawrence Hall of Science presents a workshop sequence for elementary and middle school teachers: "A Medley of Summer 2014 GEMS Space and Ocean Sciences Curriculum Sequences Workshops, With a Special Emphasis on Argumentation." The workshop, August 4-8 in Berkeley, California, offers flexible scheduling, with 1-, 2-, 3-, or 5-day summer programming.
https://www.regonline.com/builder/site/Default.aspx?EventID=1381704

Generation Earth Back To School Forum – Los Angeles County
This workshop, for Los Angeles County middle and high school teachers, August 28, 2004, offers environmental education resources and assists teachers in planning action projects for the coming year. Teachers will create a plan to increase the quality of environmental education in their classrooms. Generation Earth provides resources and referrals that support teachers' plans for the coming school year.
http://www.generationearth.com/action/index.htm .

Generation Earth Summer Institute - California
Generation Earth invites teachers and administrators from 6-12th grade Los Angeles County to this free workshop, July 25 - 26, 2007 in Pasadena, California. The workshop includes tools to create a standards-based environmental service learning project, exploration of environmental issues in Los Angeles, resource publications, auditing techniques for schools, personalized project support, free bus for a project-related fieldtrip, resource fair to network with community partners, and a Teacher Action Guide.
http://www.generationearth.com/eco/index.htm

Generation Earth Workshop - California
Generation Earth, an environmental education program of the County of Los Angeles and presented by TreePeople, offers a free workshop for secondary school teachers,

February 11, 2006 in Beverly Hills, California. Generation Earth works to educate and empower secondary students in L.A. County to take an active part in solving environmental concerns in their community.
Contact Loyda Ramos at lramos@treepeople.org

Geophysical Prospection Workshop - Georgia
The National Park Service sponsored sixteenth annual archaeological prospection techniques workshop, *Current Archaeological Prospection Advances for Non-Destructive Investigations in the 21st Century*, May 15-19, 2006, on St. Simons Island, Georgia is dedicated to the use of aerial photography, geophysical, and other remote sensing methods to identify, evaluate, conserve, and protect archaeological resources. This workshop will focus on the theory of operation, methodology, processing, interpretation, and on-hands use of field equipment.
http://www.cr.nps.gov/mwac/

Georgia Adopt-A-Wetland Training
The Coastal Georgia Adopt-A-Wetland Program is a hands-on education program that promotes wetland conservation through volunteer monitoring. The organization offers chemical and biological Adopt-A-Wetland Training workshops for adults and students. Participants will learn how to assess water quality and then receive all equipment needed to assess environmental health at an adopted site of their choice. Admission is free, but registration is required.
http://www.eeingeorgia.org/net/content/go.aspx?s=52177.0.68.4863

Georgia Aquarium Workshops - Georgia
The Georgia Aquarium Education Staff and partners offer a variety of educator workshops. *Why Do We Explore*? will be held October 1, 2011; *Georgia Native Workshop* will be held October 7-8, 2011.
http://www.georgiaaquarium.org/education/teachers/professional-development.aspx

Georgia Shore Program
The University of Georgia presents the Georgia Shore Program: Using the Marine Environment as a Model for Integrating Science and Math, June 7-22, 2005, on Skidaway Island, Georgia. Immerse yourself in a coastal Georgia experience, bring inquiry-based activities back to you classroom, and conduct your own research. The two-week class is supported by an “Improving Teacher Quality” grant to the Marine Education Center and Aquarium.
http://www.uga.edu/aquarium/workshops/SHORE.html

Georgia Shorebirds Conservation Teacher Workshop - Georgia
The Sapelo Island National Estuarine Research Reserve is hosting this teacher workshop December 1-4, 2011 November 29-December 2, 2012 November 21-23, 2014 December 4-6, 2015 February 12-14, 2016 December 4-6, 2016 January 13-15, 2017 June 12-14, 2017 on Sapelo Island, Georgia. The workshop is open to formal and informal educators of all grade levels. Participants will receive curriculum and resource materials.
Contact Georgia Graves at georgiabeachwalk@bellsouth.net
http://eeingeorgia.org/net/calendar/details.aspx?s=54703.0.68.4863&mode=p&c=3526135&p=6286
http://www.sapelonerr.org/georgia-shorebirds-conservation-teacher-workshop/
http://eeingeorgia.org/net/calendar/details.aspx?c=5384982&s=121901.0.68.4863

http://eeingeorgia.org/net/calendar/details.aspx?s=121901.0.0.4863&dateid=8562

George Wright Society Conference on Parks, Protected Areas, and Cultural Sites
The theme for the 2015 George Wright Society Conference is Engagement, Education, and Expectations: The Future of Parks and Protected Areas. The conference, March 29-April 2, 2015 in Oakland, California, will highlight research, management practices, and the core values that motivate the parks community. New for 2015 is a results-oriented conference framework.
http://www.georgewright.org/gws2015

Georgia's Barrier Island Habitats Teacher Workshop - Georgia
Explore the maritime forest, beach, and marsh habitats of one of Georgia's fourteen barrier islands, July 19-21, 2012 on Sapelo Island, Georgia. Activities include seining for local organisms, a turtle walk, introduction to the Estuaries 101 curriculum, and more. This workshop is open to both formal and informal educators of all grade levels. Contact Georgia Graves at georgiabeachwalk@bellsouth.net

Georgia's Native Waters and the Leopold Education Project
Georgia's Native Waters and the Leopold Education project workshops will create awareness among participants about the important role the environment can play in their classrooms. Learn the skills necessary to complete interactive projects for the indoor and outdoor classroom. Connections will be made to the curriculum by participating in hands-on activities and scientific investigations.
http://www.gaconservancy.org/Events/Event.asp?id=301&yy=2007&mm=2&dd=9

Georgia Shore Program - Georgia
Georgia educators can immerse themselves in a free coastal Georgia experience, June 15-29, 2013 starting on Skidaway Island, Georgia. Hurry – enrollment is limited to 16 students.
http://www.marex.uga.edu/aquarium/teacherWorkshops.html

Georgia Shorebirds Conservation Teacher Workshop - Georgia
The Sapelo Island National Estuarine Research Reserve is hosting this teacher workshop January 10-12, 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.
http://eeingeorgia.org/net/calendar/details.aspx?s=111892.0.0.4863&dateid=7393

Georgia's Shorebirds Conservation Workshop
Join birding experts and biologists for an exciting weekend of learning, December 2-4, 2005, on Sapelo Island, Georgia. Venture out to the beach to probe the sands as the birds do, take a close look at what they're feeding on, and create your own shorebird nest. This workshop is open to K-12 teachers.
http://eeingeorgia.org/net/calendar/details.aspx?c=27712&s=34959.0.68.4863

Geospatial Academy - Tennessee
The Tennessee Geographic Alliance Knoxville will host this workshop, May 14, June 6-9, and October 1, 2016 in Knoxville, Tennessee. Participants will develop geospatial science and technology background knowledge and skills and learn how to incorporate geospatial technologies activities into their curriculum. Stipends may be available.
http://www.tngeographicalliance.org/upcoming-events.html

Geospatial Teaching Across the Curriculum
Geospatial Teaching Across the Curriculum (GEOSTAC) is a professional development opportunity for Language Arts, Math, Social Science, and Science high school teachers. GEOSTAC hopes to improve geospatial education and community college program recruitment by creating a pathway between the community college, high school teachers, and their students.
http://gis.lanecc.edu/geostac

Get the Grant! - Mississippi and Alabama
Gulf of Mexico Coastal Training is a collaboration between the five Gulf Coast National Estuarine Research Reserve Coastal Training Programs. They are offering a series of Get the Grant! Workshops in Mississippi and Alabama. Check the website for details.
http://www.gulfalliancetraining.org/workshops.aspx

GET Wet! Teacher Workshop - Texas
Join the Galveston Bay Foundation for a free two-day educator workshop, April 2 and 9, 2016. This workshop is geared towards middle school and high school level educators. Participants who complete both days will receive a stipend and continuing education credit hours.
http://www.galvbay.org/how-we-protect-the-bay/in-our-schools/getwet/

Giovanni Workshop - Online
In September 2012, the NASA Goddard Earth Science Data and Information Services Center hosted an online workshop focused on the use of the data visualization and analysis tool, Giovanni. The workshop primarily consisted of online author-led presentations coupled with real-time discussions about these presentations. Presentations and chat logs will be available online for review, for those not able to participate in live sessions.
http://www.smdeponews.org/programs-events/2012-gregory-g-leptoukh-online-giovanni-workshop-for-scientists-high-school-and-undergrad-educators-sept-2012/

GIS Faculty Development Institutes - California
The Marine Advanced Technology Education (MATE) Center announces two faculty development institutes for summer 2005:

- Creating a GIS Field Project to Address Marine and Coastal Issues, June 27-July 2, 2005, and
- Building Remotely Operated Vehicles (ROVs), July 30-August 5, 2005.

There is no fee for participating in the institutes. Some travel stipends, accommodations, and meals are available. In addition to classroom and hands-on time, participants will take field trips around the Monterey Bay area.
http://www.mpcfaculty.net/tami_lunsford/SI_05_Institute/Information.htm

GIS Ocean Explorers Project in California
The Ocean Explorers project is a 3-year NSF funded project for middle and high school teachers to lead teams of teachers in the creation of lesson plans utilizing GIS technology in the study of the Channel Islands National Marine Sanctuary. There will be 2-3 day GIS introductory workshops in LA, as well as travel to the Channel Islands for a week-long research expedition this summer.
http://www.exploreoceans.org .

GIS and Underwater Robotics Workshops - California
The Marine Advanced Technology Education Center is offering two free Summer Institutes for 2006, in Monterey, California. *Creating a GIS Field Project to Address Marine and Coastal Issues*, July 8-14, 2006 will lead educators through each step of creating their own GIS projects to use their classrooms. *Building Remotely Operated Vehicles*, July 31-August 5, 2006, will teach educators the basic skills to help their students build ROVs that can compete in ROV competitions.
http://www.mpcfaculty.net/tami_lunsford/SI_06_Institute/Information.htm

GIS Workshops at National Marine Sanctuaries – Florida and Massachusetts
A three-day geographic information systems (GIS) workshop for teachers will be offered at two marine sanctuaries. During the workshop, teachers will receive hands-on training in GIS and global positions systems technologies, and learn how they can be used to study the marine environment. Participants will receive complimentary copies of the Exploring Data with GIS to Experience Marine Sanctuaries (EDGES) curriculum and Mapping Our World curriculum, and a one-year site license for ArcView GIS software.

- Florida Keys National Marine Sanctuary, Key Largo, Florida, June 22-24, 2005
- Stellwagen Bank National Marine Sanctuary, Scituate, Massachusetts, July 6-8, 2005.

Contact Jenny Brady at jennyb@evisual.org

GK-12 Program - Texas
Tracing a Drop of Water: An Integrated Environmental Approach to K-12 Education, sponsored by the National Science Foundation and the University of Texas at Austin's Environmental Science Institute, partners graduate students in the sciences with K-12 teachers in Texas to enhance science education through classroom activities, workshops, and field projects.
http://www.esi.utexas.edu/gk12/

Glaciers and Global Sea Level Rise – California and Online
The Center for Ocean Sciences Education Excellence-West invites you, your colleagues and students, family and friends, to learn more about the ocean's impact on our changing world. The *Glaciers and Global Sea Level Rise* lecture will take place November 16, 2005 in Los Angeles, California. The public lecture will be followed by session for K-12 teachers and informal educators. A related workshop on November 19, 2005 will provide K-12 teachers and informal educators with additional content and inquiry-based classroom activities. The lecture can be accessed online after logging in to the College of Exploration website.
http://www.usc.edu/org/cosee-west/
http://www.coexploration.org/

Glacier Bay eFieldTrip
The eFieldTrip, "Glacier Bay: A Living Laboratory for Studying Marine Mammals" premiered February 27, 2006, and is designed to meet state and national education standards. This is offered as a free educational outreach opportunity. In addition to the virtual visit and trip journal, on March 8 and 9, 2006, the park will host *Ask the Experts*, encouraging students to post questions through the website, to be answered by experts at Glacier Bay National Park and Preserve.
http://www.efieldtrips.org

Global Climate Change and Informal Earth System Science - Online
SUNY College at Oneonta offers this online, 10-week graduate course, designed to provide professional development for the informal Earth system science education community. The first module, Global Climate Change, discusses recent scientific study on global climate change. The second module, Earth System Science in Your Backyard, provides the tools for creating in-house, inquiry-based Earth science education products focusing on the participants' local geology and existing collections/exhibits/programming.
Contact Carlyn Buckler at csb36@cornell.edu

Global Climate Change Issues and Impacts Workshop - Online
This workshop is offered through Oregon State University E-campus, July 19-August 13, 2010. 20-July 15, 2011, i The course is geared for teachers and general audiences about climate change and impacts of warming that are being expressed in various bioregions of the world. Topics include oil supplies, alternative energy research, conservation, and more.
Contact Vicki Osis at vjosis@peak.org

Global Climate Modeling Teacher Workshop - Pennsylvania
Learn how to use a NASA global climate model and develop a climate modeling activity for your classroom at this free Global Climate Modeling Teacher Workshop, June 30-July 1 2009 in Allentown, Pennsylvania. The Educational Global Climate Modeling software has a user-friendly interface that runs on desktop computers, and provides teachers and their students with the ability to run one of NASA's research-quality global climate models.
http://www.davinci-center.org/profdev.html

Global Edge: Online Course Modules
The Global Edge site from Michigan State University's Broad College of Business offers educational tools for use in the classroom or in executive training. Check out the Culture module, including Ethics, International Negotiations, and more.
http://globaledge.msu.edu/reference-desk/online-course-modules

Global Issues and Sustainability Summer Institute – New Hampshire
Facing the Future is facilitating a one-week summer institute on July 9-14, 2006 in Meriden, New Hampshire, *It's All Connected: Integrating Global Issues and Sustainability across the Curriculum*. Get an in-depth look at global issues and sustainability while working with middle and high school teachers from around the country.
http://www.eejust.org/educators/connected.html

Global Ocean Science Education Workshop – Rhode Island
The first Global Ocean Science Education Workshop will take place June 26-27, 2015 in Narragansett, Rhode Island. Panelists and plenary speakers from over 15 nations will address international and national ocean science research and education priorities. Workshop goals include identifying opportunities and setting a course for international collaborations and establishing a foundation for an international ocean science education network.
http://www.coexploration.org/gose/
https://www.regonline.com/Register/Checkin.aspx?EventID=1696166

Global Ocean Science Education Workshop – Paris
The focus of the Global Ocean Science Education Workshop, June 13-15, 2016 in Paris, France, includes climate change, fisheries and biodiversity, and oceans and human health.
https://www.regonline.com/Register/Checkin.aspx?EventId=1823867

GLOBE El Niño Field Campaign and Webinar - Online
The GLOBE ENSO (El Niño Southern Oscillation) Campaign has been formulated to engage students in determining where and how much El Niño affects local places and to put students in contact with their local environment. Visit the website for webinars in the series.
http://www.globe.gov/web/el-nino/el-nino-campaign/webinars

GLOBE Train the Trainer – South Dakota
A free train-the-trainer workshop, April 20–24, 2015 in Rapid City, South Dakota, will be held for those wishing to become trainers in Global Learning and Observations to Benefit the Environment (GLOBE), an international science and education project sponsored by NASA, NOAA, NSF, and the US State Department.
http://www.sd-discovery.org/for-teachers/professional-development/#GLOBE

GLOBE Training for Eco-Schools - Online
National Wildlife Federation's Eco-Schools USA is a collaborating partner of the GLOBE Program and together they are working to engage Eco-Schools in the GLOBE Program. They offer free online training, June 13-August 5, 2016, September 6-October 31, 2016for educators to understand how to integrate GLOBE as a part of the 7-Step Framework and to become GLOBE trained. The course is self-paced within the specified dates.
http://www.nwf.org/Eco-Schools-USA/GLOBE/On-Line-Course-Information.aspx

GLOBE Watershed Project Educator Workshop - Colorado
GLOBE and The Geographic Data in Education Initiative at Northwestern University are looking for middle-high school science teachers to participate in an Earth system science education project that connects students with real scientific data sets for a workshop August 7-9, 2007 in Boulder, Colorado. The GLOBE Watershed Dynamics Project offers students the opportunity to conduct investigations on watershed behavior on local, regional, and national scales.
http://www.globe.gov/fsl/html/templ.cgi?watersheds&lang=en&nav=1

Google Ocean - from Sneakers to Sea Lions Workshop - California
The Center for Marine Studies offers this free workshop for middle and high school teachers, Saturday, May 12, 2007 in San Pedro, California. The workshop includes tours of two rescue facilities, working with GIS data and Google Earth, information about pinnipeds and marine birds, and more.
Contact Todd Shattuck at todd.shattuck@lausd.net

Got the HOTS for Inquiry? - Online
This free digital workshop from ED.gov shows how to increase student learning by integrating inquiry and Higher Order Thinking Skills (H.O.T.S.) into instruction; discusses how to incorporate inquiry and the revised Bloom's Taxonomy into student assessment; disaggregate the scientific method and connect it to inquiry; and discuss assessments

for inquiry and H.O.T.S. Science classroom activities are also presented within the workshop.
https://www.t2tweb.us/Digital/workshop_hots/index.html

Graduate Fellowships in Population Dynamics and Marine Resource Economics
Applications are being accepted for the 2011 NMFS-Sea Grant Fellowship Programs in Population Dynamics and Marine Resource Economics. All applications must come through a sponsoring Sea Grant office. The deadline for application is January 21, 2011. Check the Sea Grant website for your local program; the California Sea Grant website has links to the funding notices.
http://www.csgc.ucsd.edu/EDUCATION/SeaGrantFellows.html
http://www.seagrant.noaa.gov/colleges/

Grant Development Workshop – Michigan and Ohio
Sponsored by the Grant Training Center, these intensive three-day grant proposal workshops are geared for those who wish to strengthen their grant writing skills and for beginners who wish to acquire and master the techniques of preparing, writing, and winning proposals from various funding agencies. The center of attention will be on how to effectively tell the story that leads to funding, be it for the researcher, educator, or the non-profit professional.
http://www.granttrainingcenter.com

Grant Proposal Writing Workshop
The Grant Institute's *Grants 101: Professional Grant Proposal Writing Workshop* will be held August 21-23, 2006 in Ann Arbor, Michigan. The course introduces the process, structure, and skill of professional proposal writing for development professionals, researchers, faculty, and graduate students. Participants will learn the entire proposal writing process and complete the course with a solid understanding of the ideal proposal structure and factors which determine whether or not a program gets funded.
http://www.thegrantinstitute.com

Grant Writing for Conservation – West Virginia
This course from the U.S. Fish & Wildlife Service, September 17-19, 2013 in Shepherdstown, West Virginia, will help participants interweave the grant proposal writing process and strategic thinking for successful grant management once awarded. Learn how to cultivate the human personal relationships with partners or other funding organizations to support projects that promote and maintain conservation and natural resource management.
http://nctc.fws.gov/NCTCWeb/catalog/CourseDetail.aspx?CourseCodeLong=FWS-CLM8116

Great Barrier Reef Study Program - Australia
The Great Barrier Reef Study Program offers field intensive, academic short courses providing students the opportunity to undertake field-based experiential learning in Queensland's marine environment. The courses are in a classroom which includes the Great Barrier Reef and Moreton Bay Marine Parks. Courses include coral reef ecosystems, marine neurobiology, coastal resource management, and more.
http://www.cms.uq.edu.au/GBRSP/whatis.htm

Great Lakes Academy – New York
The Great Lakes Academy 2013 summer workshops for educators, July 29-August 2, 2013 in several New York locations, will focus on aquatic activities and water resources, and include a workshop for early childhood educators. A stipend may be available.
http://eelinked.naaee.net/n/eelinked/posts/2013-Great-Lakes-Academy

Great Lakes Climate Change Online Workshop and Focus Group - Online
The College of Exploration and the Great Lakes Climate Education Partnership team offered an online Focus Group Workshop on Great Lakes Climate Change Science, November 7-25, 2011. Check out the keynote presentations at any time, along with discussion groups, links to additional information, and more.
http://www.coexploration.org/CCEP-GL/

Great Lakes Educator Day - Indiana
Topics at the 56th Annual Conference on Great Lakes Research, June 2-6, 2013 in West Lafayette, Indiana, will include climate change, fish and fisheries, aquatic invasives, and more. A special educator day will be held June 3, 2013.
http://www.iaglr.org/iaglr2013

Great Lakes Institute Teacher Workshop
Lake Michigan Federation, Indiana Dunes Environmental Learning Center, and Indiana Dunes National Lakeshore present the Great Lakes Institute Teacher Workshop, July 18-23, 2004. Teachers will spend 4 nights on board an EPA research vessel and one at the Learning Center. Materials and activities will include excerpts from the *Great Lakes In My World* curriculum. Citizen science projects will be the theme of this workshop, with activities from GLOBE, Adopt-a-Beach and the Midwest Clamwatchers projects.
http://www.nps.gov/indu/learning/duneseducatorinstitutes.htm .

Great Lakes Lectures
The National Ocean Sciences Bowl (NOSB) offers this professional development opportunity for middle and high school educators nationwide. The series, The Great Lakes: A Window into Freshwater Science, will provide teachers with the opportunity to enhance their knowledge of topics related to freshwater environments, as well as science and policy issues relevant to the Great Lakes.
http://www.nosb.org/professional-development/

The Great Lakes Rock! - Online
Centers for Ocean Sciences Education Excellence Great Lakes offers archives of this online workshop, focusing on the geology of the lake basin and its relevance to the lakes themselves and the life of the region. Educational materials include invasive species, fisheries, Great Lakes background information with maps and photos, music, and much, much more.
http://www.coexploration.org/coseegreatlakes/

Great Lakes Teacher Workshop – Lake Erie Watershed
The Teacher Workshop, Great Lakes “F-EX” (Field Experiences) for Great Lakes Stewards, June 19-21, 2013 starting in Erie, Pennsylvania, is a professional development excursion through the Lake Erie watershed. NOAA educators will teach this hands-on workshop for grades 5-12 teachers. The workshop is limited to 15 teachers. Stipends may be available.

http://www.paseagrant.org/workshops/great-lakes-f-ex-field-experiences-for-great-lakes-stewards/

Green Eggs and Sand Workshops – Delaware and Georgia
The Green Eggs and Sand Horseshoe Crab and Shorebird Professional Teacher Development workshops will feature presentations from scientists and resource managers, along with field trips to take part in spawning surveys and search for eggs and shorebirds. Participants will receive training from teachers who have developed learning modules; in addition, participants will receive middle and secondary level classrooms materials and resources about the horseshoe crab/shorebird phenomena.

- May 4–6, 2007 in Savannah, Georgia, contact Dodie Sanders at sandersd@uga.edu
- May 18-20, 2007 in Dover, Delaware, contact Gary Kreamer at gary.kreamer@state.de.us
- April 26-28, 2013 on Skidaway Island
- May 20-22, 2016 in Smyrna, Delaware

http://eeingeorgia.org/net/calendar/details.aspx?s=106869.0.0.4863&dateid=6924
http://tydb.mobiusnm.com/workshop

Green Eggs and Sand Workshops – Georgia, Delaware, New York
The Green Eggs and Sand workshops are designed to explore the Atlantic Coast horseshoe crab/shorebird phenomenon and management controversy. There are three Green Eggs and Sand workshops scheduled:

- May 2-4, 2008, Savannah, Georgia
- May 16-18, 2008, Lewes, Delaware
- June 20-22, 2008, Long Island, New York

Contact Jennifer Holmes at Jennifer.Johnson@state.de.us

Green Eggs & Sand Workshops – Georgia, New Jersey, New York
The Green Eggs & Sand workshops are designed to explore the Atlantic Coast horseshoe crab/shorebird phenomenon and management controversy. Register for these upcoming workshops soon, as space is limited and reservations are on a first-come, first-serve basis.

- April 15-17, 2011, Savannah, Georgia
- May 13-15, 2011, Cape May, New Jersey
- June 3-5, 2011, Stony Brook, New York

http://www.tydb.org/pdf/2011%20GES%20workshops%20flyer.pdf

Green Eggs and Sand Workshop - Georgia
The Green Eggs and Sand Horseshoe Crab and Shorebird Education Workshop co-sponsored by Sapelo Island National Estuarine Research Reserve and the University of Georgia Marine Education Center, will be held April 28-30, 2006 in Savannah, Georgia. Participants will receive training to educate middle and secondary students about the horseshoe crab/shorebird phenomena.
http://eeingeorgia.org/net/calendar/details.aspx?c=27719&s=34995.0.68.4863

Green Eggs and Sand Workshops – Delaware, Georgia, and Massachusetts
The Green Eggs and Sand team is offering three full weekend workshops along the Atlantic coast for spring of 2006. Participants will learn about a globally significant

ecological phenomenon and take home the middle/high school-targeted curriculum package which is keyed to national standards and offers videos and activities.

- Savannah, Georgia, April 28-30, 2006; contact Dodie Sanders at sandersd@uga.edu
- Smyrna, Delaware, May 19-21, 2006; contact Gary Kreamer at gary.kreamer@state.de.us
- Sandwich, Massachusetts, June 10-11, 2006; contact Katy O'Connell at katy.oconnell@state.de.us

Green Eggs & Sand Workshop – Massachusetts and Georgia
The Green Eggs & Sand workshop is designed to explore the Atlantic Coast horseshoe crab/shorebird phenomenon and management controversy.

- May 4-6, 2012 in Savannah, Georgia; space is limited and registrations are made first-come-first-serve
- June 1-3, 2012 in Cape Cod, Massachusetts; the deadline for registration is May 1, 2012

http://www.marex.uga.edu/aquarium/teacherWorkshops.html#GEAS
http://www.massaudubon.org/catalog/listing.php?program_code=1087-WF12SP1

Green Eggs and Sand Workshop – Virginia and New Jersey
Green Eggs and Sand Workshops will take place May 12-15, 2017 on Wallops Island, Virginia and June 2-4, 2017 in Stone Harbor, New Jersey. Participants will receive a curriculum for middle and high school students.
http://dnr.maryland.gov/education/Documents/GES_Workshops.pdf

Green Schools, Blue Waters - Pennsylvania
Green Schools, Blue Waters STEM Investigations for Sustainable Schools is offered through Lebanon Valley College's Master of Science Education program. The for-credit hybrid course includes online coursework along with the field workshop. Educators and community members can attend the field workshops for free. See the website for complete details.
http://www.lvc.edu/mse/documents/greenschoolsbluewaters.pdf

Green STEM Course – Online
The National Wildlife Federation supports STEM disciplines, and has teamed with Eco-Schools USA to provide teachers with STEM opportunities through the lens of sustainability. This free, online course will be offered several times this year. Free registration is required. Be sure to check out the resources on the website.
http://www.nwf.org/Eco-Schools-USA/About-Eco-Schools-USA/STEM.aspx

Green Teacher Webinars - Online
Green Teacher offers free, one-hour webinars lead by experienced educators. Each session features a 20-30 minute presentation and a 30-40 minutes question and answer session. Upcoming webinars include Water Stewardship - From Source to Sea, Green Craft-Making, and more. Sign up to receive email notices of upcoming programs. Check out the archives of previous programs.
http://greenteacher.com/webinars

Grounds for Teaching: Watershed Institute - Maryland
The Maryland Association for Environmental and Outdoor Education offers this four-day institute, March 20-23, 2770 in Anne Arundel County, Maryland, which will cover the best available science for using small spaces to help improve habitat diversity along with air and water quality. This workshop is designed for the informal educator who wants to incorporate more habitat restoration into their program.
Contact: habitat@maeoe.org

Groundwater to the Gulf - Texas
Groundwater to the Gulf, June 22-25, 2015 from Austin, Texas, is a free field-trip based institute for Central Texas teachers that emphasizes techniques for teaching water-based curricula. Participants follow the path of water in Central Texas from its origins to its final destination in the Gulf of Mexico. Topics include hydrology, groundwater, urban watersheds, and much more.
http://coloradoriver.org/newsite/our-programs/redbud-educational-program/groundwater-to-the-gulf/

Guidelines for Excellence in Environmental Education Workshop – Oregon
The University of Oregon will host this professional development workshop for informal educators, September 14, 2015 in Eugene, Oregon.
http://natural-history.uoregon.edu/education-and-events/workshops

Guiding National Ocean Research Investment - Colorado
The National Science and Technology Council is holding a public workshop, April 18-20, 2006 in Denver, Colorado, to solicit input and guidance from the ocean science communities on the Ocean Research Priorities Plan called for in the Ocean Action Plan. In addition to the workshop, interested parties will have the opportunity to provide comments during a 45-day public comment period, scheduled to open mid-March, 2006.
http://ocean.ceq.gov/about/jsost_workshop/welcome.html

Gulf Coast Research Laboratory Professional Development – Mississippi
The University of Southern Mississippi offers a variety of workshops this fall and next spring. Most workshops consist of one or two days with a field trip during multi-day workshops. Participants receive continuing education credit, a stipend, and classroom resources appropriate to the workshop content. Upcoming workshop topics include watershed experience, oil spill science, marsh ecology, and more.
http://www.usm.edu/gcrl/mec/teacher.professional.development.php

Gulf Coast Research Laboratory Summer Field Courses - Mississippi
Explore the plants, animals, and ecology of the northern Gulf of Mexico and the Mississippi coast. A variety of undergraduate and graduate summer field courses are offered at the gulf coast research laboratory campus of the University of Southern Mississippi, including barrier island ecology, marine mammals, elasmobranch biology, coastal ornithology, and more.
http://www.usm.edu/gcrl/summer_field/index.php

Gulf of the Farallones National Marine Sanctuary Teacher Workshops - California
The Gulf of the Farallones National Marine Sanctuary provides opportunities for teachers and educators to learn about ocean concepts, student monitoring projects, and current research related to the Gulf of the Farallones through the Farallones Marine Sanctuary Association's teacher workshops. The workshops and seminars are free and K-12

teachers will receive stipends for their attendance. Upcoming workshops in spring, 2007, include rocky intertidal and sandy beach monitoring, intertidal invertebrate ecology, and sand and other geologic processes. All workshops are free and include both lecture and field excursion; K-12 teachers will receive a stipend for their attendance.

- LiMPETS Introduction to Sandy Beach Monitoring, March 10, 2007
- Intertidal Invertebrate Ecology, March 17, 2007
- Shifting Seas of Sand and Other Geologic Processes, April 21, 2007

http://farallones.org/education/teacher_workshops.php
http://farallones.org/education/teacher_workshops.php

Gulf Lagniappe Workshops - Louisiana
LUMCON's Gulf Lagniappe workshops are a series of educational sessions for those who would like to learn more about Louisiana's marine and coastal environments. The following topics will be covered in upcoming workshops in Cocodrie, Louisiana:

- Climate Change, May 14, 2011
- Salt Marsh Geology / Ecology, May 21, 2011
- Dead Zones, June 4, 2011

Workshops include a presentation by a LUMCON scientist, a trip aboard the R/V *Acadiana*, lab activities, and more; continuing education credit may be available. Pre-registration is highly recommended and appreciated.
http://www.lumcon.edu/information/news/default.asp?XMLFilename=201011221024.xml

Gulf of Mexico Climate Community of Practice Workshop - Texas
The Climate Community of Practice workshop, April 8-10, 2013 in Houston, Texas, brings together elected officials and other local leaders and decision-makers in the Gulf of Mexico with extension, outreach, and education professionals. The workshop provides information and science-based guidance to determine communities' level of risk and strategies to improve their resilience.
https://sites.google.com/site/2013climatecopworkshop/

Gulf of Mexico Exploration Teacher Workshops – Texas and Florida
Join the DEEPEND Consortium (Deep Pelagic Nekton Dynamics of the Gulf of Mexico) for teacher workshops, January 21, 2017 in Galveston, Texas and February 20, 2017 in Dania Beach, Florida. DEEPEND research projects include deep sea biodiversity, animal adaptations, and more. Participants will receive take-home lessons, resources, and an application to participate in a research cruise.
http://outreach.deependconsortium.org/index.php/education/2017-application

Gulf of Mexico Oil Spill and Ecosystem Science Conference - Louisiana
The Gulf of Mexico Oil Spill and Ecosystem Science Conference, February 6-9, 2017 in New Orleans, Louisiana, is accepting submissions for scientific sessions. The conference theme, Ecosystem Approaches to Gulf Response and Restoration, encourages researchers to consider the application of their results to practical use. They are especially interested in sessions focused on communicating science to a variety of audiences.
http://www.cvent.com/events/2017-oil-spill-and-ecosystem-science-conference/event-summary-b167156e2ddd40e5a4d371b459058545.aspx?tw=25-5A-7D-C2-10-F6-D1-0B-ED-4B-B5-45-F9-67-C1-2A

Gulf of Mexico Restoration and Recovery Webinar - Online
The free webinar, Climate Change, Community Resilience, and Restoration in the Gulf of Mexico, April 10, 2015, will discuss the intersection of climate change, community resilience, and Gulf restoration, focusing on the challenges of and opportunities for creating restoration projects that both incorporate climate change considerations and are responsive to the needs of coastal communities.
http://eli-ocean.org/gulf/climatechangewebinar/

HACCP Course – Florida
Apalachicola National Estuarine Research Reserve offers this Hazard Analysis and Critical Control Point (HACCP) Planning to Prevent the Spread of Invasive Species course January 27-28, 2014 in Eastpoint, Florida. Participants will learn how to develop and implement HACCP plans for natural resource projects and research activities through practical examples, a case study, and hands-on exercises, and will develop real-life HACCP plans tailored to their scope of work.
http://www-haccp.eventbrite.com

Hampton Roads Naval Museum Teacher Seminar - Virginia
The Hampton Roads Naval Museum and the NOAA Monitor National Marine Sanctuary will hold a teacher seminar on the *USS Cumberland* and underwater archaeology, August 17, 2007 in Norfolk, Virginia. Learn about the archaeology of the *Cumberland* and *USS Monitor* and take home resources for use in your classroom. Lessons and activities are geared for high school science and history teachers.
http://monitor.noaa.gov/news/pdfs/hrnm_workshop.pdf

Hands-on Learning in the Ballona Wetlands - California
The Center for Ocean Sciences Education Excellence-West (COSEE-West) invites you to wade into the water, November 19, San Pedro, California, for environmental and marine science research and education. K-12 teachers may receive documentation for professional development hours upon request. Additional content information and classroom materials will be provided.
Contact Peggy Hamner at phamner@ucla.edu.

Hatfield Marine Science Summer Sessions - Oregon
The Hatfield Marine Science Center offers seven different courses during two summer sessions. Courses are for upper level undergraduates, graduate students, teachers, and other professionals.
http://hmsc.oregonstate.edu/classes/summer/

Hawaiian Fishponds Workshop
This free teacher workshop, July 10, 2004, Maui, Hawaii, focuses on science, social studies, Hawaiian culture and language, through the study of native Hawaiian fishponds. The program, presented by NOAA's National Marine Sanctuary Program, is funded by the U.S. Department of Education to develop culturally relevant curricula utilizing the Hawaiian fishpond as a resource. Project Kähea Loko, "Call of the Pond," has developed these curricula in partnership with the Hawai'i Department of Education and others. Kaimana Lee, (808) 879-2818.

High School Marine Science Symposium - Massachusetts
The Annual High School Marine Science Symposium, sponsored by the University of Massachusetts at Dartmouth, New Bedford ECHO Project, and the Massachusetts

Marine Educators, will take place March 18, 2009 in Dartmouth, Massachusetts. March 9 in Boston (sharks) and March 16, 2016 in Salem, Massachusetts (penguins).
http://www.massmarineeducators.org/hsmss2009.shtml
http://ma-marine-ed.org/mmeevents/high-school-marine-science-symposium

High School Marine Science Symposium – Massachusetts
The Massachusetts Marine Educators and Northeastern University, with additional support from Salem State University, offer two marine science symposia for high school students, March 9 and 15, 2017 in Boston and Salem, Massachusetts (respectively). The events aim to inspire interest in STEM through hands-on workshops, lightning talks, and more.
http://www.northeastern.edu/cos/marinescience/outreach/high-school-marine-science-symposium/

Holbrook Global Field Expeditions – Costa Rica
Holbrook Global Field Expeditions offers a series of international professional development workshops. Travel and study with the Florida Marine Science Educators Association, July 19-27, 2007, to Costa Rica. Designed for K-16 instructors, the workshop participants will experience environments and communities while covering new techniques and applications within science curriculum and instruction.
http://www.holbrooktravel.com/pages/educationExpeditions/details.aspx?Id=463

Holbrook Global Field Expeditions
Holbrook Global Field Expeditions partners with organizations such as the Jean-Michel Cousteau Ocean Futures Society, the Geological Society of America, Project Wet, and others to offer a series of international professional development workshops. Designed for K-16 instructors, participants experience environments and communities around the world, while covering new techniques and applications within science curriculum and instruction. The programs support the bridge between field inquiry and the full incorporation of new themes and topics in the classroom. Upcoming expeditions in 2007 include Costa Rica, Galapagos Islands, Fiji, and New Zealand.
http://www.holbrooktravel.com/pages/educationExpeditions/professionaldevelopment.aspx
http://holbrooktravel.com/educationexpeditions

Holbrook Travel Professional Development - Various
Holbrook Travel facilitates professional development programs for science teachers in June and July 2014 to Costa Rica, Iceland, Galapagos, and elsewhere. Grants may be available to help with the trip expense.
http://www.holbrooktravel.com/products/professionaldevelopment-travel

Houston Zoo Educator Programs - Texas
Check out the Houston Zoo's programs for educators, including the upcoming Educator Day and workshops, along with the downloadable Houston Toad Educator's Guide.
http://www.houstonzoo.org/education/educators/

How Do We Explore? - Online
NOAA's Office of Ocean Exploration and Research, in partnership with The College of Exploration, offers *How Do We Explore? Okeanos Explorer Online Teacher Professional Development* January 24-February 11, 2011. This online workshop introduces

participants to the new Education Materials Collection for the NOAA Ship *Okeanos Explorer*. Topics will include searching for anomalies, selecting sites for exploration, and much more. The free workshop will be available 24/7, and archives will remain posted.
http://coexploration.org/oe/
http://oceanexplorer.noaa.gov/edu/development/online_development.html

How Science Can Inform Policy - Massachusetts
Join Woods Hole Sea Grant and Woods Hole Oceanographic Institution for a Professional Development Workshop, December 2, 2011 in Woods Hole, Massachusetts.
Contact Kathy Patterson at kpatterson@whoi.edu

How to Successfully Apply for Federal Fellowships - Online
Join a panel of experts for a webinar on August 24, 2016. During the 90-minute session, panelists will share tips on successfully applying for federal fellowships and traineeships. Panelists from NASA, the Smithsonian Institution, the National Institutes of Health, and the National Science Foundation will attend. To access the webinar, use the event password: 8sHU24T@.
https://nsfevents.webex.com/nsfevents/onstage/g.php?MTID=ecd623efac41b57aefc37c1f19a6477a3

Human Dimensions of Climate Change - Online
The University of Nebraska-Lincoln will offer NRES 832: Laboratory Earth: Human Dimensions of Climate Change, January 7-May 3, 2013. This online graduate-level course is geared toward K-12 science educators and extension educators who have a need to address climate change among public audiences. Stipends may be available following course completion.
http://casnronline.unl.edu/web/casnr-online/courses-Scienceforeducators

Humpback Whales Workshops – Hawai'i
The Hawaiian Islands Humpback Whale National Marine Sanctuary is offering a series of free workshops in November to learn about humpback whales, Hawaiian culture, marine life, geology, stewardship and ocean safety. Workshops will take place in Kihei and Lahaina.
Contact Emily Carlson at (808) 879-2818 or emily.carlson@noaa.gov

Huntington Beach School Trips - California
Follow and Learn about the Ocean and Wetlands, FLOW, is an educational program located in Huntington Beach, California. School groups can schedule a tour where students can shadow and assist with monitoring activities and learn about methods, techniques, and equipment used to collect and analyze plankton. Teachers receive lesson plans, activities, and more. Free bus transportation for Title I schools may be available.
http://www.amigosdebolsachica.org/flow.html

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

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

Hurricanes - Real NASA Data for Real Learning - Online
Learn to use NASA data to explore hurricanes while integrating STEM curriculum, online resources, and more into your grades 5-8 classroom instruction through this webinar, August 25, 2016. Note that a Hurricane Hunter pilot will all share his experiences and expertise during the webinar. Register online to participate.
https://www.eiseverywhere.com/ehome/index.php?eventid=191057&

Impacts of Oil on Coastal Habitats – Florida and Online
The Gulf of Mexico Sea Grant Oil Spill Outreach Team and partners will offer the free Oil Spill Science Seminar: Impacts of Oil on Coastal Habitats, July 22, 2015 in Temple Terrace, Florida and online. Researchers will discuss their work on the effects of oil on salt marshes, wetlands, mangroves, and beaches. Be sure to check out additional upcoming and archived seminars.
https://gulfseagrant.wordpress.com/oilspilloutreach/presentations/

Indigenous Knowledge and Use of Ocean Currents - Online
In this webinar, Julie Raymond-Yakoubian presented a recently completed project on indigenous knowledge and use of ocean currents. She shared perspectives on the importance of traditional understandings of ocean currents as a critical aspect of the body of knowledge held by communities in the region, how this knowledge was collected, and the modern-day practical applications of this knowledge for marine policy, planning, and safety considerations.
http://www.openchannels.org/webinars/2015/indigenous-knowledge-and-use-ocean-currents-bering-strait-region

Insects in the Classroom Course – Online
The Insects in the Classroom Online Course explores the use of insects as teaching tools in K-12 education. Aligned with No Child Left Behind standards, the course focuses on teaching science concepts and developing critical thinking skills. The online, self-paced program offers continuing education credits through Texas A&M University.
http://cecoe.tamu.edu/insects.htm

Inspire Ocean and Climate Literacy and Conservation through MPAs – Online
The MPA Center offers a monthly webinar series, co-sponsored with EBM Tools Network, focused on building and strengthening MPA networks. This free webinar, October 8, 2015, will feature the National Marine Sanctuary System's education and outreach programs which inspire ocean and climate literacy and stewardship of the national marine sanctuaries through hands-on, STEM field programs, teacher workshops, student activities, social media, and free online resources.
https://attendee.gotowebinar.com/register/4767509171814859778

Inspiring Climate Education Excellence - Colorado
The Inspiring Climate Education Excellence: Teacher Professional Development for Effective Instruction in Climate Science Literacy project is a teacher professional development that addresses climate science content along with pedagogical skills. The program for math and science teachers of grades 6-12, June 10-16, 2010 in Boulder, Colorado, will showcase NASA data and platforms, especially those associated with Arctic climate systems and global sea level change.

http://cires.colorado.edu/education/outreach/ICEE/

Interactions in the Sciences - Massachusetts
The Museum Institute for Teaching Science offers *Interactions in the Sciences: Observe, Investigate, Explain*, July 6-9 and July 12-16, 2010 in different locations in Massachusetts. Upper elementary and middle school educators will explore how cycles, processes, and systems connect life, physical, and earth science. See the website for complete details.
http://www.mits.org/summer_institute.htm

Interdisciplinary Watershed Investigations Professional Development
Michigan Technological University Educators' Professional Development Institute Series for Teachers (grades 3-12) hosts an *Interdisciplinary Watershed Investigations Workshop*, June 20-26, 2004, Houghton, Michigan. Teachers will learn methods used in watershed assessment.
http://wupcenter.mtu.edu/teachers_professional.html .

Interdisciplinary Workshop in Environmental Education - Wisconsin
A summer environmental education workshop, May 31 - August 19, 2005, in River Falls, Wisconsin, is designed for K-12 teachers who want to improve their environmental education skills and knowledge. Workshop participants will gain a basic knowledge of the nature and distribution of groundwater; sources and characteristics of common water pollutants; waste management problems and solutions; water science curricula; field experience to observe water-related and land use environmental problems; and more.
http://www.uwrf.edu/ogs/CAFES.php#envwshp

Intermediate Level ROV Workshop - California
The Marine Advanced Technology Education Center is offering a faculty workshop, *Intermediate Level Remotely Operated Vehicle Building for Classroom Projects*, July 20-26, 2009 in Monterey, California. Educators will work in teams to design and build ROVs and sensors and complete a set of predetermined mission tasks. Participants will have the opportunity to interact with industry professionals and participate in field trips.
http://www.marinetech.org/education/summer_institutes/2009_Information.php

International Environmental Law Course - Online
The United Nations Institute for Training and Research offered a free, on-line course in International Environmental Law. This basic course provides a general overview of international environmental law, introducing its fundamental principles, law making process, implementation and compliance, negotiations of environmental agreements and developments and trends in international environmental law.
http://www.unitar.org/elp/e-learning/the_course.htm

International Heritage Development Conference
The Alliance of National Heritage Areas presents the 2005 International Heritage Development Conference, June 4-8, 2005 in Nashville, Tennessee. The theme is *Creating Economic Futures, One story at a time*. Sessions include a workshop on Heritage Education Approaches and Programs; Building Relationships with Corporations; and Economic Enhancement, Land Conservation, and Recreation as Tools of Progress.
http://www.ihdc2005.org/

International Leadership Institute for Biodiversity Education
World Wildlife Fund and Disney's Animal Kingdom are looking for 40 leaders to participate in the *International Leadership Institute for Biodiversity Education* to be held October 11-16, 2004, Orlando, Florida. The goal of this institute is to provide the tools to enable participants to lead, engage, and inspire others to protect biodiversity. The institute is open to leaders who have a broad reach, experience in implementing programs, and creating effective partnerships.
www.worldwildlife.org/windows/institute.cfm .

Interpreting Climate Change - Online
This course, March 10-13, 2015, provides an overview of the knowledge and skills to develop effective, engaging climate change programming for both natural and cultural sites. Participants consider a range of engagement techniques such as facilitated dialogue, skills for dealing with controversy, and presenting multiple perspectives. Although the focus of this course is on personal services interpretation, many of the practices are also applicable to media development.
http://www.doi.gov//doilearn/index.cfm

Interpreting to Diverse Audiences - California
Be part of this interagency workshop for journey-level interpreters who have at least two years of experience. Join fellow interpreters for this 36-hour workshop, January 23-27, in Pacific Palisades, California, and explore new ways to connect your agency's resources and stories to increasingly diverse audiences. See interpretation to diverse audiences in action at the Rancho Sierra Vista/Satwiwa Native American Indian Culture Center, Long Beach Aquarium of the Pacific, and the Skirball Cultural Center.
Contact Wes Chapin at wchap@parks.ca.gov or (805) 585-1845

Interpreting Parks and Gardens - Online
This 10-week online course has been developed for the staff, docents, and volunteers of public gardens, parks, zoos, aquariums, and similar institutions. Explore how to create and use interpretive programming to improve visitor understanding. A Certified Interpretive Trainer will use text, participatory assignments, and case studies to guide this web-based class. Course details (HORT 255) are available at
http://schedule.edcc.edu/search.php?d=hort&quarter=spring05
www.interpconsulting.com

Interpretive Media - Online
This online course, CLM8243, March 17-April 9, 2015, teaches participants to design visually appealing signs, write dynamic interpretive messages, select appropriate fabrication materials, identify considerations for sign placement, and estimate project costs. Once enrolled, participants must complete the Eppley Institute "Interpretive Media" self-study class.
Contact: Laurie_Heupel@fws.gov
http://www.doi.gov/doilearn/index.cfm

Interpretive Training - Online
This site is the result of a partnership between the NPS Interpretative Development Program and the Eppley Institute for Parks and Public Lands of Indiana University. The website provides competency-based training and development to anyone with access to a computer. The free Foundations of Interpretation is the first course to become available, introducing interpreters and managers to the purpose, practice, and theory of

interpretation. Additional courses covering each of the ten NPS benchmark interpretive competencies will be posted as they are developed and will be available for a small registration fee.
http://www.interptraining.org/

Interpretive Writing Workshops - Various
This workshop offers the basics of interpretive writing as they apply to signs, brochures, websites, and more. Participants will learn how to create clear, dynamic, and concise interpretive texts for your site, whether it is a museum, park, zoo, nature center, or aquarium. Check out the website for dates and locations.
http://leftridge.com/Workshop_Schedule.html

Intracoastal Waterway Wetlands Cruise Educator Workshop - Texas
The Intracoastal Waterway Wetlands Cruise, March 13-18, 2011, and summer, June 19-24, 2011, June 14-18, 2010 from Freeport, Texas, is a free educator workshop aboard the *M/V Fling*, which will educate participants on coastal habitats and issues facing the Gulf Coast and its inhabitants. Educators will learn to actively involve their students in the learning process, to expose them to coastal ecology, and to share personal experiences about living and working on the Gulf Coast. Workshop space is limited and spaces are filled via a competitive application process.
http://www.gulfmex.org/iwwc.htm
http://www.gulfmex.org/iwwe.htm

Intracoastal Waterway Wetlands Expedition - Texas
The Gulf of Mexico Foundation's Intracoastal Waterway Wetlands Expedition, sponsored by ConocoPhillips, is a teacher training workshop for K-12 and college entry educators which takes place aboard a 100-foot vessel, the *M/V Fling*. The workshop educates participants on the importance of coastal habitats and issues facing the Gulf Coast and its communities. Check out the website for expedition dates and deadlines for application.
http://www.gulfmex.org/education-training/intercoastal-waterways-wetland-expedition/

Introduction to Animal Behaviour – Online
This free six-week MOOC from the Wageningen University in the Netherlands starts August 9, 2016. Explore wild animal behavior, discover how animals learn, communicate, find food, avoid predators, and interact socially.
https://www.edx.org/course/introduction-animal-behaviour-wageningenx-ab101x

Introduction to Earth's Climate - Online
This course is designed to guide participants through the basics of climate science, weaving content, classroom activities, and community-building discussions to help educators understand the answers to common questions about climate. The course is the first part of Climate Discovery, a series of six-week courses for middle and high school educators from the National Center for Atmospheric Research. The online course incorporates information about state-of-the-art research and modeling efforts of nationally renowned climate scientists with classroom-tested science inquiry activities.
http://ecourses.ncar.ucar.edu./

Introduction to the MANERR Habitats – Texas
The Texas Marine Education Association and the University of Texas Marine Science Institute-Marine Education Services Mission-Aransas National Estuarine Research

Reserve (MANERR) present an Introduction to the MANERR Habitats Workshop, September 22-23, 2007, in Port Aransas, Texas.
http://www.statweb.org/TMEA/

Introduction to Microbiology - California
The University of Southern California's Center for Dark Energy Biosphere Investigations, offers an all-expense paid four-week intensive introductory course funded by the NSF, Global Environmental Microbiology, July 8-August 2, 2013 in California. This course focuses on microbes found in aquatic environments.
http://www.darkenergybiosphere.org/education/undergrads/undergradscourse.html

Introduction to the Natural Capital Approach - Online
Stanford University Online is offering a free, 4-module self-paced course, Introduction to the Natural Capital Approach, beginning January, 12, 2016. Mapping and modeling ecosystem services can help highlight the diverse benefits provided to people by nature (what and where) and explore how those benefits might change under different management options--thus bringing information about nature's values into decisions in practical ways.
https://lagunita.stanford.edu/courses/HumanitiesSciences/NCP_101/SelfPaced/about

Introduction to the Next Generation Science Standards - Connecticut
Join scientists and educators for this hands-on workshop geared to help middle and high school science educators incorporate real world scientific practices, data, and cross-cutting concepts in their science classroom, July 8-10, 2014 in Groton and Storrs, Connecticut. This free workshop will introduce the Next Generation Science Standards with a series of half-day complementary components covering life sciences, engineering and technology, climate change and adaptation, and natural hazards.
Contact Diana Payne at diana.payne@uconn.edu

Introduction to OBIS-SEAMAP – Quebec
There will be a free workshop, Introduction to OBIS-SEAMAP, at the Society for Marine Mammalogy biennial conference, October 11, 2009 in Quebec City, Quebec. The workshop, useful for both data providers and users, will include sections focusing on visual survey data, as well as integrating photo-ID and acoustic data.
http://marinemammalscience.org/index.php?option=com_content&view=article&id=361&Itemid=214

Introduction to Ocean Science - Massachusetts
The New England Aquarium will host this three-part educator workshop, July 29–31, 2014 April 19–20, 2016 ; in Boston, Massachusetts, for educators in grades 3-8 (others also welcome). Participants will explore essential scientific concepts in the context of ocean science through investigations. The daily topics are Physical Properties of the Ocean, Life in the Ocean, and Human and Ocean Interaction.
http://www.neaq.org/education_and_activities/teacher_resources/professional_development/workshops/index.php

Invaders of Texas Workshop - Texas
The Invaders of Texas Program is a campaign where volunteer "citizen scientists" are trained to detect the arrival and dispersal of invasive species in their own local areas. This information is delivered into a statewide mapping database. Registration for the workshop, May 15, 2010 in Houston, Texas is free.

Contact Bruce Handley at bhandley2@comcast.net

Invasive Species Coastal Science Institute – Maine
Bowdoin College will offer a weeklong Summer Institute for middle school teachers to help improve coastal and marine literacy with a focus on invasive species, June 25-30, 2006 in Brunswick, Maine. Interdisciplinary teams involving a science teacher and a teacher representing another discipline are encouraged to apply. The institute will introduce teachers to laboratory and field techniques that will help to identify, monitor, and trace the spread of introduced species.
http://academic.bowdoin.edu/csc/

Invasive Species Education - Michigan
The Inland Seas Education Association is offering aquatic invasive species education opportunities on Lake Michigan from the Grand Traverse Bay area. Tuition for these courses is paid by scholarship funds with partial funding provided by a grant from the EPA.

- Advanced Invasive Species Field Course for Teachers, July 17-18, 2008
- Invasive Species Research Course for High School students, July 2-3, 2008
- Invasive Species Field Course for Teachers and Environmental Professionals, July 28-30, 2008.

http://www.schoolship.org/schoolship/?id=669

Invasive Species of Everglades National Park
Take your students on an electronic field trip to the Everglades National Park to explore invasive species. The eFieldTrip consists of three major components: a trip journal, a virtual visit, and posting questions via the Ask the Experts Web Form. Ask the Experts will be available from April 15-17, 2008. Ask the Experts, open April 14-16, 2009. November 3-5, 2009.
http://www.efieldtrips.org/EvergladesInvasives/index.htm
www.eFieldTrips.org

Invasive Species eFieldTrip - Online
The U.S. Fish and Wildlife Service presents a live eField Trip on April 5, 2005, on invasive species. Students can ask questions and participate in a live web chat with experts to learn about invasive species. This is a moderated chat and a moderator will screen all input to ensure only appropriate questions are entered into the chat room.
www.eFieldTrips.org/Invasives

Invasive Species Workshop - Pennsylvania
Delaware, Maryland, and Pennsylvania Sea Grant will hold a three day professional development workshop for educators and K-12 teachers. *Invasive Species: The Good, the Bad and the Prolific* will be held June 28 - 30, 2005 in Chester, Pennsylvania. Learn more about invasives in your backyard, and bring back activities to incorporate invasive species concepts into your curriculum. There will be afternoon field trips to nearby locations.
www.pserie.psu.edu/seagrant/invasive_species.pdf

Investigating and Evaluating Environmental Issues and Actions Workshop – Alaska and Hawaii
The Investigating and Evaluating Environmental Issues and Actions Workshop will help teachers learn how to help students develop critical thinking skills, investigate

environmental issues, and plan responsible citizenship action. Workshops will be held in Seward, Alaska, June 19-25, and Molokai, Hawaii, June 25–July 2, 2005.
http://www.cisde.com/index.htm
cisde@midwest.net
teachu@wabash.net

Island Species Conservation Course – St. Lucia
An island species conservation course, Island Species-Led Action (ISLA), August 29 – September 9, 2005 in St. Lucia, is offered by the International Training Centre of the Durrell Wildlife Conservation Trust, based in Jersey, UK Channel Islands. The course will provide a combination of theoretical and practically-based activities focused on developing understanding of the management of endangered terrestrial species on islands.
www.durrellwildlife.org

Islands, Vents, and Oceans…Essential Ecosystems For Many Species Nonformal Workshop - Mississippi
The Center for Ocean Sciences Education Excellence: Central Gulf of Mexico (COSEE-CGM), the Office of Naval Research - National Oceanographic Partnership Program (NOPP), and other partners will sponsor a Nonformal Educators' Workshop December 2-3, 2004, Biloxi, Mississippi. Workshop topics will include marsh restoration; methane seeps and hydrothermal vents and the role that sulfide-producing bacteria play on vent ecosystems; and oceans past, present, and future.
Contact Shelia A. Brown at shelia.brown@usm.edu .

Isn't that Spatial? - Online
NAAEE offers a free monthly webinar series on eePRO as part of NAAEE and Cornell University's EECapacity initiative. The speaker for the webinar on December 6, 2016, Isn't that Spatial? Teaching about the Environment, Examining Field Data, and Telling Your Environmental Story with Web Mapping Technology, is the Education Industry Curriculum Development Manager Register for ESRI. Webinars are archived.
https://naaee.org/eepro/learning/monthly-webinar-series

It's No Snow Job: Climate Services Reign! - Online
NOAA's Climate Stewards Education Project hosts the free webinar, It's No Snow Job: Climate Services Reign!, May 4, 2015. Dr. Robinson, New Jersey State Climatologist and Professor of Geography at Rutgers University will discuss the ins, outs, and in betweens of what a state climatologist does, and how they do it.
https://attendee.gotowebinar.com/register/1216092112209068802

JASON Academy
The JASON Academy offers award-winning online courses. Sessions begin February 7, 2005, and include aquatic ecology, ocean science, rainforests-endangered ecosystems, and more. Several interactive science workshops will also be offered.
http://www.jason.org/jason_academy/jason_academy.htm

JASON Expedition Teacher Workshop - Florida
A Florida Aquarium Teacher Workshop for the distance learning program JASON Expeditions will take place on October 8, 2005 in Tampa, Florida. JASON is an annual middle school science program emphasizing technology and real time data through a

new curriculum each school year. This year's expedition focuses on comparisons between Earth and Mars.
http://www.flaquarium.org/html/l3/l3_comm_schools_workshops.html

JASON Project Professional Development - Various
The JASON Project and its partners connect students with explorers and events to inspire and motivate them to learn science. Check the website for upcoming professional development, including workshops, summer academies, and more.
http://inov8ed.com/welcome/the-new-jason-project-3/

Jekyll Island Turtle Crawl - Georgia
The Jekyll Island Sea Turtle Project is hosting the second annual Turtle Crawl, October 9, 2004, to benefit the new Georgia Sea Turtle Center at Jekyll Island. All proceeds from the event will go to support the development and educational efforts of the Center. With a planned opening in 2006, the Georgia Sea Turtle Center will be the first of its kind in the state. The Turtle Crawl will feature athletic competitions, entertainment, and educational activities.
www.jekyllisland.com .

Kelp Can Help - Online
The webinar, Kelp Can Help! Climate Action for Students through Kelp Aquaculture, March 6, 2017, will look at the impacts of climate change on Maine's ocean environment and the community-based approach the Island Institute takes to support island and coastal schools as they teach students how to plan for and adapt to climate change.
https://attendee.gotowebinar.com/register/5514414032892830977

Key to the Sea Workshop - California
Key to the Sea is a marine environmental education program designed for teachers and elementary school children throughout Los Angeles County. Learn about watershed stewardship, storm water pollution prevention, and marine conservation through engaging hands-on educational activities. Participants receive a free curriculum guide aligned to California state standards, all the supplies needed to conduct the activities in the classroom, and you can take your students to the partnering aquarium.
http://www.healthebay.org/ . http://www.healthebay.org/key2sea

Lab and Field Explorations in Marine Science - California
Join this continuing program for middle and high school teachers, June 26-30, 2006, June 25-29, 2007 in Monterey Bay, California. June 20-24, 2011 in Moss Landing, California. The course provides techniques for incorporating meaningful watershed and marine-related experiences into core curricula, and demonstrates how research data are collected, analyzed and used in resource management and protection of the marine environment. The course includes lab, field, schoolyard, computer, and classroom activities. Participants will be provided lesson plans, handouts, and more. Monterey Bay, July 12-16, 2010 in Moss Landing, California.
http://teach.mlml.calstate.edu/LabField
http://teach.mlml.calstate.edu/

Lake Huron Exploration Workshop – Great Lakes
The COSEE Great Lakes, in partnership with the Great Lakes Sea Grant Network, invites teachers (grades 4-10) and non-formal educators from the Great Lakes region to participate in the Lake Huron Exploration Workshop, August 11-17, 2007, in Alpena,

Michigan. This workshop is designed to promote Great Lakes and ocean sciences in formal and informal education and forge lasting relationships between science researchers and educators. Participants will be involved in classroom and field programs, work with scientists, examine curricula and resources, and explore classroom activities relating to the Great Lakes and ocean resources.
http://coseegreatlakes.net/events/

Landbird Monitoring Tools – Online
The U.S. Fish and Wildlife Service is sponsoring a training and demonstration webinar of a new simplified data analysis tool (abundanceR), along with a new set of ArcGIS tools for data in the USGS Bird Point Count Database. The online workshop will be held March 31 and again on April 14, 2010.
http://www.prestoregister.com/cgi-bin/order_attendee.pl?ref=USFWS_BMT&fm=1&or=483037&Ttaxstate=&TShipMethod=&ct=&pd=

Las Maravillas de Humedales
Environmental Concern, Inc. offers quality wetlands education from their WOW! The Wonders of Wetlands curriculum in Spanish. Instruction includes *WOW! The Wonders of Wetlands* curriculum guide, select translated activities, and instructors who speak both English and Spanish to help participants reach their education goals no matter what their Spanish level.
Contact Bronwyn Mitchell at dir.educate@wetland.org

Leaders in Global Development - Online
This Massive Open Online Course (MOOC) from the University of Queensland, January 10, 2017 for eight weeks, will help participants to learn key leadership skills, concepts, and theories needed to be a successful leader in development and determine their leadership style within different development contexts.
https://www.edx.org/course/leaders-global-development-uqx-lgdm1x

Leaders of Learning - Online
This free MOOC from HarvardX will help participants explore and understand their own theories of learning and leadership. While the six-week course started May 17, 2016, you may be able to still enroll, or sign up to receive future notifications about courses from HarvardX.
https://www.edx.org/course/leaders-learning-harvardx-gse2x-0

Leadership Courses - Online
NonprofitReady.org has partnered with Filtered, an online training company, to offer free access to two of Filtered's curricula: Leadership & Management and Communication, Influence & Teams.
http://ysa.org/briefing/nonprofitready-leadership-management-and-communication-influence-teams/

Leadership Development in Natural Resources – Online
Leadership Development in Natural Resources: Strategic Planning and Implementation is designed to assist environmental educators and natural resource professionals in learning and applying key elements of successful strategic planning. Emphasis will be placed on managing the strategic planning process to build the capacity of organizations to provide effective environmental education programs.

http://www.uwsp.edu/natres/rwilke/eetap/Website2006/SPandI.htm
http://www.uwsp.edu/natres/eetap/index.aspx

LEARN - Long-term Engagement in Authentic Research at NASA - Virginia
The NASA LEARN Project provides educators with on-site research and training in Hampton, Virginia in the summer, and guided research projects that continue on throughout the school year. Participants receive training focused on atmospheric science and become GLOBE certified. The educators conduct their own research with help from NASA scientists and share and integrate these projects into the classroom. A stipend is available.
http://science-edu.larc.nasa.gov/LEARN/

Learning to Live with Climate Change - Online
NAAEE will offer this free webinar, Learning to Live with Climate Change: What Educators Need to Know, January 24, 2017. Register to attend or receive the recording if unable to attend. Be sure to submit questions in advance, as they will help shape the presentation.
https://naaee.org/eepro/learning/webinars/learning-live-climate-change-what

Learning Ocean Science and Exploration through an Online Environment - Oregon
Join classroom science teachers of grades 6-12, June 30, 2007 in Corvallis, Oregon, and bring the excitement of ocean science and deep ocean exploration to your students using the resources at NOAA's Discovery Center and Ocean Explorer Web sites. Contact Melissa Feldberg at melissa.feldberg@oregonstate.edu

Learning Ocean Science through Ocean Exploration - Various
NOAA's Ocean Exploration Program and partners will offer introductory and follow-up Learning Ocean Science through Ocean Exploration professional development workshops for science teachers. Participants will receive the curriculum with CD-ROM's, certificates of participation, and more. Contact the noted educator for registration and more information.

- Alabama – with Dauphin Island Sea Lab, November 1, 2008, Dauphin Island with a follow-up workshop March 14, 2009. The deadline for registration is October 17, 2008. Contact Denise Keaton at dkeaton@disl.org
- Louisiana – with the Audubon Zoo, October 11, 2008, New Orleans with a follow-up workshop in Spring, 2009. Hurry – the deadline for registration has been extended to October 7, 2008. Contact Gail Gainey at ggainey@AudubonInstitute.org
- South Carolina – with South Carolina Aquarium, October 18, 2008, Charleston, with a follow-up workshop February 7, 2009. The deadline for registration is October 10, 2008. Contact Brian Thill at BThill@scaquarium.org
- California with SeaWorld Adventure Camp, a follow-up workshop January 31, 2009. The deadline for registration is January 16, 2009. Contact Adrienne Marriott at Creec9a@hotmail.com
- Virginia with Nauticus, The National Maritime Center and Norfolk Public Schools, a follow-up workshop January 31, 2009. The deadline for registration is January 16, 2009. Contact Veronica Haynes at vhaynes@nps.k12.va.us
- South Carolina with South Carolina Aquarium, a follow-up workshop February 7, 2009. The deadline for registration is January 23, 2009. Contact Brian Thill at BThill@scaquarium.org

- Hawaii with Waikiki Aquarium, February 21, 2009. The deadline for registration is February 6, 2009. Contact Dan VanRavenswaay at danv@hawaii.edu
- Georgia with Georgia Aquarium, a follow-up workshop March 7, 2009. The deadline for registration is February 20, 2009. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- Alabama with Dauphin Island Sea Lab, a follow-up workshop March 14, 2009. The deadline for registration is February 27, 2009. Contact Denise Keaton at dkeaton@disl.org
- Florida with University of South Florida College of Marine Science, a follow-up workshop March 21, 2009. The deadline for registration is March 6, 2009. Contact Teresa Greely at greely@marine.usf.edu
- August 22, 2009 with Tennessee Aquarium, Chattanooga, Tennessee. The deadline for registration is August 7, 2009. Contact George Bartnik at gpb@tennis.org
- September 19, 2009 with Georgia Aquarium, Atlanta, Georgia. The deadline for registration is September 4, 2009. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- September 26, 2009 with University of South Florida College of Marine Science, St. Petersburg, Florida. The deadline for registration is September 11, 2009. Contact Teresa Greely at greely@marine.usf.edu
- September 26, 2009 with Dauphin Island Sea Lab, Dauphin Island, Alabama. The deadline for registration is September 11, 2009. Contact Denise Keaton at dkeaton@disl.org
- May 8, 2010 with New England Aquarium, Boston, Massachusetts, a follow-up workshop. The deadline for registration is April 23, 2010. Contact Jayshree Oberoi at joberoi@neaq.org
- May 8, 2010 with Tennessee Aquarium, Chattanooga, Tennessee, a follow-up workshop. The deadline for registration is April 23, 2010. Contact George Bartnik at gpb@tennis.org
- May 15, 2010 with South Carolina Aquarium, Charleston, South Carolina, a follow-up workshop. The deadline for registration is April 30, 2010. Contact Jaime Coomes at jcoomes@scaquarium.org
- May 15, 2010 with Aquarium of the Pacific, Los Angeles, California, an introductory workshop. The deadline for registration is April 30, 2010. Contact Alie Lebeau atalebeau@lbaop.org
- June 5, 2010 with Nauticus, The National Maritime Center, a follow up workshop. The deadline for registration is May 21, 2010. Contact Jennifer Tabor at jennifer.tabor@norfolk.gov
- June 21-22, 2010 with Gulf Coast Research Laboratory Marine Education Center in Mississippi, an introductory and follow-up workshop. The deadline for registration is June 7, 2010. Contact Dr. Shelia Brown at shelia.brown@usm.edu
- July 27-28, 2010 with University of Rhode Island, an introductory and follow-up workshop. The deadline for registration is July 13, 2010. Contact Carol Englander at englanca@etal.uri.edu
- August 7, 2010 with Nauticus, The National Maritime Center in Virginia, a follow-up workshop. The deadline for registration is July 16, 2010. Contact Jennifer Tabor at jennifer.tabor@norfolk.gov
- August 14, 2010 with Audubon Aquarium of the Americas in Louisiana, a follow-up workshop. The deadline for registration is July 30, 2010. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org

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Learning Ocean Science through Ocean Exploration - Various
NOAA's Office of Ocean Exploration conducts professional development workshops at a variety of locations around the United States for science teachers of students in Grades 6-12. From October through December of 2006, workshops will be provided in San Diego, Seattle, Baltimore (in conjunction with the NSTA conference), Chicago, Tampa, Corvallis, and Norfolk. The website lists available professional development opportunities, along with contact information for those wishing to request registration information for individual workshop sites. To be added to the NOAA Ocean Explorer Education e-mail list so you can be notified of professional development and other educational opportunities, send a request to cindy.renkas@noaa.gov.
http://www.oceanexplorer.noaa.gov/edu/development/development.html

Learning Ocean Science through Ocean Exploration - Alabama
NOAA's Ocean Exploration Program and Dauphin Island Sea Lab will provide an introductory Learning Ocean Science through Ocean Exploration professional development workshop for grade 5-12 science teachers on September 15, 2007 on Dauphin Island, Alabama. This is the first of a two-part workshop series; the second workshop will be March 8, 2008.
Contact Denise Keaton at dkeaton@disl.org

Learning Ocean Science through Ocean Exploration Workshop - Alaska
Presented by Paula Keener-Chavis and Dr. Valerie Chase, this 6-hour pre-NMEA conference workshop, Sunday, July 18, 2004, provides hands-on activities from the Ocean Exploration curriculum, mixed with website connections, so that you can see the interaction between technology and classroom instruction in ocean science. Participants will receive a copy of *Learning Ocean Science through Ocean Exploration*, CDs of the Ocean Exploration website and other NOAA materials. Another was sponsored by the Alaska Sealife Center, Seward Alaska, August 14, 2004.
Valerie Chase at vchase529@worldnet.att.net
Lea Paddock at Lea_Paddock@alaskasealife.org

Learning Ocean Science through Ocean Exploration - California
SeaWorld will host a Learning Ocean Science through Ocean Exploration professional development workshop for grade 6-12 science teachers, January 26, 2008 in San Diego, California, with a follow-up workshop on March 1, 2008. Registration is required and space is limited. Participants will receive the curriculum with CD-ROM's, certificates of participation, and more.
Contact Adrienne Marriott at creec9a@hotmail.com

Learning Ocean Science through Ocean Exploration – South Carolina
A NOAA Learning Ocean Science through Ocean Exploration Professional Development Follow-Up Workshop will be held February 2, 2008 in Charleston, South Carolina. This workshop is for teachers who participated in the September 2007 introductory workshop and other interested science educators of grades 6-12. Join educators during this follow-up session with the curriculum developed by NOAA's Office of Ocean Exploration. Pre-registration is required and space is limited.
Contact Brian Thill at BThill@scaquarium.org

Learning Ocean Science through Ocean Exploration - Florida
NOAA's Office of Ocean Exploration offers the professional development workshop, Learning Ocean Science through Ocean Exploration for Grade 6-12 science teachers, November 18, 2006 in St. Petersburg, Florida.
http://oceanexplorer.noaa.gov/edu/development/development.html

Learning Ocean Science through Ocean Exploration - Florida
A NOAA Learning Ocean Science through Ocean Exploration Professional Development Follow-up Workshop will be held September 22, 2007 in St. Petersburg, Florida. Please come prepared to share your experiences with OE educational activities, samples of student work, along with suggestions for extension activities, OE-themed science fair project ideas, and other feedback from the introductory workshop.
Contact Teresa Greely at greely@marine.us

Learning Ocean Science through Ocean Exploration - Florida
NOAA's Ocean Exploration Program and the University of South Florida's College of Marine Science will provide an introductory Learning Ocean Science through Ocean Exploration professional development workshop for grade 6-12 science teachers on April 21, 2007 in St. Petersburg, Florida. This is the first of a two-part workshop series; the second workshop will be September 22, 2007. A stipend is available for educators attending both workshops.
Contact Teresa Greely at greely@marine.usf.edu

Learning Ocean Science through Ocean Exploration - Indiana
NOAA's Ocean Exploration Program will be providing a *Learning Ocean Science through Ocean Exploration* professional development workshop for grade 5-12 educators, Saturday, April 17, 2007 in Lafayette, Indiana. Registration is required and space is limited.
http://www.abcsignup.com/reg/event_page.asp?ek=0005-0003-69E22FBCEDB34FCC83E26BA5AF437168

Learning Ocean Science through Ocean Exploration – Hawai'i
NOAA is offering a professional development workshop prior to the National Marine Educators Association 2005 Conference, *Learning Ocean Science through Ocean Exploration* Curriculum Professional Development, on July 11, 2005 in Maui, Hawai'i. Bring the excitement of current ocean science discoveries to your students using the ocean exploration curriculum and companion CD-ROM. Join the experts for inquiry- and standards-based activities tied directly to NOAA ocean expeditions.
www.hawaii.edu/maui/oceania/NMEA05PRE.html
http://oceanexplorer.noaa.gov/edu/curriculum/welcome.html

Learning Ocean Science through Ocean Exploration - Maine
NOAA's Ocean Exploration Program will provide a professional development workshop for educators in July in conjunction with the National Marine Educators Association 2007 Conference, July 23, 2007 in Portland Maine. The workshop is offered to grade 5-12 science teachers and other educators interested in ocean exploration. Registration is free, but pre-registration is required and space is limited.
Contact Dr. Valerie Chase at vchase529@worldnet.att.net

Learning Ocean Science through Ocean Exploration Workshop – Massachusetts
Teachers of grades 6-12 who are interested in ocean exploration can participate in this professional development workshop on October 29, 2005 (part 1) and April 8, 2006 (part 2) in Boston, Massachusetts. Join educators at the New England Aquarium as you do inquiry- and standards-based activities tied directly to ocean expeditions. A copy of Learning Ocean Science through Ocean Exploration and CD-ROM will be provided.
Contact Joel Rubin at jrubin@neaq.org

Learning Ocean Science through Ocean Exploration Curriculum - Oregon
NOAA's Office of Ocean Exploration and Oregon Sea Grant present this professional development workshop for science teachers of grades 6-12, on November 8, 2008 in Portland, Oregon. This is the first of a two-part workshop series; the second workshop will be on held April 4, 2009. Educators participating in both workshops will receive a stipend. The deadline for registration has been extended.
Contact Nancee Hunter at nancee.hunter@oregonstate.edu

Learning Ocean Science through Ocean Exploration Curriculum Professional Development – Massachusetts and South Carolina
The New England Aquarium will host a professional development institute for grade 6-12 teachers. The South Carolina Aquarium, Charleston, South Carolina, will host an Introduction to Learning Ocean Science through Ocean Exploration, and a follow-up session for those educators who have already attended the introduction to the Curriculum Session.
http://oceanexplorer.noaa.gov .
jrubin@neaq.org
kbryan@scaquarium.org.

Learning Ocean Science through Ocean Exploration – North Carolina
Join fellow educators for this Ocean Exploration Professional Development - Learning Ocean Science through Ocean Exploration in Wilmington, North Carolina on April 22, 2006 for an introductory session, or May 20, 2006 for a follow-up session with the Ocean Exploration curriculum. Learn as you do inquiry- and standards-based activities tied directly to ocean expeditions. Materials will be provided which will enable your students to model ocean science exploration in your classroom.
Contact Jim Nesbit at jnesbit@ec.rr.com

Learning Ocean Science through Ocean Exploration - Oregon
The Oregon Museum of Science and Industry will host a Learning Ocean Science through Ocean Exploration professional development workshop for grade 6-12 science teachers, October 27, 2007 in Portland, Oregon, with a follow-up workshop in 2008. Registration is required and space is limited. Participants will receive the curriculum with CD-ROM's, certificates of participation, and more.
Contact Melissa Feldberg at melissa.feldberg@oregonstate.edu

Learning Ocean Science through Ocean Exploration - Oregon
NOAA's Office of Ocean Exploration and Oregon Sea Grant offer this professional development follow-up workshop, April 12, 2008 in Portland, Oregon, for teachers who participated in the October 2007 introductory workshop, along with other interested science educators of grades 6-12.
Contact Nancee Hunter at nancee.hunter@oregonstate.edu

Learning Ocean Science through Ocean Exploration Workshop – South Carolina
Teachers of grades 6-12 who are interested in ocean exploration can participate in this professional development workshop on September 24, 2005 in Charleston, South Carolina. Join South Carolina Aquarium educators as you do inquiry- and standards-based activities tied directly to ocean expeditions. A copy of Learning Ocean Science through Ocean Exploration and CD-ROM will be provided.
Contact Katrina Bryan at 843.579.8546 or kbryan@scaquarium.org

Learning Ocean Science through Ocean Exploration Professional Development – South Carolina
Join South Carolina Aquarium educators, March 12, 2005, for an introductory session, or April 16, 2005 for a follow-up session to the Ocean Exploration curriculum. Learn as you do inquiry- and standards-based activities tied directly to ocean expeditions. A copy of Learning Ocean Science through Ocean Exploration and CD-ROM will be provided. Registration is required and space is limited. A stipend and six renewal credits are available. The course is offered to teachers of grades 5-12.
Contact Katrina Bryan at 843.579.8546 or kbryan@scaquarium.org

Learning Ocean Science through Ocean Exploration Workshop – South Carolina
Join Grade 5-12 educators at the South Carolina Aquarium June 16, 2007 in Charleston, South Carolina, during this follow-up session to the introductory professional development workshop Learning Ocean Science through Ocean Exploration. Conduct inquiry- and standards-based activities tied directly to ocean expeditions. Pre-registration is required and space is limited.
Contact Brian Thill at BThill@scaquarium.org

Learning Ocean Science through Ocean Exploration - Various
NOAA's Ocean Exploration Program and partners will offer introductory and follow-up Learning Ocean Science through Ocean Exploration professional development workshops for science teachers. Participants will receive the curriculum with CD-ROM's, certificates of participation, and more. Contact the noted educator for registration and more information.

- Tennessee with the Tennessee Aquarium, a follow-up workshop May 2, 2009. The deadline for registration is April 17, 2009. Contact George Bartnik at gpb@tennis.org
- Massachusetts with the New England Aquarium, a follow-up workshop May 16, 2009. The deadline for registration is May 1, 2009. Contact Jayshree Oberoi at joberoi@neaq.org
- California with Aquarium of the Pacific, a follow-up workshop May 16, 2009. The deadline for registration is May 1, 2009. Contact Alie Lebeau at alebeau@lbaop.org

Learning Ocean Science through Ocean Exploration - Virginia
NOAA's Ocean Exploration Program will provide a professional development workshop for science teachers of grades 6-12 in conjunction with the NAAEE (North American Association for Environmental Education) annual conference, November 14, 2007 in Virginia Beach, Virginia. Registration is required and space is limited. Take-home materials and more will be provided for each participant.
http://www.naaee.org/conference/registration

Lessons from the Deep - Online
NOAA's Office of Exploration and Research (OER), in partnership with the College of Exploration, will offer the free online workshop, *Lessons from the Deep: Exploring the Gulf of Mexico's Deep-Sea Ecosystems*, October 11-29, 2010. NOAA is developing an online professional development offering for educators of all levels that will focus on OER's Gulf of Mexico Deep-Sea expeditions. The course is archived.
http://www.coexploration.org/oe/

Lessons from the Sea – Hawai'i
Lessons from the Sea is a new marine science curriculum for grades 3-8 developed by the Hawaiian Islands Humpback Whale National Marine Sanctuary, Pacific Resources for Education and Learning, and Hawaii Institute for Biology. The curriculum includes science-based inquiry lessons, integrated art, technology, call to action lessons, and opportunities to get involved in marine related projects and field trips.
Contact Patty Miller at patty.miller@noaa.gov

Lessons Learned from the Deepwater Horizon Oil Spill – MS and Online
The seminar, Building Resilient Communities: Lessons learned from the Deepwater Horizon oil spill, September 27, 2016 in Long Beach, Mississippi and online, will discuss traits that made communities more resilient after the Deepwater Horizon oil spill, discuss programs and resources that are available to communities, share lessons learned in overcoming disasters, and identify ways to strengthen resiliency.
https://gulfseagrant.wordpress.com/oilspilloutreach/presentations/building-resilient-communities/

Let's Go Native – Georgia
Educators will become empowered by these two workshops offered through the Georgia Conservancy, May 19-20, 2006 in Roswell, Georgia. Learn the skills necessary to complete interactive projects for the indoor and outdoor classroom and connect to the curriculum with hands-on activities and scientific investigations. *Georgia's Native Waters* offers 212 pages of interdisciplinary lessons and activities for K-12 students that inspire them to apply classroom knowledge to real-world situations. *Georgia's Native Seasons* studies the natural world as it passes through stages that are part of a continuing cycle.
http://www.georgiaconservancy.org/Events/Event.asp?id=272&yy=2006&mm=5&dd=19

Let's Go Native! - Georgia
Georgia's Native Waters and Georgia's Native Seasons workshops will be held January 11, 18, and 25, 2007 in Newnan, Georgia by the Georgia Conservancy. Georgia's Native Waters is designed to be more than conservation education, with 212 pages of interdisciplinary lessons and over 55 activities.
http://www.gaconservancy.org/Events/Event.asp?id=302&yy=2007&mm=1&dd=11

Let's Talk CO2: Educator Workshop - North Carolina
North Carolina Aquarium at Pine Knoll Shores, through funding and sponsorship from the Aquariums & the Climate Coalition, will offer the educator workshop, Let's Talk CO2: Learning, Sharing and Acting on Climate Change and Ocean Health, November 18–19, 2011 in Pine Knoll Shores, North Carolina. Stipends are available for participants. Pre-registration is required.
http://reservations.ncaquariums.com/pineknollshores/Info.aspx?EventID=2

Leveraging Public-Private Funding for Trails - Online
American Trails and the National Park Service offer the free webinar, Powerful Partnerships: Lessons Learned on Leveraging Public-Private Funding for Trails, December 8, 2016, covering funding strategies for water and land trails, and reviewing two case studies of Ocean Watch articles, public-private partnerships.
http://www.americantrails.org/resources/funding/Webinar-Innovative-Funding-Strategies.html

Life & Death, Love & Sex, Drama in the Intertidal Zone - California
The Gulf of the Farallones National Marine Sanctuary and Farallones Marine Sanctuary Association offer *Life & Death, Love & Sex, Drama in the Intertidal Zone*, May 2, 2009 in San Francisco, California. Learn about the reproductive strategies and defense mechanisms of local intertidal animals that allow them to survive in their dynamic habitat. Registration is free and a stipend may be available.
http://limpetsmonitoring.org/resources_workshops.php

Life on a Water Planet - Online
Nova Southeastern University Oceanographic Center Distance Education offers *Life on a Water Planet*, an online interdisciplinary course exploring water issues from physical, social, cultural, economic, legal, and institutional perspectives.
http://www.nova.edu/ocean/waterplanet/index.html

Lifelines for High School Climate Change Education
This project is based at Lawrence Hall of Science, University of California, to establish a network of practicing high school teachers actively using climate change curricula. The key aim of the project will be creation of professional learning communities of teachers who, through a series of remote meetings and workshops, maintain ongoing communication and sharing of best practices among colleagues to strengthen knowledge and promote effective teaching strategies during and beyond the actual grant period.
http://www.lawrencehallofscience.org/gss/lifelines/

Lifelines for High School Climate Change Education
Lifelines for High School Climate Change Education is a project to establish professional learning communities of high school teachers aimed at implementing effective teaching of climate change in existing courses. The network participants will identify the best resources to use and share best practices. If you are interested in joining, check out the information on the website.
http://www.lawrencehallofscience.org/gss/lifelines/

LiMPETS Introduction to Sandy Beach Monitoring - California
The Gulf of the Farallones National Marine Sanctuary and Farallones Marine Sanctuary Association offer the free workshop, *LiMPETS Introduction to Sandy Beach Monitoring*, October 24, 2009 in San Francisco, California. Participants receive a monitoring handbook and are trained to survey the distribution and abundance of the Pacific mole crab (*Emerita analoga*) at one of many monitoring sites along the coast of California. For those closer to San Mateo County, register for the November 14, 2009 workshop.
http://limpetsmonitoring.org/resources_workshops.php

LiMPETS Introduction to Rocky Intertidal Monitoring - California
Learn to participate in this in-depth science education program for students during the LiMPETS Introduction to Rocky Intertidal Monitoring workshop, March 26, 2011, in San

Francisco, January 29, 2011 in San Mateo County, California. Participants will receive the new LiMPETS Curriculum, learn to correctly identify algae and invertebrates, and practice the monitoring methods used in the field.
http://limpetsmonitoring.org/resources_workshops.php

LiMPETS Introduction to Rocky Intertidal Monitoring - California
This workshop, December 8, 2007 in San Mateo County, California, is for teachers who are interested in participating in the Gulf of the Farallones National Marine Sanctuary's Long-term Monitoring Program and Experiential Training for Students (LiMPETS). Participants will learn to survey key invertebrate and algae species at an established monitoring site along the coast of California.
http://farallones.org/education/teacher_workshops.php

LiMPETS Workshop - California
The Long-term Monitoring Program & Experiential Training for Students network provides a unique opportunity for teachers to gain the necessary skills and confidence to engage students in monitoring activities in the field. The workshop includes an introduction to monitoring techniques; field trips to a sandy beach site and a rocky intertidal site to collect data; instruction for entering data into online databases; and guidance for setting up your own marine monitoring program with your students.
http://limpets.noaa.gov/projectInformation/introduction/welcome.html
http://limpetsmonitoring.org./resources_workshops.php

LiMPETS Workshop - California
This workshop will cover two aspects of the program: rocky intertidal and sand crab monitoring. Teachers will be trained in the LiMPETS protocols including online data entry, and receive materials for use in the classroom., California
http://farallones.org/education/teacher_workshops.php
http://limpets.noaa.gov
Contact Lisa Emanuelson at Lisa.Emanuelson@noaa.gov .
http://limpetsmonitoring.org/resources_workshops.php

LiMPETS Workshops – California
Check out the LiMPETS (Long-term monitoring and experiential training for students) workshops for the 2008-09 year posted on the Farallones Marine Sanctuary Association website.

- LiMPETS Introduction to Rocky Intertidal Monitoring, February 21, 2009 in San Mateo County, California
- Feeling the Heat: Thermal Biology and Responses to Climate Change, March 21, 2009 in San Francisco, California
- Life & Death, Love & Sex, Drama in the Intertidal Zone, May 2, 2009 in San Francisco, California
- Advanced LiMPETS Rocky Intertidal Data Analysis for the Classroom Workshop, March 7, 2012
- LiMPETS Introduction to Sandy Beach Monitoring Workshop, March 17, 2012
- LiMPETS Introduction to Sandy Beach Monitoring Workshop, August 1, 2012
- LiMPETS Introduction to Rocky Intertidal Monitoring, August 2, 2012
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http://www.farallones.org/education/teacher_workshops.php

Linking the Ocean to the Classroom
This educators workshop about the Gulf of Maine, June 28-July 1, Durham, New Hampshire, explores the latest technology and methods used to study the basis of the entire marine food web, phytoplankton. Educators and scientists will discuss, plan, and generate new ways of incorporating real-time and archived ocean observation data using an inquiry based model while still meeting the state or national standards.
http://www.cooa.unh.edu/workshop.html

Living Shorelines Workshop – Florida and Mississippi
These workshops, March 7, 2017 in Biloxi, Mississippi and March 14, 2017 in Eastpoint, Florida, will introduce participants to living shorelines and more. See the websites for details.
http://www.gulfalliancetraining.org/detail.aspx?Id=144
http://www.gulfofmexicoalliance.org/events/ms-living-shorelines-workshop/

Long Island Sound Educators Conference - Connecticut
The Southeastern New England Marine Educators are hosting the Long Island Sound Educators Conference on May 2, 2008 in Norwalk, Connecticut. The conference focuses on topics addressing Long Island Sound and the coastal environments.
http://www.seneme.org/

Long Island Sound Teacher Workshop - Connecticut
This workshop, supported by Connecticut Sea Grant and the Long Island Sound Study, offers teachers the opportunity to learn how to integrate Long Island Sound into their curriculum, April 23, 2011 May 17, 2014 in Madison, Connecticut. Participation is limited.
Contact Ken Fusco at fuscokm@plainvilleschools.org

Long Island Sound Teacher Workshops - Connecticut
There are three Long Island Sound Mentor Teacher workshops scheduled, facilitated by Connecticut Sea Grant via funding from the EPA Long Island Sound Study. The workshops cost is minimal, and includes resources for each participant to take back to the classroom.

- Island Cruise, September 26, 2009; contact Beth Taylor at etaylor@branford.k12.ct.us
- Past, Present & Future Waters, September 26, 2009; contact Karen Beitler at Karen.beitler@new-haven.k12.ct.us
- Teach at the Beach, October 2, 2009; contact Donna Rand at drand@crec.org

http://neosec.wordpress.com/2009/09/08/long-island-sound-teacher-workshops/

Lost Whaling Fleets of the Western Arctic - Online
This NOAA webinar, March 10, 2016 will explore how archaeologists discovered the battered hulls of two nineteenth century whaling ships nearly 144 years after they sank off the Arctic coast of Alaska. The shipwrecks, and parts of other ships, that were found are most likely the remains of 33 ships trapped by pack ice close to the Alaskan Arctic shore in September 1871.
https://attendee.gotowebinar.com/register/5479241746917913857

Louisiana Department of Wildlife & Fisheries' Teacher Workshops
Workshops are held throughout the state and offer Louisiana teaching resources to all participants. Topics range from wetland issues (one-week workshop held on a barrier

island) to a migratory waterfowl workshop (3-day workshop with an air boat ride through optimal duck habitat in central LA).
http://www.wlf.state.la.us/apps/netgear/index.asp?cn=lawlf&pid=315 .

Louisiana Universities Marine Consortium Scientist / Teacher Institute
LUMCON and the Central Gulf of Mexico - COSEE Scientist/Teacher Institute course for middle school teachers includes a five-day residence component, June 20-25, plus 6 online sessions, July 8- August 13, 2004. Learn about oceanography and spend a week developing a continuing relationship with a research scientist. Additional institutes will be held in 2004 in: Alabama, June 27-July 2, Florida, June 20-25, Louisiana, June 20-25, Mississippi, June 21-25, and Texas, June 13-18.
www.lumcon.edu/education/cosee .

LTER Mini-Symposium - Virginia
The 9th Annual LTER (Long-Term Ecological Research) Mini-symposium, Ecosystem Services in a Changing World: Perspectives from Long-Term Ecological Research, will be held March 4, 2010 in Arlington, Virginia.
http://lno.lternet.edu/

Made Clear Workshops – Maryland and Delaware
The MADE CLEAR project (Maryland and Delaware Climate Change Education Assessment and Research) for the 2015 Climate Science Academy will include climate change science presentations and model lessons. Sessions will be held April-August 2015, and will be a mix of in-person workshops, interactive webinars, and independent work. While the target audience is middle school science and engineering teachers and librarians, others will also be accepted. See the website for complete details.
http://www.madeclear.org/academy/

Making EE Relevant for Culturally Diverse Audiences – Online
The new 10-week on-line course, Making EE Relevant for Culturally Diverse Audiences, September 2–November 6, 2008, is designed to provide participants with the basic knowledge and skills needed to make environmental education relevant to culturally diverse audiences. This online course has been developed in collaboration with national EE experts who represent diverse cultural and ethnic backgrounds.
http://www.uwsp.edu/natres/eetap/index.aspx

Making Maps with Google Earth and Google Maps - Online
The Ecosystem-Based Management Tools Network offers a series of free webinars on Google Earth, Google Maps, KML, mashups, APIs, and publishing GIS maps on-line.

- Making Maps with Google Earth and Google Maps, April 6, 2010
- Advanced Mashups – KML and the Mapping API, April 14, 2010
- From ArcGIS to Web Maps: Techniques for Publishing GIS Maps Online, April 22, 2010

http://www.ebmtools.org/tools_training/presentations.html

Making Ocean Life Count Seminar Series – Maryland and Webcast
The NOAA Office of Ocean Exploration is hosting a series of seminars on the Census of Marine Life, *Making Ocean Life Count*. These seminars will be held from mid-April through June, 2007 at a variety of locations around NOAA's Silver Spring, Maryland campus, with live video webcast feed and phone-in available for remote users. Presentations will also be posted on the website when available.

http://explore.noaa.gov/about/seminar.html

Making Sense of Climate Science Denial - Online
This free MOOC (Massive Open Online Course) through edX is about how people think about climate change. Also self-paced. It runs for seven weeks starting in April, 2015. Participants will look at the most common climate myths, lessons from past climate change, critical thinking needed to identify the fallacies associated with the myth, and more.
https://www.edx.org/course/making-sense-climate-science-denial-uqx-denial101x#.VPHhLOHLkbg
https://www.edx.org/course/making-sense-climate-science-denial-uqx-denial101x-0#.VRqZRfmUegZ
https://www.edx.org/course/making-sense-climate-science-denial-uqx-denial101x-3

MAMEA Annual Conference - Delaware
Registration is open and presentation proposals are being accepted for the 2009 Mid-Atlantic Marine Education Association (MAMEA) Conference, *New Inspiration in Marine Education*, October 2-4, 2009 in Lewes, Delaware. The conference will highlight the latest marine research in the Mid-Atlantic region and how educators can use the new information in their classrooms and programs.
http://www.mamea.org/2009conf.html

Managing Visitor Use in Coastal and Marine Protected Areas - Delaware
This free workshop, January 12-13, 2006 in Dover, Delaware, provides an overview of the human dimensions of protected area management; offers examples of visitor use and associated impacts to natural resources and visitor experiences; and demonstrates applications to help managers address the people side of resource management. In addition to training sessions, local and regional guest speakers will share case studies. Contact Katy O'Connell at Katy.OConnell@state.de.us or (302) 739-3436 ext. 20

Mangrove Ecosystems Course - Online
The UN University Institute for Water, Environment and Health and The Nature Conservancy have launched the first unit of a 10-unit, open access, self-paced online course about mangrove ecosystems and their management. Unit 1 consists of five lessons which introduce students to mangroves and provide a brief description of their basic characteristics, evolution, distribution, importance, and status. Free registration is required.
http://inweh.unu.edu/open-access-mangroves-unit-launched/

Mangrove Forest Ecology, Management and Restoration Training Course
The second "Mangrove Forest Ecology, Management and Restoration Training Course," Hollywood, Florida, USA, February 23-26, 2004 and February 20-23, 2006, March 3-6, 2008, taught in conjunction with the Mangrove Action Project. The tidal hydrology of mangrove forests was a major topic during the course. The third workshop, February 21-24, 2005, will emphasize cost-effective successful mangrove management and restoration.
http://www.mangroverestoration.com/

Mapping Oceans and Coasts: GIS Workshop for Teachers - California
The Center for Image Processing in Education, Channel Islands National Marine Sanctuary, and Ocean Explorers Master Teachers offer a three-day Mapping Oceans

and Coasts GIS workshop for teachers July 12-14, 2006 in Camarillo, California. During the workshop, participants will explore the biological, physical, and geological characteristics of our oceans and coastlines and learn how GIS can be used to manage, understand, and protect these areas.
http://www.evisual.org/index.php?option=com_content&task=view&id=39&Itemid=35

Mapping Ocean Sanctuaries- Florida
The free, Mapping Ocean Sanctuaries teacher workshop, June 22-24, 2005 in Key Largo, Florida, will explore the biological, physical, and geological characteristics of our coastlines and national marine sanctuaries. The workshop will include hands-on instruction on how to use geographic information system (GIS) software and global positioning system hand-held units, using the Exploring Data with GIS to Experience Sanctuaries (EDGES) curriculum.
http://floridakeys.noaa.gov/edu/gis_workshop.htm

Mapping Ocean Sanctuaries GIS Workshop in Georgia
A *Mapping Ocean Sanctuaries* GIS workshop, July 7-9th, 2004, Savannah, GA, included three days of hands-on instruction in Global Positioning Systems (GPS), Geographic Information Systems (GIS) technologies, and field data collection techniques. Participants receive complimentary copies of NOAA's *Exploring Data with GIS to Experience Sanctuaries* (EDGES) curriculum and ESRI's *Mapping Our World GIS Lessons for Educators* curriculum (with a 1-year educational ArcView GIS site license). Jenny Brady at jennyb@evisual.org or (800) 322-9884 x 253.

Mapping Ocean Sanctuaries - Massachusetts
The free, Mapping Ocean Sanctuaries teacher workshop, July 6-8, 2005 in Scituate, Massachusetts, will explore the biological, physical, and geological characteristics of our coastlines and national marine sanctuaries. The workshop will include hands-on instruction on how to use geographic information system (GIS) software and global positioning system hand-held units, using the Exploring Data with GIS to Experience Sanctuaries (EDGES) curriculum.
http://www.evisual.org/www/pdfs/SBNMS_app.pdf

Mapping Ocean Sanctuaries Teacher Workshop - California
Learn how to use Geographic Information Systems to study geography and ocean science and involve your students in field data collection and analysis using their own data along with data from scientific and governmental institutions. The workshop will involve 3 days of hands-on training in GIS and GPS technologies. Participants will receive the EDGES curriculum and a copy of *Mapping Our World* book which includes a one-year site license for ArcView 3.X GIS software.
http://www.channelislands.noaa.gov/edu/edu_teacher.html .

MARE New Teacher Workshop - California
Discover MARE (Marine Activities, Resources, and Education) at the Scripps Institution of Oceanography in La Jolla, California. This workshop will provide an overview of the award-winning MARE curriculum. Explore ideas for hosting your first Ocean Week or Ocean Month at your school site. Discover how to adopt an ocean science program that addresses the needs of your English learners while incorporating technology and literacy into your science program. Scholarships are available.
http://aquarium.ucsd.edu/Education/For_Schools/For_Teachers/Professional_Development/

MARE Professional Development - California
The 2006-2007 MARE (Marine Activities, Resources & Education) from the Lawrence Hall of Science professional development schedule is available, offering half-day habitat and curriculum introduction workshops, full-day workshops, and field trips. Some offerings include Rocky Seashore, Sandy Beach, Wetlands, Open Ocean, & Islands; Kelp Forest Habitat Workshop; and Ponds Habitat Workshop.
http://www.lawrencehallofscience.org/mare/profdev/calendar.html

MARE Summer Leadership Institute
The MARE Program from University of California/Berkeley's Lawrence Hall of Science Offers a one-week residential summer institute, August 1-8, 2004, UC Santa Cruz campus. June 26-July 1, 2006 in Santa Cruz, California. July 5-9, 2009 in Santa Cruz, Participants will gain skills to help them lead a school or district in the implementation of Ocean Week or Month using MARE's whole-school ocean immersion model and K-8 science curriculum. Daily instruction will include ocean science content delivered by educators, scientists and researchers.
http://www.lhs.berkeley.edu/MARE
http://www.lawrencehallofscience.org/mare/profdev/summer.html

MARE Summer Teacher Programs – New Jersey
MARE is an interdisciplinary program that seeks to engage teachers, students, and others to transform schools and after-school clubs into dynamic laboratories for the study of the ocean. This summer, Rutgers University Institute of Marine and Coastal Sciences in New Brunswick and Tuckerton, New Jersey, is providing four MARE teacher trainings with hands-on and standards-based lessons, field experiences, and more.

- One Ocean, Interdisciplinary Instruction – July 17, 2012
- Biodiversity & Bioluminescence - July 18, 2012
- Community Day: Fish & Larvae - August 14, 2012
- Beaches, Adaptations, & Human Impacts - August 15, 2012

http://coseenow.net/mare/opportunities-resources/summer-teacher-programs/

MARE Workshop Series - California
Discover MARE at the Birch Aquarium at Scripps Institution of Oceanography in La Jolla, California, designed for K–8 teachers, science specialists, and informal educators. The workshops provide training in standards-rich, inquiry-based science strategies for addressing the needs of English learners and ideas for incorporating technology and literacy into any science program. Check the website for dates and topics.
http://aquarium.ucsd.edu/Education/For_Schools/For_Teachers/Professional_Development/

Marinating MST – New York
This field-trip based workshop, July 6-10, 2015 in Garden City, New York, is part of Adelphi's SEA program, a National Science Foundation/NOYCE Scholarship for undergraduate students in their STEP (Scholar Teacher Education Program) program that uses Long Island's natural environment for teaching.
http://lousiegel.net/Adelphi/MarinatingMST2015flyer.pdf

Marine Activities Resources and Education Workshops - California
Birch Aquarium is pleased to offer an upcoming series of Marine Activities Resources and Education (MARE) Habitat Workshops for Southern California teachers. Each of the Habitat Workshops will offer K-8 teachers opportunities to explore ocean science content and hands-on teaching strategies, specific to your own grade level and habitat focus.
http://aquarium.ucsd.edu/Education/For_Schools/For_Teachers/Professional_Development/MARE/

Marine Biodiversity Workshop
The Division of Invertebrates at the Florida Museum of Natural History offers this free workshop for Florida high school biology teachers, February 20-22, 2015 in St. Augustine, Florida.
http://leef-florida.org/net/calendar/details.aspx?s=117750.0.0.37432

Marine Biology Field Courses - Mississippi
The University of Southern Mississippi Gulf Coast Research Laboratory is now registering for marine biology college field courses to be offered this summer in Ocean Springs, Mississippi. Courses offered May 29-June 20, 2007 are marine biology, marine mammals, shark biology and marine ichthyology. Courses offered June 21-July 13, 2007 are oceanography, marine invertebrate zoology, marine ecology and marine biology for teachers.
http://www.usm.edu/gcrl/summer_field/calendar.php
http://www.usm.edu/gcrl/summer_field/index.php

Marine Biotechnology and Bioinformatics - California
Learn to incorporate hands-on biotechnology and bioinformatics activities into your classroom and research through this marine science summer educator workshop, July 10-28, 2006 in Monterey Bay, California, July 9-27, 2007 in Monterey Bay, California,. Participants will investigate using biotechnology techniques to generate DNA data and the latest bioinformatics software to analyze it and incorporate cutting edge science techniques into their instructional programs.
http://www.marinebiotech.net/
http://teach.mlml.calstate.edu/

Marine Debris Educator Workshop - Ohio
Stone Lab is hosting a Marine Debris Educator Workshop from Ohio Sea Grant and NOAA's Marine Debris Program, June 8-10, 2015 on Gibraltar Island, Ohio. Recommended for K-8 educators, the program will give teachers first-hand experience in conducting marine debris research and cleanups, along with an in-depth look at curriculum.
http://stemoutreach.osu.edu/events/marine-debris-educator-workshop

Marine Debris Summit – Virginia
Early Bird registration is open for the 2nd Virginia Marine Debris Summit, March 7-9, 2016 in Gloucester, Virginia. While the summit's audience will be mostly from Virginia, it will also include stakeholders from other mid-Atlantic states.
http://events.r20.constantcontact.com/register/event?oeidk=a07ec35sin6cf9efe12&llr=nyolw7cab

Marine Debris Teacher Workshop - California
The Algalita Marine Research & Education group offers this free marine debris teacher workshop April 20, 2016 in Newport Beach, California.
Contact marineeduation@newportbeachca.gov

Marine Education Workshop - Florida
This Marine Education Workshop from Newfound Harbor Marine Institute, February 18–February 21, 2011, February 17-20, 2012, March 15-17, 2013, April 24-26, 2015 , April 29-May 1, 2016 April 7-9, 2017 , on Big Pine Key, Florida, will offer the opportunity to study a variety of subjects within the Florida Keys National Marine Sanctuary, including coral ecosystems, mangrove islands, sponge and sea grass beds, and algal shoals.
http://www.nhmi.org/tchwshp.htm
Contact Judy Gregoire at info@nhmi.org
Contact the marketing department at info@nhmi.org
http://fmsea.org/wp-content/uploads/2015/01/Seacamp-Teachers-Workshop-2015.pdf

Marine and Estuarine Invertebrates Field Course - Oregon
A summer field course at the Hatfield Marine Science Center will be held June 20 – July 15, 2005 in Newport Oregon. It will include the comparative survey of eight major invertebrate phyla and many lesser-known phyla. Three areas of emphasis will be invertebrate identification, natural history, and comparative anatomy. Laboratories and field trips will strongly supplement lecture material.
http://hmsc.oregonstate.edu/classes/summer/zoo461.html

Marine Mammals in Coastal Georgia Teacher Workshop - Georgia
April 22, 2016 October 28, 2016 in Brunswick, Georgia. Topics will include current research, conservation and management strategies, and more, along with curriculum and classroom activities.
Contact Georgia Graves at georgiabeachwalk@bellsouth.net

Marine Mammal Institute – North Carolina
The North Carolina Aquarium at Fort Fisher and the North Carolina Museum of Natural Sciences will host a free Marine Mammal Institute, , August 10-19, 2011 starting at Roanoke Island, North Carolina. Participants will travel from North Carolina to New England learning about, and interacting with, marine mammals. Following the institute, participants will develop activities to communicate climate change impacts on marine mammals in conjunction with an event incorporating a GeoDome theater.
http://www.ncaquariums.com/fort-fisher/teachersstudents/conservation-education-through-marine-mammals

Marine Mammal and Sea Turtle Rehabilitation: In Your Backyard and Beyond - Online
NYSMEA and the Riverhead Foundation will present an interactive webcast, *Marine Mammal and Sea Turtle Rehabilitation: In Your Backyard and Beyond*, November 10, 2010. The program will offer an overview of marine mammal and sea turtle strandings, current threats and diseases, as well as current research initiatives. The event is open to current members of NYSMEA, the Riverhead Foundation, NMEA and Long Island Marine Association only.
https://spreadsheets1.google.com/viewform?formkey=dHpuT0tCLTl2X0VacndUenFOV0E1M3c6MQ

Marine Mammal Seminars - California
The second annual Marine Mammal Weekend Seminars at Camp Ocean Pines in Cambria, California will join biologists in field observations of elephant seals, sea otters, sea lions, harbor seals, and other marine mammals. On January 21-23, 2005 Dr. Burney LeBoeuf will focus on land based behaviors and reproduction of Elephant Seals. Join Dr. Jim Estes and Dr. Terrie Williams on January 28-30, 2005 to observe and discuss sea otters and sea lions in California.
http://www.campoceanpines.org/upcoming/

Marine Mammal Seminars - California
Camp Ocean Pines is hosting three weekend retreats focused on marine mammals. Leading scientists will share their latest research and discoveries.

- Tagging of Pacific Pelagics, Dan Costa, January 6-8, 2006
- Sleuthing Mother Nature with Seals: Revelations from Long-Term Study, Burney LeBoeuf, January 13-15, 2006
- Sea Otters, Terrie Williams and Jim Estes, January 20-23, 2006.

The retreats feature lectures and activities with the leaders in the field, food, and lodging.
http://www.campoceanpines.org/

Marine Mammals in Coastal Georgia - Georgia
Join experts in the marine mammal field who will speak on the North Atlantic Right Whale, Atlantic Bottlenose Dolphin, and Florida Manatee, November 12, 2010 in Brunswick, Georgia. Topics will include life history, adaptations, management and threats, and an activity session. K-12 curriculum and resources will be provided for all participants.
Contact Georgia Graves at georgiabeachwalk@bellsouth.net

Marine Mammals Teacher Workshop – Georgia
Join experts in the marine mammal field for this Marine Mammals in Coastal Georgia Teacher Workshop, April 12, 2014 November 13, 2015 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.
http://eeingeorgia.org/net/calendar/details.aspx?s=54702.0.0.4863&c=5058725

Marine Protected Areas Course - Mexico
Students and practitioners interested in MPAs in the Caribbean region are invited to enroll in an international course to be held June 21-29, 2008, in Puerto Morelos, Mexico. The course, *Marine Protected Areas for the South Florida, Mexican Caribbean, and Mesoamerican Region*, will analyze ecological and socioeconomic aspects of MPA design and management. Full fellowships for the course are available for Latin American students. The course is fully bilingual.
Contact Ligia Collado Vides at colladol@fiu.edu

Marine Protected Areas Outreach and Education Workshops – Rhode Island and Maine
Two 2-day workshops will provide input on the development by the New England Fishery Management Council of a thoughtful policy on the use of marine protected areas for managing fisheries. The Council is seeking input from the public on the development of an MPA policy while also providing background on basic ecology, the role of habitat in fisheries, and the science of marine protected areas.
May 5-6, 2005, West Greenwich, Rhode Island and May 10-11, 2005, Ogunquit, Maine

Contact Woneta Cloutier at wcloutier@nefmc.org

Marine Recreation Community Workshop - Texas
National Geographic will offer a free Marine Recreation Community Workshop, November 2, 2011 in Galveston, Texas. One of the goals of National Geographic's Ocean Initiative is to engage and collaborate with the marine recreation community with a shared goal of raising public awareness and inspiring people to help protect the vital natural resources that the ocean provides. Participants will receive free resources and more.
http://www.gulfmex.org/3487/3487/

Marine Resources Population Dynamics Workshop - Florida
This undergraduate workshop, presented by the National Marine Fisheries Service and Virginia Tech, will be held at the Mote Tropical Research Laboratory on Summerland Key, Florida, January 6-12, 2007. The all-expenses-paid week will include coursework, fieldwork, and social activities.
http://www.nmfs.vt.edu/workshop/info.1.07.htm

Marine Science Adventure Camp for Homeschoolers - Virginia
The Marine Science Consortium is offering the Marine Science Adventure course just for Homeschoolers, November 16-18, 2010 on Wallops Island, Virginia. The workshop provides hands-on observation of marine environments and life forms and time to socialize with other youth. Hurry – the workshops fill up quickly.
http://msconsortium.org/#/homeschoolers-marine-adventure/4537567584

Marine Spatial Planning Trainings
The EBM Tools Network and partners have gathered information on existing marine spatial planning training opportunities. Categories include short courses, graduate programs, tools training, and more.
https://meam.openchannels.org/trainings

Marine Studies Teacher Workshops
The University of Delaware Graduate College of Marine Studies offers a variety of professional development workshops for teachers. Upcoming January and February workshops include Invasive Species, Delaware and Chesapeake Watersheds, and Rookie Science workshops.
http://www.ocean.udel.edu/public/teachercourses.html#course1

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

Marine Wildlife Viewing Workshop
The 2003 *Marine Wildlife Viewing Workshop*, November 9-10, 2003, South Padre Island, Texas, provides a forum for the development of generally applicable guidelines for major

types of commercial and recreational marine wildlife viewing activities. This year's program emphasizes the Gulf Coast and Greater Caribbean regions.
http://www.watchablewildlife.org/conference/marine_workshop.htm

MarineLab Courses - Florida
MarineLab offers three teacher workshops, July 27-August 3, 2008 in Key Largo, Florida. *Introduction to Coastal Marine Ecology* is an overview of the marine habitats of the Upper Keys; *Restoring the Habitats of the Keys* includes learning and observing current restoration efforts in the Everglades, seagrasses, and coral reefs; and *ReefCheck* is a workshop using SCUBA to gather data as part of the global REEFCHECK program.
http://www.marinelab.org/Teacher_Workshops.html

MarineLab Teacher Workshops - Florida
MarineLab will host three workshops concurrently from July 24-29, 2011 July 23-28, 2012: Coastal Marine Ecology of the Keys, Ecology and Research Techniques, and the Reef Check Eco Diver Certification program. The workshops are content oriented and are designed for the middle and high school science teacher; all feature on-water field explorations. July 29-August 3, 2013
http://www.marinelab.org/Teacher_Workshops.html

Maritime Archaeology: Exploring and Discovering Shipwrecks - Online
The next webinar in the National Marine Sanctuaries' Webinar Series, Maritime Archaeology: Exploring and Discovering Shipwrecks, will take place January 13, 2016. Discover how to integrate STEM and social studies as you explore the underwater world of shipwrecks and the tools of maritime archaeologists. Participants will receive free curriculum and resources. Be sure to check out upcoming webinars.
http://sanctuaries.noaa.gov/education/teachers/webinar-series.html

Maritime Cultural Landscape Symposium – Wisconsin and Online
Join NOAA and partners for an exploration of Maritime Cultural Landscapes, October 14-15, 2015 in Madison, Wisconsin. The symposium will explore how the terrestrial and submerged resources near and in the nation's oceans, rivers, and lakes might be identified, characterized, and evaluated, and what benefits may be derived from the broader recognition of these landscapes as unique entities. Online participation is available.
http://www.wisconsinhistory.org/Content.aspx?dsNav=N:4294963828-4294963805&dsRecordDetails=R:CS4545

Massachusetts Institute of Technology's OpenCourseWare
MIT's OpenCourseWare (OCW) launched its large-scale, web-based electronic publishing initiative, a free and open educational resource for faculty, students, and self-learners around the world, with the publication of approximately 500 courses. Courses include Ocean Engineering, Science Technology and Society, and Urban Studies and Planning.
http://ocw.mit.edu/OcwWeb/index.htm

MAST (Multicultural Students At Sea Together)—Opportunity for College Students
This on-the-water program ran from June 16-July 10, 2003 in the Chesapeake Bay. The program covered marine science, marine policy, the heritage of African Americans and Native Americans on the Chesapeake and under sail, and seamanship. They also

recruited an ethnically diverse crew, including African Americans, Native Americans, Hispanic Americans, Pacific Islanders, and others.
http://www.hamptonu.edu/science/masthompage.htm

Master of Environmental Management Program - Online
The Nicholas School of the Environment at Duke University offers the Duke Environmental Leadership Program, a two-year online Master of Environmental Management degree, with strategically integrated intensive on-campus visits. Check the website for online information sessions.
http://www.nicholas.duke.edu/delinfo

Master Naturalist Program - Florida
The Florida Master Naturalist Program is an adult environmental education program from the University of Florida. Three 40-hour teaching modules include freshwater wetlands, coastal systems, and upland habitats. Students learn science-based curriculum and interpretation skills in the classroom and in the field. Check the website for upcoming courses, including Coastal Systems, Freshwater Systems, Habitat Evaluation, and more.
http://www.masternaturalist.org/ .
http://www.masternaturalist.ifas.ufl.edu/
http://conference.ifas.ufl.edu/fmnp/

Master of Science Programs – Wisconsin and Online
The University of Wisconsin-Stevens Point offers graduate courses within four Master of Science Degree Programs. Courses may be taken as part of these programs or as non-degree credit for your professional development and include Applied Master of Science Degree Programs for working professionals along with more traditional master's program with emphasis in a variety of areas such as forestry, wildlife, water, human dimension, environmental education, and others. Both on-campus and online courses are available.
http://www.uwsp.edu/cnr/Pages/graduate.aspx

Master of Science in Resource Interpretation - Online
An online master's degree specializing in resource interpretation is available through the College of Forestry and Agriculture at Stephen F. Austin State University in Nacogdoches, Texas. Course example include: Curriculum-based Learning, Interpretive Planning, Media and Graphics, and Field-based Programs. The courses have been designed in cooperation with the National Park Service. Applications are being accepted for the fall semester.
http://www.sfasu.edu/msri/

Master Tread Trainer Program
Tread Lightly! promotes responsible outdoor recreation through education and restoration. The Tread Trainer program is designed to train participants in innovative, practical methods of spreading outdoor ethics to the public. The training is provided through a one-day course and will qualify the participant to become a Tread Lightly! representative – a "Master Tread Trainer." In addition to the training, participants receive a manual, guidebooks, public service announcements, and other materials.
http://www.treadlightly.org/

Master's in Environmental Education and Interpretation - Online
The University of Wisconsin–Stevens Point offers on online option for professionals interested in pursuing a Master's degree in Environmental Education and Interpretation. The program is designed especially for environmental education and interpretation professionals, and no travel to the campus is required.
https://campus.uwsp.edu/sites/cnr-ap/omseei/Pages/default.aspx

MATE Center Faculty Development Institutes
The Marine Advanced Technology Education (MATE) Center announces two faculty development institutes for summer 2004:

- Building Remotely Operated Vehicles (ROVs), July 1 - July 9, 2004
- GIS and Marine Science: Using GIS to model marine habitats, July 11-17, 2004.

Educators interested in organizing future workshops or regional student ROV competitions to feed into the national competition can participate in an optional day.
http://www.marinetech.org/education/institutes.php .

MATE Summer Institute - California
MATE's (Marine Advanced Technology Education Center) *2011 Summer Institutes for Faculty Development on Intermediate Level ROV Building for Classroom Projects* will take place July 24-31, 2011 in Monterey, California. Participants will work in teams to design and build ROVs to accomplish a set of pre-determined mission tasks. In addition to the instruction and hands-on time, participants will have the opportunity to interact with industry professionals and participate in field trips.
http://www.marinetech.org/education/summer_institutes/2011_Information.php

MATE Summer Institute - California
The MATE (Marine Advanced Technology Education Center) 2010 Summer Workshop for Faculty on Intermediate Level ROV Building for Classroom Projects will take place July 26-August 1, 2010 in Monterey, California. Participants will work in teams to design and build ROVs to accomplish a set of pre-determined mission tasks. In addition to the instruction and hands-on time, participants will have the opportunity to interact with industry professionals and participate in field trips.
http://www.marinetech.org/education/summer_institutes/2010_Information.php

MATE's Summer ROV Workshop – California
The Marine Advanced Technology Education (MATE) Center announces their summer institute for 2008, Advanced Remotely Operated Vehicle Building for Classroom Projects, July 21-27, 2008 in Monterey, California. Throughout the week, educators will work in teams to design and build their own ROVs to complete a set of predetermined mission tasks. The participants will test their ROVs in a mini-competition at the end of the week. The deadline for application to this free workshop is April 14, 2008.
http://www.mpcfaculty.net/tami_lunsford/SI_08_institute/Info.aspx

MATE Workshops - Various
MATE and partners offer professional development workshops studying project-based engineering design, underwater robotics, and more. Locations (including online), financial resources, and curriculum products are listed.
http://www.marinetech.org/workshops/

Maury Project Summer Workshop - Maryland
The Maury Project workshop, July 7-19, 2013, July 12-24 2015, in Annapolis, Maryland, is intended to: introduce master teachers to the physical foundations of selected oceanographic topics and issues; explore and suggest ways in which these understandings and concepts can be employed in school studies; and prepare workshop attendees to conduct training sessions on selected oceanography topics and issues for teachers in their home areas during the next school year.
http://www.ametsoc.org/amsedu/MAURY/summer.html

MERITO Academy Workshop - California
The MERITO Academy's goal is to increase multicultural student's understanding of watershed and ocean issues through hands-on field and in-class activities while exposing them to careers in science and building pride and stewardship towards their sanctuary and local environments. This workshop for educators is scheduled for October 13-14, 2006 in Oxnard, California, with a follow-up on February 3, 2007.
http://sanctuaries.noaa.gov/education/teachers/professional.html

Meaningful Watershed Education Experiences - Massachusetts
The Gulf of Maine watershed program is a field- and classroom-based program that will provide Massachusetts middle school science teachers with the knowledge and skills to teach students about local watersheds and show how climate change affects watersheds. The program, July 15-17, 2010 in Boston, Massachusetts, offers a three-day summer workshop, two call-back/follow-up sessions, and a teacher-lead meaningful watershed education experience in the field and classroom for students in grades 5-8.
http://neosec.wordpress.com/2010/06/21/pd-at-ne-aquarium-meaningful-watershed-education-experiences/

Mentoring: Getting Started with Your Mentee - Online
Fish & Wildlife Service's Division of Education Outreach at the National Conservation Training Center offers a new on-line course for mentors, *OUT8081 Mentoring: Getting Started with Your Mentee.* The self-paced course focuses on the tools and skills needed when meeting with a mentee for the first time. Use the search term OUT8081 on the DOI Learn website.
http://www.doi.gov/doilearn/index.cfm

Microbes Down Below! - Online
The Center for Dark Energy Biosphere Investigations (C-DEBI) and the College of Exploration invite you to explore life on the dark side in a free online workshop. Designed for community college instructors and high school teachers, Microbes down below! Exploring life beneath the ocean floor, will take place November 4-15, 2013.
http://www.coexploration.org/C-DEBI/

Microplastics - Online
Join the webinar, Microplastics: What we know and discussion of research needs, April 13, 2017, highlighting studies funded by the NOAA Marine Debris Program. Learn about the various types and sources of microplastics and the impacts associated with microplastic marine debris
https://attendee.gotowebinar.com/register/5580307763312728833

Microplastics Webinar – Online
The NOAA Marine Debris Program and partners will host Microplastics: What we know and discussion of research needs, April 13, 2017. Learn about the various types and sources of microplastics and the impacts associated with microplastic marine debris.
https://attendee.gotowebinar.com/register/5580307763312728833

Migratory Bird Education for Educators – West Virginia
The U.S. Fish and Wildlife Service National Conservation Training Center is offering Migratory Bird Education for Educators (OUT8163) June 18-21, 2007 in Shepherdstown, West Virginia. This course teaches the knowledge, skills, instructional tools, and strategies to educate others about birds and their conservation. Participants learn to teach others basic bird identification, explore a wide array of available educational resources with emphasis on festivals and citizen science, practice educational activities, and identify potential cross-cultural connections. This is not a bird identification course.
Contact Juanita Gustines at Juanita_Gustines@fws.gov

Mini-Conference and Teacher Sleepover - Maryland
The Mid-Atlantic Marine Education Association is sponsoring the Mini-Conference and Teacher Sleepover, *Biodiversity is Life, Is Our Life* at the National Aquarium, March 11-12, 2011 in Baltimore, Maryland. Participants will explore the biodiversity of local environments as well as examine the diversity of life in one of the Aquarium's exhibits.
http://www.aqua.org/downloads/pdf/registration_teacherovernight.pdf

Misconceptions About Climate Changes - Online
This webinar, January 21, 2011, will identify common misconceptions held by students, and will offer pedagogic strategies for handling various types of misconceptions in the college classroom. Registration is free, but limited to 20 participants. For those who cannot attend, the presentation file, related references, and a webcast of this session will be available after the event.
http://serc.carleton.edu/NAGTWorkshops/climatechange/webinar/jan.html

Monarch Curriculum Webinar - Online
This webinar, December 8, 2016 from the U.S. Fish and Wildlife Service, is free and open to all. The goal of the webinar is for participants to learn about various monarch resources and curriculum.
http://nctc.adobeconnect.com/monarchwebinar/

Monitor Open House and R.O.V. Workshops - Virginia
The Monitor National Marine Sanctuary will host a teacher open house at their office in Newport News, Virginia on October 5, 2006. The open house is an opportunity for local teachers to preview programming available through the national marine sanctuary program. Discover new resources to teach social studies and science standards using the Civil War ironclad USS Monitor and the National Marine Sanctuaries. The sanctuary will also sponsor professional development opportunities for teachers to learn about remotely operated vehicles (ROVs) this fall, on September 30, 2006, November 4, 2006, and November 18, 2006. These hands-on workshops teach how to design and build working ROVs.
http://monitor.noaa.gov
Contact Krista Trono at Krista.Trono@noaa.gov for information about the workshops.

Monterey Bay Aquarium Teacher Institutes - California
The Monterey Bay Aquarium will host four institutes for teams of full-time classroom teachers this summer. These free, grade-specific, week-long professional development opportunities use activities that are aligned with national and California state science content standards, as well as Ocean Literacy principles. Participants receive activities, resources, and materials for their classrooms; a stipend may be available.

- June 26-July 1, 2011 , Splash Zone Teacher Institute for Head Start and K-2 teachers
- July 11-15, 2011 with follow-up sessions later in the year, Project Based Science Institute for grades 6-8
- July 25-29, 2011, Connecting Marine Science for grades 9-12
- July 31-August 5, 2011, Coastal Systems Teacher Institute for grades 3-5

http://www.montereybayaquarium.org/lc/teachers_place/edu_programs.aspx

Monterey Bay Aquarium Teacher Institutes – California
The Monterey Bay Aquarium offers two teacher institutes. The Splash Zone Institute, July 10-14, 2006 is for Pre-K - 2nd grade teachers. Teachers will have an opportunity to explore schoolyard and rocky shore habitats, share inquiry-based activities and implement new teaching strategies. The Coastal Systems Institute, July 24-28, 2006 is for 3rd - 5th grade teachers. Teachers will use living coastal ecosystems to teach standards, integrate content and process skills and facilitate language acquisition.
http://montereybayaquarium.org/lc/teachers_place/edu_program.asp

Monterey Bay Aquarium Teacher Institutes - California
The Monterey Bay Aquarium offers several different institutes and workshops for teachers. *The Coastal Systems Teacher Institute*, July 21-25, 2008, is designed for teachers of grades 3-5; the *Dynamic Cycles Institute*, July 7-11 is designed for 6-12th grade teachers. The summer institutes are free and a stipend and credit are available. Three follow-up sessions are required.
http://www.mbayaq.org/lc/teachers_place/edu_programs.asp

Monterey Bay Watershed Academy Workshop - California
Educators are invited to participate in the Monterey Bay National Marine Sanctuary, Multicultural Education for Resource Issues Threatening Ocean (MERITO), Watershed Academy Leader Training, August 24-25, 2007 in Watsonville, California. The Watershed Academy program includes a free train-the-trainer workshop, local field trips, in-class activities, teacher resources, guest speakers, and stipends for program transportation and materials. MERITO has developed a Watershed Activity Guide addressing state standards. Each year MERITO is pleased to offer 20 scholarships for programs interested in implementing the Watershed Academy program at their site. Contact Sonya Padron at sonya.padron@noaa.gov

Monthly Webinar Series: Bringing New Ideas and Innovation to the Field of EE
NAAEE hosts this free monthly webinar series on eePRO as part of NAAEE and Cornell University's EECapacity initiative. The webinars are on topics of interest to environmental education professionals in both formal and nonformal settings. The initial webinar of 2017 is Climate Change Adaptation & Resiliency.
https://naaee.org/eepro/learning/monthly-webinar-series

Mote Professional Development Workshops - Florida
Join Mote Marine Laboratory this fall for new Marine Science Professional Development Workshops during September in Sarasota, Florida. Choose from the listed programs and receive supporting print materials and more.

- Manatees 09/10/2005, registration deadline September 2nd, 2005
- Dolphins 09/24/2005, registration deadline September 9th, 2005
- Sharks, 10/15/2005, registration deadline September 30th, 2005

Contact Kasey Gaylord at kasey@mote.org or 1-800-691-MOTE ext 263

Mother Mother Ocean – Online
Mother Mother Ocean from the University of West Florida is the first in a series of Gulf Stories, highlighting the university's connection and engagement with the Gulf of Mexico. This free course consists of five modules lasting approximately two hours each.
http://uwf.edu/innovation/the-work/gulf-stories/

Mountains to the Gulf Workshop - Alabama
The workshop, Mountains to the Gulf: Helping Teachers Make Connections, June 25 - July 2, 2011 from Nauvoo, Alabama, is funded by the Gulf of Mexico Alliance and sponsored by The Environmental Education Association of Alabama.
http://www.campmcdowell.com/cmec/Teacher_Workshops.htm#MTG

MPA Course - Mexico
Students and practitioners interested in MPAs in the Caribbean region are invited to enroll in an international course to be held June 28-July 8, 2009 in Quintana Roo, Mexico. The course, *Marine Protected Areas for the South Florida, Mexican Caribbean, and Mesoamerican Region*, will analyze ecological and socioeconomic aspects of MPA design and management, and will be co-led by researchers from the National University of Mexico and Florida International University.
Ligia Collado Vides at colladol@fiu.edu

MPA Webinars - Online
The MPA Center and partners sponsor a free monthly webinar series focused on building and strengthening MPA networks. Upcoming topics include disaster preparedness, sustainable recreational use, and more. Webinars are archived following the presentation.
http://marineprotectedareas.noaa.gov/resources/webinars/

MS PHD'S Professional Development Program
The Minorities Striving and Pursuing Higher Degrees of Success in Earth System Science (MS PHD'S) Professional Development Program provides professional development experiences that facilitate the advancement of minorities committed to achieving Earth system science careers. The program includes mentoring and networking activities and provides a supportive environment in which participants develop strategies and professional skills.
http://www.msphds.org/

MTS-IEEE/OES Educators Workshop - California
This free session on Marine Technology in the Classroom for grades 6-12 teachers and informal educators will be held at the Oceans2013 Conference, September 21, 2013 in San Diego, California. The session is limited to 30 educators.
Contact Erica Moulton at emoulton@marinetech.org

My NASA Data Teacher Workshop - Virginia
NASA will host a hands-on workshop designed for grade 6-12 teachers. The workshop will focus on the implementation and use of earth system science data sets developed for the pre-college education community. The data sets are derived from the archive of remotely-sensed data from NASA's Earth Observing System satellites. Participating teachers will explore topics in Earth system science (especially atmospheric science), educational application of data sets, and hands-on classroom activities.
http://mynasadata.larc.nasa.gov/workshop.html

Nab the Aquatic Invader Workshop - Indiana
This workshop from Illinois-Indiana Sea Grant in conjunction with the National Park Service, November 8, 2006 in East Chicago, Indiana, offers professional development training to help educators for grades 4-10 get their students involved in community stewardship projects that help prevent spread of aquatic invaders.
http://www.iisgcp.org/cal/Promo%20for%20Nov-2006%20Wkshop.%20Final%20Copy.pdf

NAI International Conference
The 2017 National Association for Interpretation's International Conference on Interpretation will take place March 19-23, 2017 in San Jose del Cabo, Mexico. The theme is Interpretation: Awakening Curiosity to Conserve and Protect.
http://www.interpnet.com/NAI/interp/Events/NAI_International_Conference/nai/_events/NAI_International_Conference.aspx

NAI National Workshop
The theme of the 2014 National Association for Interpretation's National Workshop, November 18–22, 2014 in Denver, Colorado, is Scaling Interpretive Heights. November 8-12, 2016 in Corpus Christi, Texas, is Nature Protection Cultural Connection.
http://www.interpnet.com/NAI/interp/Events/NAI_National_Workshop/nai/_events/NAI_National_Workshop.aspx
http://www.interpnet.com/nai/Events/NAI_National_Workshop/nai/_events/NAI_National_Workshop.aspx

NAI Webinars – Online
The National Association for Interpretation hosts a variety of webinars designed to advance interpretation techniques and help you connect with your audiences. Upcoming webinars discuss advocacy vs lobbying, facilitated dialogue, and more.
http://www.interpnet.com/nai/Certification/Webinars/nai/_certification/Webinars.aspx?hkey=7c32c73e-3c21-4540-998e-45c82a050a96
http://www.interpnet.com/NAI/interp/Certification/Webinars/nai/_certification/Webinars.aspx
http://www.interpnet.com/NAI/interp/Certification/Other_Training/Webinars/nai/_certification/Webinars.aspx

NASA Aquarius Webinar Series - Online
The scientific aim of the Aquarius SAC/D satellite is to collect data on the salinity of the oceans, revealing information relevant to ocean circulation, the water cycle, and climate. The NASA Aquarius Webinar Series: Focus on Inquiry Education will present the free webinar, How Do We Teach Ocean Concepts in the High School Earth Science Classroom?, May 3, 2012.

http://cosee.umaine.edu/programs/webinars/aquarius/inquiry/

NASA Climate Change Lectures – DC and Online
NASA Goddard Space Flight Center and The Library of Congress are offering free public presentations by top NASA scientists on current topics, including climate change, urban sprawl, and natural disasters. The lectures will take place in Washington, DC and will also be posted on the Library of Congress website.

- Who Left the Freezer Door Open? What the Poles Are Telling Us About Climate Change, January 24, 2007
- Honey Bees, Satellites, and Climate Change, April 3, 2007
- City Lights, Spy Satellites, and Urban Sprawl, June 27, 2007
- Predicting, Observing, and Mitigating Damage from Fires and Other Natural Disasters, October 17, 2007

http://www.loc.gov/rr/scitech/events/events.html#cybercasts

NASA Earth Science Education Community Meeting - Florida
NASA will hold a second Earth science education community meeting on May 18-20, 2005, in Orlando, Florida, and invites diverse participation. At this meeting the Steering Committee will present a draft NASA earth science education roadmap for community review and comment. Classroom teachers are encouraged to apply for travel support, with an application deadline of April 4, 2005.
http://www.ncar.ucar.edu/eo//roadmap/

NASA Earth Scientist Lectures – Washington, D.C. and Online
NASA Goddard Space Flight Center and The Library of Congress announce free public presentations by NASA scientists on current topics such as climate change, urban sprawl, and natural disasters. For those unable to attend the event in person, the lectures will be recorded and available for viewing after the event on the website.
http://www.loc.gov/rr/scitech/events/events.html#cybercasts

NASA Educator Professional Development Webinars
NASA Educator Professional Development presents a series of free webinars open to all educators. Join NASA Education Specialists to learn about activities, lesson plans, educator guides, and resources to bring NASA into your classroom. Upcoming webinars include Seeing the World Without a Passport - Mission Geography, Art and the Cosmic Connection, and more.
https://events-na11.adobeconnect.com/content/connect/c1/1088539485/en/events/catalog.html
https://events-na11.adobeconnect.com/content/connect/c1/1088539485/en/events/catalog.html

NASA Endeavor Science Teaching Certificate
The NASA Endeavor Science Teaching Certificate Project awards one-year fellowships each year to more than 40 current and prospective teachers. In partnership with state departments of education, Endeavor Fellows take five graduate courses in a live online format and learn to apply research-based pedagogical strategies and cutting-edge STEM content to their classroom contexts.
http://www.us-satellite.net/endeavor/index.cfm

NASA and GLOBE Earth's Atmosphere Educator Workshop - Virginia
An educator workshop, *NASA Satellites Study Earth's Atmosphere: CALIPSO, CloudSat and Aura Partner with the GLOBE Program,* will be held July 9-15, 2006 in Hampton, Virginia. This workshop primarily targets middle school educators who will work with the missions by involving their students in collecting and reporting cloud observations and sun photometer data at the GLOBE Program Website. Applications are due March 10, 2006.
http://calipsooutreach.hamptonu.edu/va2006.html

NASA Ocean Mission Educator Conference - California
NASA's Ocean Surface Topography Mission on the Jason-2 satellite (OSTM/Jason-2) is scheduled to launch on June 15, 2008. An Educator Launch Conference will be held on June 14-15, 2008. OSTM will measure sea surface height; sea surface topography has numerous applications, including: predicting hurricane intensification, improving tide models, mapping deep ocean bathymetry, monitoring and forecasting El Niño Southern Oscillation, measuring the rate of global sea level rise, and charting surface currents.
http://endeavours.org/sec/

NASA STEM Webinars
The NASA STEM Educator Professional Development Collaborative presents a series of free webinars open to all educators. Check out both upcoming and archived webinars.
http://www.txstate-epdc.net/events/

NASA's Aquarius Educator Webinar Series – Online
NASA hosted a two-part webinar series on the Aquarius/SAC-D Satellite and the science behind what it takes to measure the salinity of the world's oceans.
http://cosee.umaine.edu/programs/webinars/aquarius/aqwebinarsjan2012/

National Climate Seminar – Phone-In
The National Climate Seminar is a bi-monthly, national phone conversation featuring climate scientists, political leaders, and policy analysts. This seminar is hosted by the Bard Center for Environmental Policy and will run through December 30, 2009. Participants can submit questions and comments. Note that the call-in number may not be free of charge.
http://www.bard.edu/cep/ncs/

National Conservation Training Center Courses – West Virginia
The U.S. Fish and Wildlife Service offers professional development courses at the National Conservation Training Center campus in West Virginia, many of which may be of interest to this group. For more information, contact the individual identified below.

- OUT8106: Powerful Presentation Tools and Techniques; July 14- 18, 2008; the deadline for registration is June 2, 2008; contact Juanita Gustines at juanita_gustines@fws.gov
- OUT8114: Volunteer Recruitment Management; August 5-8, 2008; the deadline for registration is June 23, 2008; contact Laura Jones at Laura_Jones@fws.gov
- OUT8181: Working with the News Media; August 4-6, 2008; the deadline for registration is June 20, 2008; contact Sandy Spakoff at sandy_spakoff@fws.gov
- OUT8122: Applying Collaboration to Complex Environmental Issues; August 11-15, 2008; the deadline for registration is May 30, 2008; contact Ora W. Dixon at Ora_Dixon@fws.gov

- OUT8121: Interest-Based Negotiation, June 15-17, 2009; the deadline for registration has been extended. Contact Ora W. Dixon at Ora_Dixon@fws.gov
- OUT8113: Developing and Working with Friends Organizations, June 29-July 1, 2009; call for availability. Contact Laura Jones at Laura_Jones@fws.gov
- OUT8194: Trail Management: Plans, Projects and People, ***August 3-7, 2009 in Homer, Alaska***; the deadline for registration is May 15, 2009. October 5-9, 2009 in Shephardstown, West Virginia; the deadline for registration is July 27, 2009. Contact Matt Gay at Matt_Gay@fws.gov
- OUT8114: Volunteer Recruitment and Management, August 11-14, 2009; the deadline for registration is June 2, 2009. Contact Laura Jones at Laura_Jones@fws.gov
- OUT8120: Advanced Volunteer Management, August 17-20, 2009; the deadline for registration is June 8, 2009. Contact Laura Jones at Laura_Jones@fws.gov
- OUT8116: Grant Writing for Conservation, September 9-11, 2009; the deadline for registration is July 6, 2009. Contact Ora Dixon at Ora_Dixon@fws.gov
- OUT8122: Applying Collaboration to Environmental Issues, September 14-18, 2009; the deadline for registration is July 6, 2009. Contact: Ora Dixon at Ora_Dixon@fws.gov
- OUT8194: Trail Management: Plans, Projects and People, March 29-April 2, 2010, San Rafael, California. The deadline for registration is January 18, 2010. Contact Matt Gay at Matt_Gay@fws.gov
- OUT8101: Public Outreach and Education: Overview and Program Planning, June 7-11, 2010 in Shepherdstown West Virginia. The deadline for registration is March 29, 2010. Contact Sandy Spakoff at sandy_spakoff@fws.gov
- OUT8163: Connecting People with Nature through Birds, June 21-24, 2010 in Brigham City, Utah. The deadline for registration is April 13, 2010. Contact Jim Siegel at Jim_Siegel@fws.gov
- OUT8106: Powerful Presentation Tools and Techniques, July 12- 16, 2010 in Shepherdstown West Virginia. The deadline for registration is May 3, 2010. Contact Don Tollefson at Don_Tollefson@fws.gov
- OUT8163: Connecting People with Nature through Birds, June 6-9, 2011; the deadline for registration is May 6, 2011. Contact Michelle Donlan at Michelle_Donlan@fws.gov
- OUT8107/NPS-INT4013: Earth to Sky V: Communicating Climate Change, September 26-30, 2011; the deadline for registration is June 15, 2011. Contact Susan DeStephanis at Susan_DeStephanis@fws.gov
- OUT8162: Education Programs for Youth: School's Out, April 29-May 1, 2013; the deadline for registration is February 17, 2013.
- OUT8108: Best Practices for Field Days Assessment, May 2-3, 2013; the deadline for registration is February 17, 2013.
- OUT8163: Connecting People with Nature through Birds, June 3-6, 2013; the deadline for registration is March 31, 2013.
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http://training.fws.gov/documents/Section1_NCTC_Sponsored_Courses.pdf

National Conservation Training Center Courses – West Virginia, Oregon
The U.S. Fish and Wildlife Service offers professional development courses at the National Conservation Training Center campus in West Virginia, many of which would be of interest to this group. For more information, contact the individual identified below

- OUT8101: Public Outreach and Education: Overview and Program Planning; April 21-25, 2008; the deadline for registration is March 3, 2008; contact Sandy Spakoff at sandy_spakoff@fws.gov
- OUT8119: Sustainable Funding Strategies for Non-Profit Partners; May 6-8, 2008; contact Laura Jones at laura_jones@fws.gov; NOTE: this course will take place in Portland, Oregon
- OUT8113: Developing and Working with Friends Groups; May 21-23, 2008; contact Laura Jones at laura_jones@fws.gov
- OUT8116: Grant Writing for Conservation; May 28-30, 2008; the deadline for registration is March 14; contact Ora Dixon at ora_dixon@fws.gov
- OUT 8127: Public Participation & Informed Consent–Part I, Bleiker Approach for Public Officials to Complex Problem-Solving; June 10-12, 2008; the deadline for registration is March 3, 2008; contact Ora Dixon at ora_dixon@fws.gov
- OUT8163: Connecting People to Nature through Birding; June 16-19, 2008; the deadline for registration is April 21, 2008; contact Juanita Gustines at Juanita_gustines@fws.gov
- OUT8121: Interest-Based Negotiation; June 30-July 2, 2008; the deadline for registration is April 22, 2008; contact Ora Dixon at ora_dixon@fws.gov
- OUT8106: Powerful Presentation Tools and Techniques; July 14-18-2008, the deadline for registration is June 2, 2008; contact Juanita Gustines at Juanita_gustines@fws.gov
- OUT8114: Volunteer Recruitment Management; August 5-8, 2008; contact Laura Jones at laura_jones@fws.gov
- (Formally LED 5136): Applying Collaboration to Complex Environmental Issues; August 11-15, 2008; contact Ora Dixon at ora_dixon@fws.gov
- OUT8127: *Public Participation and Informed Consent – Part I*, January 21-23, 2009, the deadline for registration is November 12, 2008. Contact Ora W. Dixon at Ora_Dixon@fws.gov
- OUT8115: *Balancing Nature and Commerce in Communities that Neighbor Public Lands,* January 26-29, 2009; the deadline for registration is December 5, 2008. Contact Laura Jones at Laura_Jones@fws.gov
- OUT 8128: *Public Participation & Informed Consent – Part II,* February 18-20, 2009; the deadline for registration is December 10, 2008. Contact Sandy Spakoff at sandy_spakoff@fws.gov
- OUT8144: *Developing Festivals and Special Events*, February 23-27, 2009; the deadline for registration is December 15, 2008. Contact Laura Jones at Laura_Jones@fws.gov
- *OUT8101: Public Public Outreach and Education: Overview and Program Planning*, March 30-April 3, 2009; the deadline for registration is January 19, 2009 (after deadline, call for availability). Contact Sandy Spakoff at Sandy_Spakoff@fws.gov.
- *OUT8113: Developing and Working with Friends Organizations*, May 27-29, 2009; the deadline for registration is March 18, 2009 (after deadline, call for availability). Contact Laura Jones at Laura_Jones@fws.gov.
- *OUT8119: Advanced Partnerships: Building Sustainable Revenues,* May 12-14, 2009. This is an advanced course for federal agency and non-profit partners engaged in an active partnership. There is no charge for FWS, NPS, or BLM federal employees' tuition. Contact Laura Jones at laura_jones@fws.gov

- OUT8163: Connecting People with Nature through Birds, June 1-4; the deadline for registration is March 23, 2009. Contact: Juanita Gustines at Juanita_Gustines@fws.gov
- OUT8121: Interest Based Negotiation, June 15-17, 2009; the deadline for registration is April 6, 2009. Contact Ora W. Dixon at Ora_Dixon@fws.gov
- TEC7163: Remote Camera Setup for Wildlife Management Course, June 9–11, 2009. Contact Matt Poole at Matt_Poole@fws.gov
- OUT8106: Powerful Presentation Tools and Techniques, July 27- 31, 2009; the deadline for registration May 18, 2009. Contact: Juanita Gustines at Juanita_Gustines@fws.gov
- OUT8181: Working with the News Media, August 3-5, 2009; the deadline for registration is May 26, 2009. Contact Sandy Spakoff at sandy_spakoff@fws.gov
- OUT8160: Environmental Education Methods, September 21-24, 2009; the deadline for registration is July 13, 2009. Contact Julie Study at Julie_Study@fws.gov
- OUT8194: Trail Management: Plans, Projects and People, October 5-9, 2009; the deadline for registration is July 27, 2009. Contact Matt Gay at Matt_Gay@fws.gov
- OUT8164: Creating a Schoolyard Habitat/Outdoor Classroom, November 2-6, 2009; the deadline for registration is August 24, 2009. Contact Julie Study at Julie_Study@fws.gov

Note that the following courses may still have some open slots even if the deadlines for registration have passed. Contact the individuals below for the latest information.

- OUT8121: Interest-Based Negotiation (prerequisite to 8122), June 15-17, 2009
- OUT8122: Applying Collaboration to Environmental Issues, September 14-18, 2009
- OUT8116: Grant Writing for Conservation, September 9-11, 2009

Contact Ora W. Dixon at Ora_Dixon@fws.gov

- OUT8106: Powerful Presentation Tools and Techniques, July 27- 31, 2009

Contact Juanita Gustines at juanita_gustines@fws.gov

- OUT8181: Working with the News Media, August 3-5, 2009, NCTC

Contact Sandy Spakoff at sandy_spakoff@fws.gov

- OUT8114: Volunteer Recruitment and Management, August 11-14, 2009
- OUT8120: Advanced Volunteer Management, August 17-20, 2009

Contact Laura Jones at Laura_Jones@fws.gov

- OUT8116: Grant Writing for Conservation, December 7-9, 2009; the deadline for registration is September 28, 2009. Contact Ora Dixon at Ora_Dixon@fws.gov.
- OUT8115: Balancing Nature and Commerce in Communities that Neighbor Public Lands, January 25-28, 2010; the deadline for registration is November 30, 2009. Contact Laura Jones at Laura_Jones@fws.gov
- OUT8116: Grant Writing for Conservation, December 7-9, 2009; the deadline for registration is September 28, 2009. Contact Ora Dixon at Ora_Dixon@fws.gov.
- OUT8115: Balancing Nature and Commerce in Communities that Neighbor Public Lands, January 25-28, 2010; the deadline for registration is November 30, 2009. Contact Laura Jones at Laura_Jones@fws.gov
- OUT8127: Public Participation and Informed Consent – Part I, February 17-19, 2010; the deadline for registration is December 14, 2009. Contact Jim Siegel at Jim_Siegel@fws.gov

- OUT8162: Education Programs for Youth: School's Out, March 8-10, 2010; the deadline for registration is December 28, 2009. Contact Julie Study at Julie_Study@fws.gov
- OUT8113: Developing and Working with Friends Organizations May 19-21, 2010. The deadline for registration is March 10, 2010. Contact Laura Jones at Laura_Jones@fws.gov
- OUT8121: Interest-Based Negotiation June 2-4, 2010. The deadline for registration is March 24, 2010. Contact Jim Siegel at Jim_Siegel@fws.gov
- OUT8101: Public Outreach and Education: Overview and Program Planning, June 7-11, 2010. The deadline for registration is March 29, 2010. Contact Sandy Spakoff at sandy_spakoff@fws.gov
- OUT8163: Connecting People with Nature through Birds, June 21-24, 2010 in Brigham City, Utah. The deadline for registration is April 13, 2010. Contact Jim Siegel at Jim_Siegel@fws.gov
- OUT8102: Education Program Evaluation, June 28-July 2, 2010 in Shepherdstown, West Virginia. The deadline for registration is March 24, 2010. Contact Jim Siegel at Jim_Siegel@fws.gov
- OUT8116: Grant Writing for Conservation, July 7-9, 2010 in Shepherdstown, West Virginia. The deadline for registration is April 28, 2010. Contact Ora Dixon at Ora_Dixon@fws.gov
- OUT8164: Creating a Schoolyard Habitat/Outdoor Classroom, October 18-22, 2010 in Mancelona, Michigan. The deadline for registration is August 16, 2010. Contact Julie Study at Julie_Study@fws.gov
- OUT8163: Connecting People with Nature through Birds, June 21-24, 2010 in Brigham City, Utah. Slots are still available. Contact Jim Siegel at Jim_Siegel@fws.gov
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http://training.fws.gov/documents/Section1_NCTC_Sponsored_Courses.pdf

National Conservation Training Center Courses – West Virginia
The U.S. Fish and Wildlife Service offers professional development courses at the National Conservation Training Center campus in West Virginia, many of which may be of interest to this group. For more information, contact the individual identified below.

- OUT8119: Sustainable Funding Strategies for Non-Profit Partners, September 3-5, 2008; call for availability; contact: Laura Jones at Laura_Jones@fws.gov
- OUT8194: Trail Management: Plans, Projects and People, October 6-10, 2008, the deadline for registration is July 28, 2008 - after deadline call for availability; contact Matt Gay at Matt_Gay@fws.gov

http://training.fws.gov/documents/Section1_NCTC_Sponsored_Courses.pdf

National Marine Sanctuaries Field Studies – Hawai'i
The National Marine Sanctuaries Field Studies in Hawai'i will take place August 4-9, 2005 on O'ahu, Hawai'i. NOAA's National Marine Sanctuary Program, in partnership with the National Geographic Society, offers hands-on ocean field studies based on educational standards, including subject areas such as marine science, water systems, habitat monitoring, and exploration. Teacher/student pair work will include snorkeling and fish identification on the coral reefs, studies of the local watershed, and more.
http://www.ngsednet.org/workshop_details.cfm?w_id=27

National Marine Sanctuaries Webinar Series - Online
Join sanctuary educators for this webinar series covering topics from albatrosses to shipwrecks and more. The webinars provide educators with educational and scientific expertise, resources, and training to support ocean and climate literacy in the classroom. Check out Winged Ambassador (March 24, 2016), Great Ships, Check out Rivers to Reefs: Understanding the Vital Connections Between Rivers and the Ocean, October 1, 2016. If you are unable to join the live webinars, they are archived for future viewing.
http://sanctuaries.noaa.gov/education/teachers/webinar-series.html

National Preservation Institute Training
The National Preservation Institute offers a series of professional training seminars for the management, development, and preservation of historic, cultural, and environmental resources related to historic preservation and cultural resource management. The Institute's Training Calendar, along with course descriptions, is available on the website.
www.npi.org

National Project for Excellence in EE Webinars
NAAEE offers this webinar series to help educators learn about the National Project for Excellence in EE. The upcoming webinar, Environmental Education Materials: Guidelines for Excellence, April 10, 2012, will guide participants through NAAEE's Environmental Education Materials: Guidelines for Excellence as a tool to self-evaluate your EE materials or programs. Registration is free and archived presentations are available from the website.
http://eelinked.naaee.net/n/guidelines

National Science Teachers Association's 2009 Conference
Submit a session proposal for NSTA's 2009 conferences, March 19-22, 2009 in New Orleans, Louisiana (March 19–22, 2009).
http://science.nsta.org/sessions/proposal_submission.asp

National Security and Climate Change - Online
The Southern Alliance for Clean Energy offers this free webinar, June 2, 2016, to help attendees better understand how climate change increases security risk by aggravating stressors such as poverty, environmental degradation, political instability, and social tensions that exacerbate violent conflict. Speakers will discuss how the military is working to meet the challenges of basing, training, equipping, and operating under such conditions.
https://climateandsecurity.org/2016/05/26/webinar-national-security-and-climate-change/#more-8912

Natural Hazards Research and Applications Workshop
The theme for the annual Natural Hazards Research and Applications Workshop, July 9-12, 2017 in Broomfield, Colorado is Knowledge to Action: Reducing Hazards Losses and Promoting Disaster Resilience. Attendance is by invitation only. Check out the student volunteer opportunities or request an invitation.
https://hazards.colorado.edu/workshop/2017

Nature Mapping for Beaches Training
Tacoma Nature Center will offer a Nature Mapping for Beaches Training, November 10, 2009 in Port Townsend, Washington. The workshop is for educators interested in

education based marine programs on local beaches who want to enrich their current programs to include the collection of marine fish and invertebrate data for the statewide managed biodiversity database, and use inquiry based approaches to promote a field investigation design in their marine education programs in order to explore beaches.
http://www.coseeolc.net/event-detail.cfm?EventID=72

NSTA Web Seminars
NSTA Web Seminars are free, 90-minute, live professional development experiences that use online learning technologies to allow participants to interact with subject matter experts and education specialists. The programs are live and interactive and all online tools are provided. Seminars may be archived and available for viewing after the live event has occurred. *Watershed Dynamics* will be offered December 8, 2005 and February 16, 2006. A new series of seminars is scheduled between September 2006 and March 2007. Topics include the ocean's role in weather and climate, energy, the International Polar Year, and more. Registration is required.
http://institute.nsta.org/web_seminars.asp

National System of MPAs Public Dialogue - Maine
The National Marine Protected Areas Center is holding a series of public dialogues around the country to solicit and collect input that will be used to develop the framework for the national system of marine protected areas. Each forum will begin with a presentation from MPA Center staff on our current plans. Participants will break into small groups to ask questions, discuss relevant issues, and provide input on the national system. The New England Region Public Dialogue will be held on May 16, 2005, in Portland, Maine.
http://mpa.gov/national_system/

National Teachers Enhancement Network
The National Teachers Enhancement Network (NTEN), delivers teaching resources and professional development opportunities through the Internet directly to K-12 science teachers. University scientists, engineers, mathematicians, and science educators teach NTEN's graduate courses. Educators access electronic teacher resources, discuss issues with other educators, and participate in high-quality graduate tele-computing courses, including the *Global Warming, Climate Change and our Environment* course.
http://scienceteacher.org/courses.htm

Natural Disasters - Online
This course from edX examines the science behind different types of natural disasters and our ability or inability to control and predict such events. The twelve-week course, starting January 14, 2015, is free to audit.
https://www.edx.org/course/natural-disasters-mcgillx-atoc185x#.VKG5Nv984
https://www.edx.org/course/natural-disasters-mcgillx-atoc185x-1

Natural History and Conservation of Florida Turtles Summer Workshops - Florida
The fourteenth annual summer workshops for formal and non-formal educators on the natural history and conservation of Florida turtles provide educators with an introduction to the ecology and conservation of Florida turtles through both classroom presentations and first-hand field experiences.

- Boyd Hill Nature Park, St. Petersburg, June 5-8, 2006.
- Guana Tolomato Matanzas National Estuarine Research Reserve, Ponte Vedra Beach, June 12-15 2006

- Apalachicola National Estuarine Research Reserve, Apalachicola, June 19-22, 2006
- June 4-7, 2007 in St. Petersburg, Florida,

http://heinrichecologicalservices.com/2006registration.pdf
http://www.heinrichecologicalservices.com/programs.html

Natural Resource Communications Techniques and Technologies – West Virginia
This Natural Resource Communications Techniques and Technologies course (OUT8106), June 6-10, 2005, July 17-21, 2006, in Shepherdstown, West Virginia, is designed to help natural resource professionals communicate more effectively through oral presentations using dynamic visuals aids. Topics include developing communication strategies for specific audiences, creating computer-generated PowerPoint images, and solving equipment problems. A special session entitled "Verbal Victories" (SM) provides hints for handling difficult or hostile audiences. The course combines lecture, role-playing, demonstration, and practice in making presentations on natural resource topics.
Contact Juanita Gustines at Juanita_Gustines@fws.gov
http://training.fws.gov/catalog/coursecontents.html

Nature and Environmental Writers - College and University Educators - Maine
Nature and Environmental Writers - College and University Educators (NEW-CUE), Inc. is a non-profit, environmental education organization founded primarily to assist writers and educators who are dedicated to enhancing the public's awareness of environmental issues. The Fourth NEW-CUE Writers' Conference and Workshop in honor of Rachel Carson will be held June 13-16, 2006 in Boothbay Harbor, Maine, with the theme of *Wilderness/Wildness.* Conference enrollment is limited to 100 participants.
http://www.new-cue.org/

Nature Photography Workshop - Maryland
The Assateague Island Nature Photography Workshop, April 19-21, 2013 in Berlin, Maryland, is designed for those with a basic knowledge of the operation of a 35 mm SLR digital camera, an interest in nature photography, and the desire to improve their photographic skills and optimize the use of their camera. The workshop is limited to 10 participants.
http://shop.assateagueislandalliance.org/product.sc?productId=117&categoryId=22

NEOSEC Café - Online
The NEOSEC Café is a monthly, virtual reading club that doubles as an informal professional development opportunity. This initiative aspires to share current literature related to research and practice in marine education with colleagues by conference call. Each call is hosted by a NEOSEC (New England Ocean Science Education Collaborative) member representative who will present a summary of the reading and lead a discussion. The café is the second Wednesday of the month.
Contact Carole McCauley at C.McCauley@neu.edu

NEOSEC Ocean Literacy Summit – New Hampshire
The New England Ocean Science Education Collaborative's (NEOSEC) 2010 Ocean Literacy Summit will be held on November 11-13, 2010 in Durham, New Hampshire.
http://www.neosec.org/previous-summits/2010-summit

NERRS Education Calendar of Events
NOAA's National Estuarine Research Reserve System (NERRS) offers an online Education Calendar of Events. This searchable calendar allows users to find education activities by type, date, or reserve. Listings of events include the event title, date, location, contact, hosting reserve, and category (i.e. community ed/outreach, K-12 student, or post-secondary programs). Whenever available, visitors can also link to additional information.
http://www8.nos.noaa.gov/publicnerrs/eduevents.aspx

New England Aquarium Workshops - Massachusetts
The New England Aquarium in Boston, Massachusetts offers a variety of professional development courses for teachers. Upcoming opportunities focus on bioluminescence, changing oceans, watershed education, and more. See the website for details, including deadlines for registration.
http://www.neaq.org/education_and_activities/teacher_resources/professional_development/workshops/index.php

New England Aquarium's Summer Institutes - Massachusetts
New England Aquarium's professional development programs are designed to provide firsthand experience in inquiry based science to participants at the aquarium through behind-the-scenes tours, field trips, and classroom activities. The following programs are based in Boston, Massachusetts; see the website for complete details, including follow-up dates.

- Watershed Education Course, July 27–29, 2011
- On the Waterfront: Integrating Science Standards through Classroom and Field Investigations, August 8–13, 2011
- Museum Institute for Teaching Science, July 11-22, 2011

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

New Graduate Programs – Florida and North Carolina
A new graduate program offered at the Rosenstiel School of Marine and Atmospheric Science (RSMAS), University of Miami is the Master's of Professional Science. The curriculum combines study in select areas of marine and atmospheric science with interdisciplinary coursework in business, public health, communications, law, and other professional domains. Duke Environment at the Nicholas School is offering a two-year Master of Environmental Management with a specialized Environmental Economics and Policy concentration in Environmental Economics and Policy and a three-year concurrent Master of Environmental Management/Master of Public Policy degree from the Nicholas School and Sanford School of Public Policy.
http://mps.rsmas.miami.edu/
http://www.nicholas.duke.edu/programs/professional/concurrent

New Jersey Teach at the Beach
The New Jersey Marine Education Association announces *Teach At The Beach* in Camden, New Jersey, May 14, 2004. The workshops and activities are designed to provide educators of all grades and disciplines with ideas, resources, lesson plans and programs dedicated to utilizing marine and aquatic environments as a background to classroom teaching.
http://hometown.aol.com/newjerseymea/register.html .

New Journeys Workshop – New York
Join NOAA's National Ocean Service, the Hudson River National Estuarine Research Reserve, and Project Indigenous for the free New Journeys Traditional Environmental Education and Climate Change Workshop, August 3-4, 2014 in Staatsburg New York. Educators will learn about the role of culture, tradition, ceremony, and respect in Native American communities and the importance of including the Indigenous community when discussing issues impacting the local environment
https://docs.google.com/a/noaa.gov/spreadsheet/viewform?usp=drive_web&formkey=dHV4SFduQXR5dEctRXhRa2pWUkFGa3c6MA#gid=0

New Perspectives on MPA Performance: Linking Knowledge to Action – Online and Washington, D.C.
WWF is hosting a free international symposium on November 5, 2010 in Washington, D.C., reviewing knowledge of Marine Protected Areas as a foundation for both science-based policy and policy-relevant science. Note that there is a webcast option for attendance.
http://www.worldwildlife.org/science/fellowships/fuller/fuller-symposium-2010.html

New York State Marine Education Association Conference – New York
The theme for the 32nd New York State Marine Education Association Annual Conference, June 8, 2008 in New York, New York, is Seafood, Sea Turtles, and a Sea Legacy. Join them with their host, the American Museum of Natural History, for an enriching experience in marine science. The theme for the New York State Marine Education Association Annual Conference, June 5-7, 2009 in Southampton, New York, is *Estuaries – Sustaining the Sea!*
http://www.nysmea.org/con09/NYSMEA09.htm
http://www.nysmea.org/con08/NYSMEA08.htm

NGSS Climate Education with the CLEAN Collection - Online
The Climate Literacy and Energy Awareness Network (CLEAN) Collection is a digital library of free climate and energy learning resources, including activities, videos, short demonstrations, and guidance for teaching. This free webinar from the National Association of Geoscience Teachers highlighted ways in which climate and energy learning is included in NGSS will describe the resources available through CLEAN, and will show attendees how to use CLEAN for their NGSS needs.
http://nagt.org/nagt/profdev/workshops/ngss_summit/CLEAN_res/index.html

NGSS Professional Development Workshop - Connecticut
The New England Ocean Sciences Education Collaborative and partners offer formal and informal educators this free workshop, December 11, 2014 in Groton, Connecticut. Participants will examine curricular connections between the Next Generation Science Standards and State Environmental Literacy Plans in order to become familiar and comfortable with both documents as they become guiding standards for secondary science education.
Contact Lauren Rader at lrader@oceanology.org

NGSS Web Seminars - Online
NSTA offers this free Next Generation Science Standards Web Seminar series for educators teaching grades K-5. The summer series includes Constructing explanations from evidence, Making meaning through discourse, and Planning a coherent storyline.
http://learningcenter.nsta.org/products/symposia_seminars/NGSS/webseminar.aspx

Ninetyeast Ridge Expedition – Indian Ocean
Prior to scientific ocean drilling projects, marine geological research expeditions explore and map the areas proposed for drilling. The Ninetyeast Ridge Expedition, one such site survey of one of the longest linear features on Earth, will be conducted June 15-August 15, 2007. One educator will be selected as part of the Teacher at Sea Program, to participate and to interpret the expedition for a variety of shore-based audiences.
http://joilearning.org/training/default.html

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

NNOCCI Study Circle
The National Network for Ocean Climate Change Interpretation is a collaborative effort to establish a national network of professionals skilled in communicating climate science to the American public. The study circle is a cross-disciplinary learning group made up of peers with expertise from fields of professional interpretation, climate and ocean sciences and communications, and cultural sciences.
http://www.climateinterpreter.org/features/apply-join-nnocci-study-circle-november-4-2012

NOAA Ocean Explorers Educators' Workshop – Hawai'i
Bring the excitement of modern day explorers to your teaching with this NOAA Ocean Explorers' Workshop, February 24, 2007 in Honolulu, Hawai'i. Stipends cover time, teaching materials, travel costs (including costs from neighbor islands), and a copy of Learning Ocean Sciences through Ocean Exploration curricula and CD-ROM. Since part of the program is web-based, your librarian or IT team member are welcome as well.
http://www.waquarium.org/class/family.html#noaa_ocean_explorers

NOAA Ocean Exploration Professional Development Workshops - Mississippi
The Gulf Coast Research Laboratory, University of Southern Mississippi, J.L. Scott Marine Education Center presents NOAA Ocean Exploration Professional Development Workshops for science educators of grades 6-12 on June 30, 2008, in Ocean Springs, Mississippi, with a follow-up workshop October 17, 2008.
Contact Dr. Shelia Brown, shelia.brown@usm.edu

NOAA Ocean Exploration Workshop – New York
Join Dr. Valerie Chase for a hands-on, secondary earth and life science workshop using some of the more than 200 lessons from the Ocean Explorer website during this free, pre-NMEA conference workshop on July 16, 2006 in New York, New York. The activities emphasize the use of real ocean science data in a classroom setting. The workshop is first come, first served for 32 participants.
Contact Dr. Valerie Chase at vchase529@worldnet.att.net

NOAA Ocean Exploration Workshop – North Carolina
Bring the excitement of current ocean science discoveries to your students using the Ocean Exploration curriculum and CD-ROM's of the Ocean Explorer website at this workshop, July 28, 2006 in Kure Beach, North Carolina.
http://www.oceanexplorer.noaa.gov
Contact Danielle Wallace at Danielle.Wallace@ncmail.net
Alabama - September 16, 2006, with Part II on March 24, 2007 on Dauphin Island, Alabama. Contact Denise Keaton at dkeaton@disl.org

NOAA Open House for Educators - Maryland
NOAA invites you to learn more about its programs and educational resources. The NOAA Science Center in Silver Spring, Maryland will be open on July 17, 2007 to teachers and informal educators to meet NOAA scientists and educational specialists and find out about resources, websites, and programs that engage students in the science of NOAA. Free educational resources will be available.
Contact Karrie Carnes at Karrie.Carnes@noaa.gov

NOAA Seminars
NOAA offers a series of Science Seminars in Silver Spring, Maryland, which can be joined off-site through video, webcast, or by phone. You can view the schedule through Google Calendar, which offers links to a detailed description of the seminar along with viewing and listening methods when available. For example, Stephen Weisberg will present *New opportunities in beach water quality monitoring* on April 11, 2007. You can also join the seminar email list by contacting Hernan Garcia at Hernan.Garcia@noaa.gov.
http://www.google.com/calendar/embed?src=39n13ap56usih9flusufcft34o%40group.calendar.google.com&dates=20070401%2F20070501

NOAA Why Do We Explore? - Alabama
Join Dauphin Island Sea Lab for an Okeanos Explorer Education Materials Collection Why Do We Explore? Professional Development Workshop for Educators, November 7, 2015 on Dauphin Island, Alabama. Educators who attend both Part I AND Part II: How Do We Explore will receive a stipend. The deadline for registration is October 16, 2015.
http://www.disl.org/educational-programs/professional-development-for-educators/list-of-workshops/

North Cascades Institute Birding Seminars - Washington
The North Cascades Institute offers a variety of winter birding seminars. Led by experienced naturalists, most seminars are one day with transportation provided. The three-day retreat not only addresses birds but looks at Skagit Delta winter ecology, land use and habit conservation by landowners.

- January 7, 2006: Bald Eagles and Salmon of the Skagit River
- January 14-16, 2006: Skagit Delta Naturalists Retreat: Lowlands, Rich
- Lands
- January 21, 2006: Winter Birds of the Skagit and Samish Deltas
- February 4, 2006: Water Birds of Bellingham Bay aboard the Snow Goose
- February 5, 2006: White Birds of Winter
- February 11, 2006: Trumpeter Swans: Ecology and Conservation

http://www.ncascades.org

Northwest Aquatic and Marine Educators Conference - Washington
The Northwest Aquatic and Marine Educators will host their annual conference, *Living on an Island: Salish Sea Stewardship,* July 9-12, 2008 on San Juan Island, Washington.
http://www.wsg.washington.edu/education/events/name.html

Northeastern University Summer Programs - Massachusetts
Northeastern University's Marine Science Center offers a two week summer program for students, teacher workshops, and other programs. For science teachers of grades 6-12, the *Survey of New England Coastal Ecosystems*, focuses on rocky intertidal zone, sandy beach, and salt marsh New England coastal habitats, along with current research in each. Summer opportunities for students entering grades 9-10 in the fall include the *Coastal Ocean Science Academy*.
http://www.ace.neu.edu/pdp/programs/science

Northwest Earth Institute Discussion Courses
The Northwest Earth Institute offers a series of self-facilitated discussion courses in which participants examine personal values and habits, stimulate conversation, consider ways to take action toward creating a more sustainable future, and more. Courses include Choices for Sustainable Living, Discovering a Sense of Place, Global Warming: Changing CO2urse, and more.
http://www.nwei.org/discussion_courses/course-offerings/course-offerings

NOSB Webinars - Online
The National Ocean Sciences Bowl (NOSB) offers professional development opportunities for middle and high school educators focusing on the 2014 NOSB competition theme, Ocean Acidification. The purpose of the series is to provide teachers with the opportunity to enhance their knowledge of topics related to ocean acidification.
http://nosb.org/professional-development/

NSDL Brown Bag Webinars - Online
The National Science Digital Library (NSDL) Resource Center offers monthly Brown Bag webinars on topics of interest to STEM educators at all levels. Sessions are typically scheduled for the final week of the month. Learn about trends and issues in education, technology use in educational settings, and useful tools, services, and best practices. Check out upcoming brown bags and look through the archives for information about open source technology tools you can use.
http://nsdl.org/pd/?pager=brownbag

NSELA Summer Leadership Institute - Florida
The theme of the National Science Education Leadership Association's 2015 Summer Leadership Institute, June 23-26, 2015 in Tampa, Florida is *Science Leaders Building the STEM Future Together: Partnerships, Stewardship, & Collaboration*.
http://www.nsela.org/SLI

NSTA International Polar Year Web Seminars - Online
NSTA's Web Seminars offers two free online seminars designed for educators of grades 5–8 on *The Role of Polar Regions in Earth's Changing Climate System*, November 27 and December 13, 2007, featuring scientists and education specialists from NASA. The seminars will focus on the International Polar Year and how polar regions interact with Earth's climate system; atmospheric gas changes over Earth's history; what ice cores tell us about past climate; and the implications of climate change in the polar regions.

http://learningcenter.nsta.org/products/symposia_seminars/fall07/IPY_Denver/webseminar.aspx

NSTA – NSDL Web Seminars - Online
The National Science Teachers Association and the National Science Digital Library (NSDL) will partner once again, offering web seminars for teacher professional development that showcases NSDL experts and resources. The presenters within the NSDL community of trusted educational and research-based organizations will share their expertise and answer questions live during a 90-minute online program straight from your desktop. Archive versions of each presentation will be provided.
http://nsdl.org/resources_for/k12_teachers/?pager=professional_development

NSTA Web Seminars
NSTA Web Seminars are 90-minute, live professional development experiences that use online learning technologies to allow participants to interact with experts, education specialists, and others. Seminars may be archived and available for viewing after the live event has occurred. Upcoming seminars focus on corals, polar science, and more. Check out the upcoming seminars, including Weather and Climate: Satellite Meteorology; Meteorology: How Clouds Form; and more.
http://learningcenter.nsta.org/products/webseminars.aspx

NSTA Web Seminars - Online
NSTA offers free online seminars on the NGSS through YouTube. The latest are a series of twelve videos on disciplinary core ideas which have the power to focus K–12 science curriculum, instruction, and assessments.
https://www.youtube.com/playlist?list=PL2pHc_BEFW2JjWYua2_z3ccHEd6x5jIBK

NSTA Web Seminar – Coral Ecosystems
NSTA Web Seminars are 90-minute, live professional development experiences that use online learning technologies to allow participants to interact with nationally acclaimed experts, scientists, education specialists, and others from NSTA government partners such as NASA and NOAA. NOAA: Coral Ecosystems will be presented on June 7, 2006. Registration is required.
http://institute.nsta.org/Anaheim/coral/webseminar.asp

NSTA Web Seminar: Using the Learning Center as Your e-Textbook
NSTA presents the free webinar, Using the Learning Center as Your e-Textbook with Preservice Teachers, for professor of science preservice teachers, December 10, 2013. Learn how to create an integrated learning experience for your students with a customized interactive e-Textbook leveraging the NSTA Learning Center. Participants will receive a SciPack of their choice along with other materials.
http://learningcenter.nsta.org/products/symposia_seminars/NLC/webseminar33.aspx

NTEN Online Courses
The National Teachers Enhancement Network (NTEN) provides quality online science courses developed just for teachers, created by a collaborative team of scientists and in-service teachers. The courses contain rich science content and emphasize discussion and collaboration among participants. Upcoming courses include Biology of Riparian Zones and Wetlands, Environmental Measurement: Sensors and Electronics, Construction of Curriculum, Fundamentals of Oceanography, Environmental

Measurement: Sensors and Electronics, Streamside Science: Hands-On Approaches to Water Quality Education, and more.
http://btc.montana.edu/courses/aspx/ntenindex.aspx

Ocean Acidification Curriculum Webinar - Online
The Channel Islands National Park and Channel Islands National Marine Sanctuary Ocean Acidification Curriculum is a series of middle school lessons that use the park and sanctuary as a backdrop for learning about ocean acidification. The webinar will provide an overview of curriculum which includes eight lessons that are aligned with Common Core and Next Generation Science Standards. Space is limited; free registration is required.
https://attendee.gotowebinar.com/register/1263495359764788738

Ocean Acidification Teacher Workshop - Florida
Participants will learn to use real data from NOAA to teach ocean acidification and how it affects coral reefs and other marine calcifiers through the five integrated, scalable lesson plans associated with the ocean acidification module. The workshops will include hands-on demonstrations and experiments, a background science presentation on ocean acidification, and a walk-through of the five lesson plans and data exercises that are part of this Data-in-the-Classroom project.
http://coralreef.noaa.gov/education/educators/resources/2011_fl_wkshps.pdf

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

Ocean Adventures Workshops - California
KQED Public Broadcasting has partnered with The Oakland Zoo and River of Words to present educator workshops for upper elementary, middle school, and high school teachers to celebrate the PBS series, *Jean-Michel Cousteau: Ocean Adventures.* Learn about marine debris and invasive species and the educational materials available on the series website.

- Making Sense of Marine Debris; June 17, 2006; Berkeley; www.kqedrow.mollyguard.com
- Invasive Species around the World; June 22, 2006; Oakland; www.kqedoaklandzoo.mollyguard.com

Additional workshops will include The Gray Whale Obstacle Course in August and Sharks at Risk and America's Underwater Treasures in September, 2006.
ScienceEd@kqed.org.

Ocean Awareness Through Aquarium Education – North Carolina
Join aquarium staff and marine education specialists to experience science education driven by ocean awareness in this free Ocean Awareness Through Aquarium Education workshop. Activities will connect teachers to aquariums and oceans, as resources for

discovery and relevant science education. Teachers participating in this workshop receive CEU credit, classroom activities, posters, and other useful materials.
Contact Danielle Wallace at Danielle.Wallace@ncmail.net

Ocean Awareness Day - Georgia
Georgia Aquarium, in partnership with COSEE–Southeast, presents *Ocean Awareness Day: Climate Change - Cause and Effect*, November 6, 2010 in Atlanta, Georgia, an educator workshop for middle and high school teachers to reinforce their background knowledge about ocean sciences and to explore ocean scenarios associated with global climate change. This event is free but pre-registration is required.
http://www.georgiaaquarium.org/education/teachers/professional-development.aspx

Ocean Awareness Days – Georgia and South Carolina
The following institutions are hosting workshops for high and middle level teachers during events called Ocean Awareness Day workshops. Each workshop focuses on various marine themes for middle and high school teachers in their local area. Please contact the appropriate person for more information.

- March 4 2006, Carrollton Georgia – Steve Rich at srich@westga.edu
- March 25, 2006, Athens, Georgia – Kate Mowbray at katemowbray@co.clarke.ga.us
- April 1, 2006, Ravenel, South Carolina – registration, Amy Oser at aoser@ccprc.com or content questions, Sara Marhenke at smarhenke@ccprc.com

Ocean Awareness Training – Hawai'i
The Oahu Winter 2012 Ocean Awareness Training Program provides multidisciplinary knowledge of Hawaii's unique marine environment. Workshops will be held on five consecutive Tuesdays.
http://www.oceanawarehawaii.org/

Ocean Bound for History 2011 - Massachusetts
Board the schooner *Harvey Gamage*, and sail along the New England coast from Gloucester, Massachusetts for this continuing education program by Ocean Classroom, for middle and high school teachers of history and literature. Studies are guided by maritime studies professors, with hands-on activities, direct exploration, formal readings, and discussions to give teachers an understanding of the role of maritime studies in history and literature, oceanography, environmental issues, and applied mathematics.
Contact Susan Hodder at mail@oceanclassroom.org

Ocean Exploration Professional Development Workshop - Oregon
Bring the excitement of current ocean science discoveries to your students using NOAA's Ocean Exploration curriculum and CD-ROM's of the Ocean Explorer Web site, June 17, 2006 in Corvallis, Oregon. Perform inquiry- and standards-based activities tied directly to ocean expeditions. Participants receive a copy of the Learning Ocean Science through Ocean Exploration curriculum and CD-ROM's.
www.oceanexplorer.noaa.gov
Contact Melissa Feldberg at melissa.feldberg@oregonstate.edu

Ocean Exploration and Research Professional Development - Online
NOAA's Office of Ocean Exploration and Research, in partnership with The College of Exploration, offers free online professional development, providing educators with in-

depth studies into specific ocean science content through the context of ocean exploration. The online campus setting provides a venue for educators worldwide to meet, view keynote addresses given by ocean explorers, and ask questions of keynote speakers online. Hands-on and inquiry-based activities, along with many other resources, are provided in a facilitated environment. The following courses are scheduled:

- Why Do We Explore? Okeanos Explorer Online Teacher Professional Development Series, Offering #2, June 21–July 2, 2010. The workshop features keynote addresses by ocean explorers who have made significant ocean discoveries, inquiry-based lessons for all grade-levels, and facilitated online reflective conversations about the importance of ocean exploration on a global scale. Areas of focus include climate change, energy, human health and ocean health.
- How Do We Explore? Okeanos Explorer Online Teacher Professional Development Series, Offering #3, October 11 - 29, 2010. Topics will include searching for anomalies, selecting sites for exploration, communication tools including telepresence technology, mapping techniques, water column study, and operating remotely operated vehicles.

http://coexploration.org/oe/
http://oceanexplorer.noaa.gov/edu/development/online_development.html

Ocean Exploration Workshop – Florida

NOAA's Ocean Exploration Program and partners offer the Okeanos Explorer Education Materials Collection Professional Development Workshops for Educators. Participants will receive classroom-ready lessons, certificates of participation, and other resources. Volume 2: How Do We Explore? Professional Development for Educators of Grades 5-12 will take place July 30, 2016 with the University of South Florida College of Marine Science in St. Pete Beach, Florida.
Contact Teresa Greely at greely@marine.usf.edu

Ocean Exploration Workshops – Various

NOAA's Ocean Exploration Program and partners offer Exploring the Deep Ocean with NOAA Professional Development Workshops for Educators. Participants will receive classroom-ready lessons, certificates of participation, and other resources. Contact the noted educator or check out the website for registration and more information.

- September 24, 2016 with Birch Aquarium at Scripps Institution of Oceanography in San Diego, California. The deadline for registration is September 2, 2016. Contact Audrey Evans at eaudrey@ucsd.edu
- October 1, 2016 with the North Carolina Aquarium at Fort Fisher, in Fort Fisher, North Carolina. The deadline for registration is September 9, 2016. Contact Jennifer Metzler-Fiorino at jennifer.metzler-fiorino@ncaquariums.com
- October 1, 2016 Oregon Museum of Science and Industry, in Portland, Oregon. The deadline for registration is September 23, 2016. Contact Nate Lesiuk at nlesiuk@omsi.edu
- October 8, 2016 with the University of South Florida College of Marine Science, in St. Pete Beach, Florida. The deadline for registration is September 16, 2016. Contact Teresa Greely at greely@marine.usf.edu
- October 15, 2016 with Dauphin Island Sea Lab, on Dauphin Island, Alabama. The deadline for registration is September 23, 2016. Contact Sara Johnson at sejohnson@disl.org

- October 15, 2016 with the Georgia Aquarium, in Atlanta, Georgia. The deadline for registration is September 23, 2016. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- October 15, 2016 with the John G. Shedd Aquarium, in Chicago, Illinois. The deadline for registration is September 23, 2016. Contact Jackie Formoso at jformoso@sheddaquarium.org
- October 22, 2016 with the New England Aquarium, in Boston, Massachusetts. The deadline for registration is September 30, 2016. Contact Tania Slywynskyj at tslywynskyj@neaq.org
- October 29, 2016 with the National Aquarium, in Baltimore, Maryland. The deadline for registration is October 7, 2016. Contact David Christopher at dchristopher@aqua.org
- December 3, 2016 with the Aquarium of the Pacific in Long Beach, California. The deadline for registration is November 11, 2016. Contact Staci Wong at swong@lbaop.org
- December 3, 2016 with the South Carolina Aquarium in Charleston, South Carolina. The deadline for registration is November 11, 2016. Contact Jaime Thom at jthom@scaquarium.org
- October 15, 2016 with Dauphin Island Sea Lab, on Dauphin Island, Alabama. Space is still available. Contact Sara Johnson at sejohnson@disl.org
- November 5, 2016 with the University of South Florida in St. Petersburg, Florida. The deadline for registration is October 14, 2016. Contact Angela Lodge at alodge@usf.edu
- November 5, 2016 with the North Carolina Aquarium at Fort Fisher, North Carolina. The deadline for registration is October 15, 2016. Contact Casey Radley at casey.radley@ncaquariums.com
- February, 18, 2017 with the Dauphin Island Sea Lab on Dauphin Island, Alabama. The deadline for registration is January 27, 2017. Contact Sara Johnson at sejohnson@disl.org
- February, 25, 2017 with the Oregon Museum of Science and Industry in Portland, Oregon. The deadline for registration is February 3, 2017. Contact Nate Lesiuk at nlesiuk@omsi.edu
- March 25, 2017 with the University of South Florida College of Marine Science in St. Petersburg, Florida. The deadline for registration is March 3, 2017. Contact Teresa Greely at greely@marine.usf.edu
- April 8, 2017 with the New England Aquarium in Boston, Massachusetts. The deadline for registration is March 17, 2017. Contact Christine Chirch-Cassidy at trc@neaq.org
- April 22, 2017 with the Aquarium of the Pacific in Long Beach, California. The deadline for registration is March 31, 2017. Contact Staci Wong at swong@lbaop.org
- April 22, 2017 with the South Carolina Aquarium, Charleston in South Carolina. The deadline for registration is March 31, 2017. Contact Jaime Thom at jthom@scaquarium.org
- April 29, 2017 with the National Aquarium in Baltimore, Maryland. The deadline for registration is April 7, 2017. Contact David Christopher at dchristopher@aqua.org
- May 6, 2017 with the Birch Aquarium at Scripps Institution of Oceanography in San Diego, California. The deadline for registration is April 14, 2017. Contact Cari Paulenich at cpaulenich@ucsd.edu

- April 22, 2017 with the Aquarium of the Pacific in Long Beach, California. The deadline for registration is March 31, 2017. Contact Staci Wong at swong@lbaop.org
- April 22, 2017 with the South Carolina Aquarium in Charleston, South Carolina. The deadline for registration is March 31, 2017. Contact Jaime Thom at jthom@scaquarium.org
- April 29, 2017 with the National Aquarium in Baltimore, Maryland. The deadline for registration is April 7, 2017. Contact David Christopher at dchristopher@aqua.org
- May 6, 2017 with the Birch Aquarium at Scripps Institution of Oceanography in San Diego, California. The deadline for registration is April 14, 2017. Contact Cari Paulenich at cpaulenich@ucsd.edu
- May 6, 2017 with the John G. Shedd Aquarium in Chicago, Illinois. The deadline for registration is April 14, 2017. Contact Laura Lytle at llytle@sheddaquarium.org
- April ,1 2017 with the Audubon Aquarium of the Americas in Ruston, Louisiana. The deadline for registration is March 10, 2017. Contact Stephanie Smith at educationprograms@auduboninstitute.org
- May 13, 2017 with the North Carolina Aquarium at Fort Fisher in North Carolina. The deadline for registration is April 21, 2017. Contact Casey Radley at casey.radley@ncaquariums.com
- May 20, 2017 with the North Carolina Aquarium at Pine Knoll Shores in Pine Knoll Shores, North Carolina. The deadline for registration is April 28, 2017. Contact Pam Pittman at pamela.pittman@ncaquariums.com
- June 20, 2017 with the Science and Technology Education Center in Ruston, Louisiana. The deadline for registration is May 30, 2017. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
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http://oceanexplorer.noaa.gov/edu/development/development.html

Learning Ocean Science through Ocean Exploration - Various
NOAA's Ocean Exploration Program and partners will offer introductory Learning Ocean Science through Ocean Exploration professional development workshops for grade 5-12 science teachers, with follow-up workshops at later dates. Participants will receive the curriculum with CD-ROM's, certificates of participation, and more. Contact the noted educator for registration and more information.

- San Diego, California with SeaWorld Adventure Camp, September 20, 2008; deadline for registration is August 29, 2008. Contact Adrienne Marriott at Creec9a@hotmail.com
- Norfolk, Virginia with the National Maritime Center and Norfolk Public Schools, September 27, 2008; deadline for registration is September 8, 2008. Contact Veronica Haynes at vhaynes@nps.k12.va.us
- New Orleans, Louisiana with Audubon Aquarium of the Americas, October 11, 2008; deadline for registration is September 26, 2008. Contact Gail Gainey at ggainey@AudubonInstitute.org
- Charleston, South Carolina South with the Carolina Aquarium, October 18, 2008; deadline for registration is October 10, 2008. Contact Brian Thill at BThill@scaquarium.org

- Chicago, Illinois with John G. Shedd Aquarium, November 15, 2008; the deadline for registration is October 31, 2008. Contact Amy Christiansen at AChristian@sheddaquarium.org
- Alabama – with Dauphin Island Sea Lab, September 13, 2008, with a follow-up workshop May 14, 2009, Dauphin Island, Alabama. The deadline for registration is August 22, 2008. Contact Denise Keaton at dkeaton@disl.org
- Massachusetts – with New England Aquarium, October 11, 2008, with a follow-up workshop May 16, 2009 in Boston, Massachusetts. Contact Jayshree Oberoi at oberoi@neaq.org
- Tennessee – with Tennessee Aquarium, August 23, 2008, with a follow-up workshop on May 2, 2009 in Chattanooga, Tennessee. The deadline for registration is August 11, 2008. Contact George Bartnik at gpb@tennis.org
- Florida – with University of South Florida College of Marine Science, September 20, 2008 in St. Petersburg, Florida. The deadline for registration is August 29, 2008. Contact Teresa Greely at greely@marine.usf.edu
- California – with SeaWorld Adventures, October 4, 2008, with a follow-up workshop January 31, 2009, San Diego, California. The deadline for registration is September 26, 2008. Contact Adrienne Marriott at Creec9a@hotmail.com or register at http://www.creec.org/region9a.
- Georgia – with Georgia Aquarium, November 1, 2008, Atlanta, Georgia. The deadline for registration is October 10, 2008. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- Oregon – with Oregon Museum of Science & Industry, November 8, 2008, Portland, Oregon. The deadline for registration is October 24, 2008. Contact Nancee Hunter at nancee.hunter@oregonstate.edu
- Florida – with University of South Florida College of Marine Science, November 22, 2008, St. Petersburg, Florida. The deadline for registration is November 7, 2008. Contact Teresa Greely at greely@marine.usf.edu
- California – with Aquarium of the Pacific, December 6, 2008, Los Angeles, California. The deadline for registration is November 14, 2008. Contact Alie Lebeau at ALebeau@lbaop.org
- Maryland with the National Aquarium in Baltimore, April 4, 2009. The deadline for registration is March 20, 2009. Contact Joe Harber at jharber@aqua.org
- Oregon with the Oregon Museum of Science & Industry, a follow-up Professional Development Workshop for Teachers, April 4, 2009. The deadline for registration is March 20, 2009. Contact Nancee Hunter at nancee.hunter@oregonstate.edu
- Illinois with the John G. Shedd Aquarium, a follow-up Professional Development Workshop for Teachers, April 18, 2009. The deadline for registration is April 3, 2009. Contact Amy Christiansen at AChristian@sheddaquarium.org
- Louisiana with the Audubon Aquarium of the Americas, a follow-up Professional Development Workshop for Teachers, April 18, 2009. The deadline for registration is April 3, 2009. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- October 17, 2009 with the New England Aquarium, Boston, Massachusetts. The deadline for registration is October 2, 2009. Contact Jayshree Oberoi at joberoi@neaq.org
- October 24, 2009 with The National Aquarium, Baltimore, Maryland, a follow-up workshop. The deadline for registration is October 9, 2009. Contact Joe Harber at jharber@aqua.org

- November 7, 2009 with Hatfield Marine Science Center, Newport, Oregon. The deadline for registration is October 23, 2009. Contact Tracy Crews at tracy.crews@oregonstate.
- November 14, 2009 with John G. Shedd Aquarium, Chicago, Illinois. The deadline for registration is October 30, 2009. Contact Amy Christiansen at AChristian@sheddaquarium.org
- November 14, 2009 with SeaWorld Adventure Camp, San Diego, California. The deadline for registration is October 30, 2009. Contact Adrienne Marriott at Creec9a@hotmail.com
- November 21, 2009 with Audubon Aquarium of the Americas, New Orleans, Louisiana. The deadline for registration is November 6, 2009. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- December 5, 2009 with SeaWorld Adventure Camp, San Diego, California. The deadline for registration is November 30, 2009. Contact Adrienne Marriott at Creec9a@hotmail.com
- December 12, 2009 with the Aquarium of the Pacific, Los Angeles, California. The deadline for registration is November 23, 2009. Contact Alie Lebeau atalebeau@lbaop.org
- December 12, 2009 with the South Carolina Aquarium, Charleston, South Carolina. The deadline for registration is November 23, 2009. Contact Brian Thill at BThill@scaquarium.org
- January 23, 2010 with Tennessee Aquarium, Chattanooga, Tennessee. The deadline for registration is January 8, 2010. Contact George Bartnik at gpb@tennis.org
- January 30, 2010 with Nauticus, The National Maritime Center. The deadline for registration is January 15, 2010. Contact Jennifer Tabor at jennifer.tabor@norfolk.gov
- February 6, 2010 with SeaWorld Adventure Camp, San Diego, California (a follow up workshop). The deadline for registration is January 22, 2010. Contact Adrienne Marriott at Creec9a@hotmail.com
- March 6, 2010 with Georgia Aquarium, Atlanta, Georgia. The deadline for registration is February 19, 2010. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- March 6, 2010 with Dauphin Island Sea Lab, Dauphin Island, Alabama. The deadline for registration is February 19, 2010. Contact Denise Keaton at dkeaton@disl.org
- March 13, 2010 with Audubon Aquarium of the Americas, New Orleans, Louisiana. The deadline for registration is February 26, 2010. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- March 20, 2010 with University of South Florida College of Marine Science, St. Petersburg, Florida. The deadline for registration is March 5, 2010. Contact Teresa Greely at greely@marine.usf.edu
- April 10, 2010 with Hatfield Marine Science Center, Oregon, a follow-up workshop. The deadline for registration is March 29, 2010. Contact Contact Tracy Crews attracy.crews@oregonstate.edu
- April 10, 2010 with John G. Shedd Aquarium, Chicago, Illinois, an introductory workshop. The deadline for registration is March 29, 1010. Contact Amy Christiansen at AChristian@sheddaquarium.org

- April 17, 2010 with National Aquarium in Baltimore, Maryland, an introductory workshop. The deadline for registration is April 2, 2010. Contact Joe Harber at jharber@aqua.org
- September 18, 2010 with Georgia Aquarium in Atlanta, Georgia. The deadline for registration is September 3, 2010. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- September 25, 2010 with Dauphin Island Sea Lab on Dauphin Island, Alabama. The deadline for registration is September 10, 2010. Contact Sara Johnson at sejohnson@disl.org
- October 2, 2010 with Audubon Aquarium of the Americas in New Orleans, Louisiana. The deadline for registration is September 17, 2010. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- October 9, 2010 with the University of South Florida College of Marine Science in St. Petersburg, Florida. The deadline for registration is September 24, 2010. Contact Teresa Greely at greely@marine.usf.edu
- October 16, 2010 with Nauticus, The National Maritime Center in Virginia, an introductory workshop. The deadline for registration is October 1, 2010. Contact Jennifer Tabor at jennifer.tabor@norfolk.gov
- October 23, 2010 with the South Carolina Aquarium, in Charleston, South Carolina, an introductory workshop. The deadline for registration is October 8, 2010. Contact Jaime Coomes at jcoomes@scaquarium.org
- October 23, 2010 with the National Aquarium in Baltimore, Maryland, a follow-up workshop. The deadline for registration is October 8, 2010. Contact Jennifer Aiken at jaiken@aqua.org
- November 6, 2010 with New England Aquarium in Boston, Massachusetts, an introductory workshop, with a follow-up workshop in May, 2011. The deadline for registration is October 22, 2010. Contact Jayshree Oberoi at joberoi@neaq.org
- November 6, 2010 with Birch Aquarium at Scripps in San Diego, California, an introductory workshop, with a follow-up workshop March 12, 2011. The deadline for registration is October 22, 2010. Contact Adrienne Marriott at Creec9a@hotmail.com.
- November 13, 2010 with Hatfield Marine Science Center in Oregon, an introductory workshop. The deadline for registration is October 22, 2010. Contact Tracy Crews at tracy.crews@oregonstate.edu.
- November 13, 2010 with John G. Shedd Aquarium inChicago, Illinois, an introductory workshop, with a follow-up workshop April 9, 2011. The deadline for registration is October 29, 2010. Contact Jackie Formoso at jformoso@sheddaquarium.org.
- November 13, 2010 with John G. Shedd Aquarium in Chicago, Illinois, an introductory workshop, with a follow-up workshop April 9, 2011. Registration is still open. Contact Jackie Formoso at jformoso@sheddaquarium.org
- November 13, 2010 with Hatfield Marine Science Center in Newport, Oregon, an introductory workshop, with a follow-up workshop April 16, 201. Registration is still open. Contact Tracy Crews at tracy.crews@oregonstate.edu
- December 4, 2010 with Aquarium of the Pacific in Los Angeles, California, an introductory workshop, with a follow-up workshop May 14 2011. The deadline for registration is November 19, 2010. Contact Alie Lebeau at alebeau@lbaop.org.
- February 26, 2011 with Georgia Aquarium in Atlanta, Georgia, a follow-up workshop. The deadline for registration is February 11, 2011. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org

- February 26, 2011 with Dauphin Island Sea Lab on Dauphin Island, Alabama, a follow-up workshop. The deadline for registration is February 11, 2011. Contact Sara Johnson at sejohnson@disl.org
- February 26, 2011 with Georgia Aquarium in Atlanta, Georgia, a follow-up Learning Ocean Science through Ocean Exploration workshop. The deadline for registration is February 11, 2011. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- February 26, 2011 with Dauphin Island Sea Lab on Dauphin Island, Alabama, a follow-up Learning Ocean Science through Ocean Exploration workshop. The deadline for registration is February 11, 2011. Contact Sara Johnson at sejohnson@disl.org
- March 5, 2011 with Nauticus, The National Maritime Center in Norfolk, Virginia, a follow-up Learning Ocean Science through Ocean Exploration workshop. The deadline for registration is February 18, 2011. Contact Jennifer Tabor at jennifer.tabor@norfolk.gov
- March 5, 2011 with Birch Aquarium at Scripps in San Diego, California, a follow-up Learning Ocean Science through Ocean Exploration workshop. The deadline for registration is February 18, 2011. Contact Adrienne Marriott at Creec9a@hotmail.com
- March 26, 2011 with National Aquarium in Baltimore, Maryland. Why Do We Explore?, an introductory professional development workshop for teachers. The deadline for registration is March 11, 2011. Contact Joe Harber at Jharber@aqua.org
- March 26, 2011 with Audubon Aquarium of the Americas in New Orleans, Louisiana, a follow-up Learning Ocean Science through Ocean Exploration workshop. The deadline for registration is March 11, 2011. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- February 26, 2011 with Adventure Science Center in Nashville, Tennessee, a Learning Ocean Science through Ocean Exploration professional development workshop. Hurry – the deadline for registration is February 4, 2011. Contact Sharon Mendonsa at smendonsa@adventuresci.com
- February 26, 2011 with Jacques Cousteau National Estuarine Research Reserve in Tuckerton, New Jersey, a Learning Ocean Science through Ocean Exploration professional development workshop. Hurry – the deadline for registration is February 4, 2011. Contact Melanie Reding at reding@marine.rutgers.edu
- March 11, 2011 at NSTA in San Francisco, a Short Course, NOAA Ship Okeanos Explorer: Why Do We Explore? and How Do We Explore? This new course will delve into the benefits of ocean exploration targeting climate change, energy, human health, and ocean health. Participants will also explore the philosophy behind selecting sites for exploration and searching for anomalies, communication tools, mapping techniques, water column study, and remotely operated vehicles. http://nsta.org/conferences/schedule.aspx?id=2011san&action=search&format=Workshop
- *NOTE THIS DATE CHANGE:* April 2, 2011 with Audubon Aquarium of the Americas in New Orleans, Louisiana, a follow-up Learning Ocean Science through Ocean Exploration workshop. The deadline for registration is March 18, 2011. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- April 9, 2011 with University of South Florida College of Marine Science in St. Petersburg, Florida, a follow-up Learning Ocean Science Through Ocean

Exploration workshop. The deadline for registration is March 25, 2011. Contact Teresa Greely at greely@marine.usf.edu

- April 9, 2011 with John G. Shedd Aquarium in Chicago, Illinois, a follow-up Learning Ocean Science Through Ocean Exploration workshop. The deadline for registration is March 25, 2011. Contact Jackie Formoso at jformoso@sheddaquarium.org
- April 16, 2011 with Hatfield Marine Science Center in Oregon, a follow-up Learning Ocean Science Through Ocean Exploration workshop. The deadline for registration is April 1, 2011. Contact Tracy Crews at tracy.crews@oregonstate.edu
- May 7, 2011 with New England Aquarium, Boston, Massachusetts, a follow-up Learning Ocean Science Through Ocean Exploration workshop. The deadline for registration is April 22, 2011. Contact Gina Cerrito at gcerrito@neaq.org
- May 14, 2011 with South Carolina Aquarium, Charleston, South Carolina, a follow-up Learning Ocean Science Through Ocean Exploration workshop. The deadline for registration is April 29, 2011. Contact Jaime Thom at jthom@scaquarium.org
- May 14, 2011 with Aquarium of the Pacific, Los Angeles, California, a follow-up Learning Ocean Science Through Ocean Exploration workshop. The deadline for registration is April 29, 2011. Contact Alie Lebeau at alebeau@lbaop.org
- June 16, 2011 with J.L. Scott MEC and Aquarium, Ocean Springs, Mississippi, an
- Introductory Professional Development Institute for Teachers. The deadline for registration is June 2, 2011. Contact Shelia Brown at shelia.brown@usm.edu
- June 17, 2011 with J.L. Scott MEC and Aquarium, Ocean Springs, Mississippi, a follow-up Learning Ocean Science Through Ocean Exploration workshop. The deadline for registration is June 2, 2011. Contact Shelia Brown at shelia.brown@usm.edu
- December 1, 2011 with J.L. Scott MEC and Aquarium in Ocean Springs, Mississippi, an Introductory Professional Development Institute for Teachers. The deadline for registration is November 17, 2011. Contact Shelia Brown at shelia.brown@usm.edu
- December 2, 2011 with J.L. Scott MEC and Aquarium in Ocean Springs, Mississippi, a Follow Up Professional Development Institute for Teachers. The deadline for registration is November 17, 2011. Contact Shelia Brown at shelia.brown@usm.edu
- February 2, 2013 with National Aquarium in Baltimore, Maryland. The deadline for registration is January 11, 2013. Contact David Christopher at dchristopher@aqua.org.
- March 2, 2013 with University of South Florida College of Marine Science, St. Pete Beach, Florida. The deadline for registration is February 8, 2013. Contact Teresa Greely at greely@marine.usf.edu.
- March 2, 2013 with South Carolina Aquarium, Charleston, South Carolina. The deadline for registration is February 8, 2013. Contact Jaime Thom at jthom@scaquarium.org.
- March 9, 2013 with Seattle Aquarium, Seattle, Washington. The deadline for registration is February 15, 2013. Contact Dan Newburn at d.newburn@seattleaquarium.org.
- March 9, 2013 with Audubon Aquarium of the Americas, New Orleans, Louisiana. The deadline for registration is February 15, 2013. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org.

- March 16, 2013 with Dauphin Island Sea Lab, Dauphin Island, Alabama. The deadline for registration is February 22, 2013. Contact Sara Johnson at sejohnson@disl.org.
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Ocean Exploration Workshops - Various

NOAA's Ocean Exploration Program and partners offer professional development workshops for science teachers. 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.

Okeanos Explorer Education Materials Collection, Volume 1: Why Do We Explore? Professional Development Workshops for Educators:

Also, the Okeanos Explorer Education Materials Collection, How Do We Explore?

- November 5, 2011 with South Carolina Aquarium in Charleston, South Carolina. The deadline for registration is October 21, 2011. Contact Jaime Thom at jthom@scaquarium.org
- November 19, 2011 with John G. Shedd Aquarium in Chicago, Illinois. The deadline for registration is November 4, 2011. Contact Jackie Formoso at jformoso@sheddaquarium.org
- November 19, 2011 with Aquarium of the Pacific in Los Angeles, California. The deadline for registration is November 4, 2011. Contact Alie Lebeau at alebeau@lbaop.org
- November 19, 2011 with the National Aquarium in Baltimore, Maryland. The deadline for registration is November 4, 2011. Contact Joe Harber at Jharber@aqua.org
- December 3, 2011 with Dauphin Island Sea Lab on Dauphin Island, Alabama. The deadline for registration is November 18, 2011. Contact Sara Johnson at sejohnson@disl.org
- December 3, 2011 with Birch Aquarium at Scripps in San Diego, California. The deadline for registration is November 18, 2011. Contact Adrienne Marriott at Creec9a@hotmail.com
- January 7, 2012 with Hatfield Marine Science Center in Newport, Oregon. The deadline for registration is December 16, 2011. Contact Tracy Crews at tracy.crews@oregonstate.edu
- January 14, 2012 with Audubon Aquarium of the Americas in New Orleans, Louisiana. The deadline for registration is December 21, 2011. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- January 28, 2012 with Nauticus, The National Maritime Center in Norfolk, Virginia. The deadline for registration is January 13, 2012. Contact Jennifer Tabor at jennifer.tabor@norfolk.gov
- February 25, 2012 with Dauphin Island Sea Lab on Dauphin Island, Alabama. The deadline for registration is February 10, 2012. Contact Sara Johnson at sejohnson@disl.org
- February 25, 2012 with South Carolina Aquarium in Charleston, South Carolina. The deadline for registration is February 10, 2012. Contact Jaime Thom at jthom@scaquarium.org
- March 3, 2012 with Georgia Aquarium, Atlanta, Georgia. The deadline for registration is February 17, 2012. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org

- March 10, 2012 with University of South Florida College of Marine Science in St. Petersburg, Florida. The deadline for registration is February 24, 2012. Contact Teresa Greely at greely@marine.usf.edu
- March 17, 2012 with Aquarium of the Pacific in Los Angeles, California. The deadline for registration is March 2, 2012. Contact Alie Lebeau at alebeau@lbaop.org
- April 21, 2012 with John G. Shedd Aquarium in Chicago, Illinois. The deadline for registration is April 6, 2012. Contact Jackie Formoso at jformoso@sheddaquarium.org
- April 21, 2012 with Hatfield Marine Science Center in Newport, Oregon. The deadline for registration is April 6, 2012. Contact Tracy Crews at tracy.crews@oregonstate.edu
- April 21, 2012 with Audubon Aquarium of the Americas in New Orleans, Louisiana. The deadline for registration is April 6, 2012. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- April 28, 2012 with New England Aquarium in Boston, Massachusetts. The deadline for registration is April 13, 2012. Contact Gina Cerrito at gcerrito@neaq.org
- May 5, 2012 with Birch Aquarium at Scripps in San Diego, California. The deadline for registration is April 20, 2012. Contact Adrienne Marriott at Creec9a@hotmail.com
- May 5, 2012 with the National Aquarium in Baltimore, Maryland. The deadline for registration is April 20, 2012. Contact Joe Harber at Jharber@aqua.org
- May 12, 2012 with Mystic Aquarium in Mystic, Connecticut.. Contact the Reservations Department at reservations@mysticaquarium.org
- June 2, 2012 with the Smithsonian Institution's Sant Ocean Hall in Washington, D.C. The deadline for registration is May 18, 2012. Contact Trish Mace at macet@si.edu
- August 11, 2012 with Birch Aquarium at Scripps in San Diego, California. The deadline for registration is July 27, 2012. Contact Adrienne Marriott at Creec9a@hotmail.com
- August 11, 2012 with Nauticus, The National Maritime Center in Norfolk, Virginia. The deadline for registration is July 27, 2012. Contact Jennifer Kodolitsch at jennifer.tabor@norfolk.gov
- September 29, 2012 with National Aquarium in Baltimore, Maryland. The deadline for registration is September 7, 2012. Contact David Christopher at dchristopher@aqua.org
- October 13, 2012 with Birch Aquarium at Scripps in San Diego, California. The deadline for registration is September 21, 2012. Contact Adrienne Marriott at Creec9a@hotmail.com
- October 20, 2012 with New England Aquarium in Boston, Massachusetts. The deadline for registration is September 28, 2012. Contact Tania Slywynskyj at tslywynskyj@neaq.org
- October 20, 2012 with University of South Florida College of Marine Science in St. Petersburg, Florida. The deadline for registration is September 28, 2012. Contact Teresa Greely at greely@marine.usf.edu
- October 27, 2012 with John G. Shedd Aquarium in Chicago, Illinois. The deadline for registration is October 5, 2012. Contact Jackie Formoso at jformoso@sheddaquarium.org

- November 10, 2012 with Hatfield Marine Science Center in Newport, Oregon. The deadline for registration is October 19, 2012. Contact Tracy Crews at tracy.crews@oregonstate.
- November 17, 2012 with Dauphin Island Sea Lab on Dauphin Island, Alabama. The deadline for registration is October 26, 2012. Contact Sara Johnson at sejohnson@disl.org
- November 17, 2012 with Georgia Aquarium in Atlanta, Georgia. The deadline for registration is October 26, 2012. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- December 1, 2012 with Aquarium of the Pacific in Long Beach, California. The deadline for registration is November 9, 2012. Contact Alie Lebeau at alebeau@lbaop.org
- December 8, 2012 with South Carolina Aquarium in Charleston, South Carolina. The deadline for registration is November 16, 2012. Contact Jaime Thom at jthom@scaquarium.org
- December 15, 2012 with Seattle Aquarium in Seattle, Washington. The deadline for registration is November 26, 2012. Contact Dan Newburn at d.newburn@seattleaquarium.org
- January 12, 2013 with Audubon Aquarium of the Americas in New Orleans, Louisiana. The deadline for registration is December 21, 2012. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- January 26, 2013 with Old Dominion University in Norfolk, Virginia. The deadline for registration is January 4, 2012. Contact Jennifer Kodolitsch at jennifer.tabor@norfolk.gov
- February 2, 2013 with National Aquarium in Baltimore, Maryland. The deadline for registration is January 11, 2013. Contact David Christopher at dchristopher@aqua.org.
- March 2, 2013 with University of South Florida College of Marine Science, St. Pete Beach, Florida. The deadline for registration is February 8, 2013. Contact Teresa Greely at greely@marine.usf.edu.
- March 2, 2013 with South Carolina Aquarium, Charleston, South Carolina. The deadline for registration is February 8, 2013. Contact Jaime Thom at jthom@scaquarium.org.
- March 9, 2013 with Seattle Aquarium, Seattle, Washington. The deadline for registration is February 15, 2013. Contact Dan Newburn at d.newburn@seattleaquarium.org.
- March 9, 2013 with Audubon Aquarium of the Americas, New Orleans, Louisiana. The deadline for registration is February 15, 2013. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org.
- March 16, 2013 with Dauphin Island Sea Lab, Dauphin Island, Alabama. The deadline for registration is February 22, 2013. Contact Sara Johnson at sejohnson@disl.org.
- **Note**: There has been a change in schedule and the workshop scheduled with the National Aquarium in Baltimore, Maryland will now be held March 23, 2013. The new deadline for registration is March 1, 2013. Contact David Christopher at dchristopher@aqua.org
- April 6, 2013 with Hatfield Marine Science Center, Newport, Oregon. The deadline for registration is March 15, 2013. Contact Tracy Crews at tracy.crews@oregonstate.edu

- April 6, 2013 with Aquarium of the Pacific, Long Beach, California. The deadline for registration is March 15, 2013. Contact Alie Lebeau at alebeau@lbaop.org
- April 13, 2013 with John G. Shedd Aquarium, Chicago, Illinois. The deadline for registration is March 22, 2013. Contact Jackie Formoso at jformoso@sheddaquarium.org
- April 27, 2013 with Birch Aquarium at Scripps, San Diego, California. The deadline for registration is April 5, 2013. Contact Adrienne Marriott at Creec9a@hotmail.com
- May 4, 2013 with New England Aquarium, Boston, Massachusetts. The deadline for registration is April 12, 2013. Contact Tania Slywynskyj at tslywynskyj@neaq.org
- June 22, 2013 with Audubon Aquarium of the Americas, New Orleans, Louisiana. The deadline for registration is May 31, 2013. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- April 13, 2013 with John G. Shedd Aquarium, Chicago, Illinois. The deadline for registration has passed, but contact Jackie Formoso at jformoso@sheddaquarium.org
- April 27, 2013 with Birch Aquarium at Scripps, San Diego, California. The deadline for registration is April 5, 2013. Contact Adrienne Marriott at Creec9a@hotmail.com
- May 4, 2013 with New England Aquarium, Boston, Massachusetts. The deadline for registration is April 12, 2013. Contact Tania Slywynskyj at tslywynskyj@neaq.org
- June 22, 2013 with Audubon Aquarium of the Americas, New Orleans, Louisiana. The deadline for registration is May 31, 2013. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- June 22, 2013 with Georgia Aquarium, Atlanta, Georgia. The deadline for registration is May 31, 2013. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- June 1, 2013 with Birch Aquarium at Scripps, San Diego, California. The deadline for application is May 17, 2013. Contact Adrienne Marriott at Creec9a@hotmail.com
- July 20, 2013 with Hatfield Marine Science Center, Newport, Oregon. The deadline for application is June 28, 2013. Contact Tracy Crews at tracy.crews@oregonstate.edu
- August 10, 2013 with Nauticus, the National Maritime Center (hosted at Old Dominion University), Norfolk, Virginia. The deadline for application is July 19, 2013. Contact Tammie Weitzman at Tammie.weitzman@norfolk.gov
- June 1, 2013 with Birch Aquarium at Scripps, San Diego, California. The deadline for application is May 17, 2013. Contact Adrienne Marriott at Creec9a@hotmail.com
- July 20, 2013 with Hatfield Marine Science Center, Newport, Oregon. The deadline for application is June 28, 2013. Contact Tracy Crews at tracy.crews@oregonstate.edu
- August 10, 2013 with Nauticus, the National Maritime Center (hosted at Old Dominion University), Norfolk, Virginia. The deadline for application is July 19, 2013. Contact Tammie Weitzman at Tammie.weitzman@norfolk.gov
- August 13, 2013 with The Maritime Aquarium at Norwalk, Norwalk, Connecticut. The deadline for application is July 30, 2013, or call to see if space is still available. Contact Donna Vinci at dvinci@maritimeaquarium.org

- August 14, 2013 with the University of Rhode Island's Inner Space Center in Narragansett, Rhode Island. The deadline for application is August 7, 2013, or call to see if space is still available. Contact Andrea Gingras at agingras@mail.uri.edu
- August 24, 2013 with Seattle Aquarium in Seattle, Washington; The deadline for application is August 2, 2013 Contact Dan Newburn at d.newburn@seattleaquarium.org

How Do We Explore?

- August 9, 2013 with Mystic Aquarium in Mystic, Connecticut. The deadline for application has passed; call to see if space is still available. Contact Zachary Zeilman at {860) 572-5955
- October 11, 2013 with Hatfield Marine Science Center in Newport, Oregon. The deadline for application is September 20, 2013. Contact Tracy Crews at tracy.crews@oregonstate.edu

Why Do We Explore?

- September 21, 2013 with Dauphin Island Sea Lab on Dauphin Island, Alabama. The deadline for application is August 30, 2013. Contact Sara Johnson at sejohnson@disl.org
- September 28, 2013 with National Aquarium in Baltimore, Maryland. The deadline for application is September 6, 2013. Contact David Christopher at dchristopher@aqua.org
- October 5, 2013 with Nauticus, the National Maritime Center in Norfolk, Virginia. The deadline for application is September 13, 2013. Contact Tammie Weitzman at Tammie.weitzmann@norfolk.gov
- October 12, 2013 with Audubon Aquarium of the Americas in New Orleans, Louisiana. The deadline for application is September 20, 2013. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- October 19, 2013 with Georgia Aquarium in Atlanta, Georgia. The deadline for application is September 27, 2013. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- October 19, 2013 with New England Aquarium in Boston, Massachusetts. The deadline for application is September 27, 2013. Contact Tania Slywynskyj at tslywynskyj@neaq.org
- October 26, 2013 with University of South Florida College of Marine Science in St. Pete Beach, Florida. The deadline for application is October 4, 2013. Contact Teresa Greely at greely@marine.usf.edu
- November 2, 2013 with the Seattle Aquarium in Seattle, Washington. The deadline for application is October 11, 2013. Contact Dan Newburn for information at d.newburn@seattleaquarium.org
- November 9, 2013 with John G. Shedd Aquarium in Chicago, Illinois. The deadline for application is October 18, 2013. Contact Jackie Formoso at jformoso@sheddaquarium.org
- November 16, 2013 with South Carolina Aquarium in Charleston, South Carolina. The deadline for application is October 25, 2013. Contact Jaime Thom at jthom@scaquarium.org
- November 23 with 2013 with Aquarium of the Pacific in Long Beach, California. The deadline for application is November 1, 2013. Contact Alie Lebeau at alebeau@lbaop.org

- December 14, 2013 with Seattle Aquarium in Seattle, Washington. The deadline for application is November 22, 2013. Contact Dan Newburn at d.newburn@seattleaquarium.org
- January 25, 2014 with National Aquarium in Baltimore, Maryland. The deadline for application is January 8, 2014. Contact David Christopher at dchristopher@aqua.org
- February 1, 2014 with Audubon Aquarium of the Americas, New Orleans, Louisiana. The deadline for application is January 10, 2014. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- February 8, 2014 with Oregon Museum of Science and Industry, Portland, Oregon. The deadline for application is January 17, 2014. Contact Tracy Crews at tracy.crews@oregonstate.edu

How Do We Explore?

- March 1, 2014 with Dauphin Island Sea Lab, Dauphin Island, Alabama. The deadline for application is February 7, 2014. Contact Sara Johnson at sejohnson@disl.org
- March 15, 2014 with the Georgia Aquarium in Atlanta, Georgia. The deadline for application is February 21, 2014. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- March 29, 2014 with the National Aquarium in Baltimore, Maryland. The deadline for application is March 7, 2014. Contact David Christopher at dchristopher@aqua.org
- March 29, 2014 with the South Carolina Aquarium in Charleston, South Carolina. The deadline for application is March 7, 2014. Contact Jaime Thom at jthom@scaquarium.org
- April 5, 2014 with Aquarium of the Pacific in Long Beach, California. The deadline for application is March 14, 2014. Contact Staci Wong at swong@lbaop.org
- April 5, 2014 with John G. Shedd Aquarium in Chicago, Illinois. The deadline for application is March 14, 2014. Contact Jackie Formoso at jformoso@sheddaquarium.org
- April 12, 2014 with the University of South Florida College of Marine Science in St. Pete Beach, Florida. The deadline for application is March 21, 2014. Contact Teresa Greely at greely@marine.usf.edu
- April 19, 2014 with the Oregon Museum of Science and Industry in Portland, Oregon. The deadline for application is March 28, 2014. Contact Tracy Crews at tracy.crews@oregonstate.edu
- 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
- May 3, 2014 with the New England Aquarium in Boston, Massachusetts. The deadline for application is April 11, 2014. Contact Tania Slywynskyj at tslywynskyj@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
- 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 eaudrey@ucsd.edu

- June 28, 2014 with the Audubon Aquarium of the Americas in New Orleans, Louisiana. The deadline for registration is June 6, 2014. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- August 2, 2014 with Dauphin Island Sea Lab on Dauphin Island, Alabama. The deadline for registration is July 12, 2014. Contact Sara Johnson at sejohnson@disl.org

Why do we explore

- October 4, 2014 with University of South Florida College of Marine Science in St. Pete Beach, Florida. The deadline for registration is September 12, 2014. Contact Teresa Greely at greely@marine.usf.edu
- October 4, 2014 with Georgia Aquarium in Atlanta, Georgia. The deadline for registration is September 12, 2014. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- October 4, 2014 with Dauphin Island Sea Lab in Dauphin Island, Alabama. The deadline for registration is September 12, 2014. Contact Sara Johnson at sejohnson@disl.org
- October 25, 2014 with New England Aquarium in Boston, Massachusetts. The deadline for registration is October 3, 2014. Contact Tania Slywynskyj at tslywynskyj@neaq.org
- October 25, 2014 with New England Aquarium in Boston, Massachusetts. The deadline for registration is October 3, 2014. Contact Tania Slywynskyj at tslywynskyj@neaq.org
- November 1, 2014 with Aquarium of the Pacific in Long Beach, California. The deadline for registration is October 10, 2014. Contact Staci Wong at swong@lbaop.org
- November 8, 2014 with South Carolina Aquarium, Charleston in South Carolina. The deadline for registration is October 17, 2014. Contact Jaime Thom at jthom@scaquarium.org
- November 1, 2014 with Aquarium of the Pacific in Long Beach, California. The deadline for registration is October 10, 2014. Contact Staci Wong at swong@lbaop.org
- November 15, 2014 with John G. Shedd Aquarium in Chicago, Illinois. The deadline for registration is October 24, 2014. Contact Jackie Formoso at jformoso@sheddaquarium.org
- November 15, 2014 with the National Aquarium in Baltimore, Maryland. The deadline for registration is October 24, 2014. Contact David Christopher at dchristopher@aqua.org
- November 15, 2014 with the North Carolina Aquarium at Pine Knoll Shores in Pine Knoll Shores, North Carolina. The deadline for registration is October 24, 2014. Contact Pam Pittman at pamela.pittman@ncaquariums.com
- November 15, 2014 with the Oregon Museum of Science and Industry in Portland, Oregon. The deadline for registration is October 24, 2014. Contact Nate Lesiuk at nlesiuk@omsi.edu
- January 24, 2015 with the Dauphin Island Sea Lab on Dauphin Island, Alabama; Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is January 9, 2015. Contact Sara Johnson at sejohnson@disl.org

How Do We Explore?

- October 4, 2014 with Birch Aquarium at Scripps Institution of Oceanography in San Diego, California. The deadline for registration is September 12, 2014. Contact Audrey Evans at eaudrey@ucsd.edu
- October 18, 2014 with Seattle Aquarium in Seattle, Washington. The deadline for registration is September 26, 2014. Contact Dan Newburn at d.newburn@seattleaquarium.org
- January 10, 2015 with the Oregon Museum of Science and Industry in Portland, Oregon; The deadline for registration is December 19, 2014. Contact Nate Lesiuk at nlesiuk@omsi.edu
- February 28, 2015 with the North Carolina Aquarium at Pine Knoll Shores at Pine Knoll Shores, North Carolina; The deadline for registration is February 6, 2015. Contact Pam Pittman at pamela.pittman@ncaquariums.com
- March 7, 2015 with the Seattle Aquarium in Seattle, Washington; Why Do We Explore? The deadline for registration is February 13, 2015. Contact Dan Newburn at d.newburn@seattleaquarium.org
- March 14, 2015 with the South Carolina Aquarium in Charleston, South Carolina; How Do We Explore? The deadline for registration is February 20, 2015. Contact Jaime Thom at jthom@scaquarium.org
- March 14, 2015 with the Georgia Aquarium in Atlanta, Georgia; How Do We Explore? The deadline for registration is February 20, 2015. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- March 21, 2015 with the Aquarium of the Pacific in Long Beach, California; How Do We Explore? The deadline for registration is February 27, 2015. Contact Staci Wong at swong@lbaop.org
- March 28, 2015 with the National Aquarium in Baltimore, Maryland; How Do We Explore? The deadline for registration is March 6, 2015. Contact David Christopher at dchristopher@aqua.org
- March 7, 2015 with the Seattle Aquarium in Seattle, Washington; Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is February 13, 2015. Contact Dan Newburn at d.newburn@seattleaquarium.org
- March 14, 2015 with the South Carolina Aquarium in Charleston, South Carolina; How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is February 20, 2015. Contact Jaime Thom at jthom@scaquarium.org
- March 14, 2015 with the Georgia Aquarium in Atlanta, Georgia; How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is February 20, 2015. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- March 21, 2015 with the Aquarium of the Pacific in Long Beach, California; How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is February 27, 2015. Contact Staci Wong at swong@lbaop.org
- March 28, 2015 with the National Aquarium in Baltimore, Maryland; How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is March 6, 2015. Contact David Christopher at dchristopher@aqua.org
- April 11, 2015 with the University of South Florida College of Marine Science in St. Pete Beach, Florida. How Do We Explore? Professional Development

Workshop for Educators. The deadline for registration is March 20, 2015. Contact Teresa Greely at greely@marine.usf.edu

- May 2, 2015, with the New England Aquarium in Boston, Massachusetts. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is April 10, 2015. Contact Tania Slywynskyj at tslywynskyj@neaq.org
- May 2, 2015, with the John G. Shedd Aquarium in Chicago, Illinois. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is April 10, 2015. Contact Laura Lytle at llytle@sheddaquarium.org
- May 9, 2015 with the Birch Aquarium at Scripps Institution of Oceanography in San Diego, California. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is April 17, 2015. Contact Audrey Evans at eaudrey@ucsd.edu
- June 16, 2015 with the Audubon Aquarium of the Americas in New Orleans, Louisiana. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is May 26, 2015. Contact Tricia Leblanc at tleblanc@auduboninstitute.org
- June 17, 2015 with the Audubon Aquarium of the Americas in New Orleans, Louisiana. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is May 26, 2015. Contact Tricia Leblanc at tleblanc@auduboninstitute.org or (504) 378-2675
- September 12, 2015 with the University of South Florida College of Marine Science in St. Pete Beach, Florida. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is August 21, 2015. Contact Teresa Greely at greely@marine.usf.edu
- September 26, 2015 with the John G. Shedd Aquarium in Chicago, Illinois. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is September 4, 2015. Contact Jackie Formoso at jformoso@sheddaquarium.org
- October 3, 2015 with the Georgia Aquarium in Atlanta, Georgia. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is September 18, 2015. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- October 3, 2015 with the Birch Aquarium at Scripps Institution of Oceanography in San Diego, California. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is September 18, 2015. Contact Audrey Evans at eaudrey@ucsd.edu
- October 3, 2015 with the Birch Aquarium at Scripps Institution of Oceanography in San Diego, California. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is September 18, 2015. Contact Audrey Evans at eaudrey@ucsd.edu
- October 17, 2015 with the New England Aquarium, Boston, Massachusetts. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is September 25, 2015. Contact Tania Slywynskyj at tslywynskyj@neaq.org
- November 8, 2015 with the North Carolina Aquarium at Fort Fisher, Fort Fisher, North Carolina. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is October 16, 2015. Contact Jennifer Metzler-Fiorino at jennifer.metzler-fiorino@ncaquariums.com

- November 14, 2015 with the John G. Shedd Aquarium, Chicago, Illinois. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is October 23, 2015. Contact Jackie Formoso at jformoso@sheddaquarium.org
- November 14, 2015 with the Oregon Museum of Science and Industry, Portland, Oregon. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is October 23, 2015. Contact Nate Lesiuk at nlesiuk@omsi.edu
- November 21, 2015 with the National Aquarium, Baltimore, Maryland. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is October 30, 2015. Contact David Christopher at dchristopher@aqua.org
- October 17, 2015 with the New England Aquarium, Boston, Massachusetts. Why Do We Explore? Professional Development Workshop for Educators. Contact Christine Chirch-Cassidy at cchirchcassidy@neaq.org
- December 5, 2015 with the Aquarium of the Pacific, Long Beach, California. The deadline for registration is November 13, 2015. Contact Staci Wong at swong@lbaop.org
- December 5, 2015 with the South Carolina Aquarium, Charleston, South Carolina. The deadline for registration is November 13, 2015. Contact Jaime Thom at jthom@scaquarium.org
- January 16, 2016 with the Texas State Aquarium in Corpus Christi, Texas. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is December 28, 2015. Contact Kristin at kevans@txstateaq.org
- January 23, 2016 with the Science and Technology Education Center, Louisiana Tech University in Ruston, Louisiana. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is January 4, 2016. Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org
- February 6, 2016 with the Birch Aquarium at Scripps Institution of Oceanography in San Diego, California. Why Do We Explore? Professional Development Workshop for Educators. The deadline for registration is January 15, 2016. Contact Audrey Evans at eaudrey@ucsd.edu
- February 20, 2016 with the Dauphin Island Sea Lab on Dauphin Island, Alabama. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is February 2, 2016. Contact Sara Johnson at sejohnson@disl.org
- February 27, 2016 with the North Carolina Aquarium at Fort Fisher in Fort Fisher, North Carolina. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is February 8, 2016. Contact Jennifer Metzler-Fiorino at jennifer.metzler-fiorino@ncaquariums.com
- March 12, 2016 with the Georgia Aquarium in Atlanta, Georgia. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is February 19, 2016. Contact Kim Morris-Zarneke at kzarneke@georgiaaquarium.org
- March 19, 2016 with the National Aquarium in Baltimore, Maryland. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is February 29, 2016. Contact David Christopher at dchristopher@aqua.org

- March 19, 2016 with the South Carolina Aquarium in Charleston, South Carolina. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is February 29, 2016. Contact Jaime Thom at jthom@scaquarium.org
- April 9, 2016 with the Texas State Aquarium, Corpus Christi, Texas. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is March 21, 2016. Contact Kristin Evans at kevans@txstate.org
- April 16, 2016 with the John G. Shedd Aquarium in Chicago, Illinois. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is March 25, 2016. Contact Laura Lytle **at** llytle@sheddaquarium.org
- April 30, 2016 with the Aquarium of the Pacific in Long Beach, California. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is April 8, 2016. Contact Staci Wong at swong@lbaop.org
- April 30, 2016 with the New England Aquarium in Boston, Massachusetts. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is April 8, 2016. Contact Tania Slywynskyj at tslywynskyj@neaq.org
- April 30, 2016 with the University of South Florida College of Marine Science in St. Pete Beach, Florida. How Do We Explore? Professional Development Workshop for Educators. The deadline for registration is April 8, 2016. Contact Teresa Greely at greely@marine.usf.edu
- 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.. Contact Stephanie Smith at educationprograms@auduboninstitute.org
- (New Name)

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

Ocean Exploration Workshops – Louisiana
NOAA's Ocean Exploration Program offers the Okeanos Explorer Education Materials Collection Professional Development Workshops for Educators June 15, 2016 with the Audubon Aquarium of the Americas and hosted by the Science and Technology Education Center Louisiana Tech University in Ruston, Louisiana. How Do We Explore? Professional Development Workshop for Educators. Participants will receive classroom-ready lessons, certificates of participation, and other resources. Contact Stephanie Smith at educationprograms@auduboninstitute.org

Ocean Exploration Workshop – Virginia
NOAA's Ocean Exploration Program and partners offer the Okeanos Explorer Education Materials Collection, Volume 1: Why Do We Explore? Professional Development Workshop for Educators, July 27, 2012 with the National Maritime Center in Norfolk, Virginia. Participants will receive curriculum with CD-ROM's, certificates of participation, and more.
Contact Jennifer Tabor at jennifer.tabor@norfolk.gov
http://oceanexplorer.noaa.gov/edu/development/development.html

Ocean Explorer Professional Development
NOAA's Ocean Explorer website lists upcoming professional development offerings for teachers and other educators to engage in learning more about ocean exploration. Opportunities focus on how educators can use the mathematics, science, and technology associated with exploring the oceans in their classrooms to help increase awareness and understanding of the ocean world. These workshops are designed to introduce educators to premiere ocean scientists/explorers and their research and explorations, and at the same time, provide exemplary tools and resources to engage students in ocean exploration by bringing the classroom closer to the ocean than it has ever been before. The website includes contact information to sign up for individual workshops.
http://oceanexplorer.noaa.gov/edu/development/development.html

Ocean Explorer Workshops
NOAA's Ocean Explorer program offers professional development offerings around the country. Workshops in January and February 2007 will take place in California, Washington, South Carolina, and Hawai'i.
http://www.oceanexplorer.noaa.gov/edu/development/development.html

Ocean Explorer Workshops - Various
NOAA's Ocean Explorer program offers professional development offerings around the country. Opportunities focus on how educators can use the science, technology, and mathematics associated with exploring the oceans in their classrooms to help increase awareness and understanding of the ocean world. The website lists upcoming workshops through August 2007 throughout the country. Check the website for details and contact information.
http://www.oceanexplorer.noaa.gov/edu/development/development.html

Ocean Lecture and Educators' Night – New Jersey and Online
Rutgers University's Institute of Marine & Coastal Sciences in New Brunswick, New Jersey will host an event every other month for teachers interested in teaching about ocean literacy and bringing current research into their classrooms. Each meeting will include a Rutgers University scientist presenting on their research along with a question-and-answer period. The final hour will be spent reviewing curriculum developed to align with both the research presented that evening and New Jersey Science Standards.
http://coseenow.net/mare/opportunities-resources/ocean-lecture-educators-night/

Ocean for Life Student Recruitment to Kick-off Soon
Ocean for Life brings together high school students of diverse backgrounds and cultures to discover marine science, conservation, and how the ocean connects us all. NOAA's national marine sanctuaries provide the setting for this opportunity to enhance cross-cultural relationships, while creating a stewardship ethic for the ocean and the universal human experience.
http://sanctuaries.noaa.gov/education/ofl/welcome.html

Ocean Literacy Summit - Maine
The New England Ocean Science Education Collaborative will host the 2016 Ocean Literacy Summit, November 3-4, 2016 in Portland, Maine. The summit will focus on the research and education activities surrounding Ocean Literacy principle #3, the ocean is a major influence on weather and climate. An interactive Science and Education Fair will highlight hands-on activities and interpretive ideas on teaching ocean literacy.

http://www.neosec.dreamhosters.com/previous-summits/2016-ocean-literacy-summit/

Ocean Literacy Summit - Massachusetts
Join ocean scientists, science writers, educators and their administrators, and policymakers at the New England Ocean Sciences Education Collaborative Ocean Literacy Summit, November 4, 2006 in Boston, Massachusetts. The summit will include workshops, discussions, networking, and exhibits, with a principal focus on ocean science literacy (OSL), an understanding of the ocean's influence on you and your influence on the ocean. Learn how the national OSL Principles can be used to frame ocean science research, teach about science, and incorporate ocean sciences into standard curricula.
http://necosee.net/NEOSECOceanScienceLiteracySummit.htm

Ocean Literacy Summit – Rhode Island
The fourth biennial Ocean Literacy Summit, November 1-3, 2012 in Narragansett Bay, Rhode Island, will offer opportunities for formal and informal educators, ocean scientists, and policymakers to make connections. All of the concurrent sessions feature scientists and educators as co-presenters and will explore Ocean Literacy Principle 7 – the ocean is largely unexplored. November 6-7, 2014 i
http://www.neosec.org/previous-summits/2012-ocean-literacy-summit
http://www.neosec.org/

Ocean Observing System Workshops – Gulf of Mexico
The Gulf of Mexico coastal Ocean Observing System Regional Association will offer two workshops for Gulf Coast educators. Both will focus on GPS technology and the use of near-real-time data in the classroom. For educators in Louisiana and Texas, the workshop will be held April 23-24, 2009 in Corpus Christi, Texas. For educator sin Mississippi, Alabama, and Florida, the workshop will be held April 30-May 1, 2009 at the Dauphin Island Sea Lab.
Contact Chris Simoniello at simo@marine.usf.edu

Ocean Observing Educator Workshop – New Hampshire
This free educator institute, Seasons in the Sea: Understanding Change in the Gulf of Maine Through Buoys, Boats, and Satellites, June 26-30, 2006 in Durham, New Hampshire, will help grade 7-12 classroom teachers link the ocean to their classroom. Learn how the ocean undergoes seasonal from regional to microscopic scales. Learn content, gain lab and sea research experience, and identify new classroom activities to translate ocean science to learners.
http://www.cooa.unh.edu/workshop2006.jsp

Ocean Observing Educator Institute Workshop – New Hampshire
The University of New Hampshire Coastal Observing Center and the Gulf of Maine Ocean Observing System will cosponsor an Educator Institute, *Understanding Seasonal Change in the Ocean Using Ocean Observing Data*, July 7-11, 2008 in Durham, New Hampshire. This workshop aims to provide a deeper understanding on how the Gulf of Maine works, how it changes, and how we can monitor these changes by studying ocean observing data. Check the website for materials from previous workshops.
http://www.cooa.unh.edu/education/workshops.jsp

Ocean Observing System Teacher Workshop – Chesapeake Bay
The Bridge educators are planning a workshop for grade 9-12 science teachers within the Chesapeake Bay watershed. This data-rich professional development and classroom opportunity will focus on the Bay and its associated ocean observing systems, including the Chesapeake Bay Interpretive Buoy System, National Estuarine Research Reserve system, the Chesapeake Bay Observing System, and Virginia Estuarine and Coastal Observing System. This workshop is tentatively scheduled for June 26-29, 2007, and is contingent upon funding.
http://www.vims.edu/k12/cbibs

Ocean Observing Systems - Online
COSEE-West invites formal and informal educators to participate in a free online workshop, Ocean Observing Systems (00S), October 23-November 13, 2009. The workshop explores how scientists and researchers use remote sensing technologies to study oceans. Participants will be able to interact with other educators, and COSEE-West will post supporting teacher resources in the online environment. The sessions will be archived for viewing on your own schedule.
http://www.coexploration.org/cosee_west/

Ocean Observing Workshop - Alabama
Dauphin Island Sea Lab and COSEE will host an Ocean Observing Systems and Apex Predators Workshop at the Southern Association of Marine Educators Conference, November 14-16, 2008, on Dauphin Island, Alabama. The nominal fee includes lodging, meals, field trips, and workshop materials, along with a one-year membership to the Southern Association of Marine Educators and the National Marine Educators Association.
Contact Denise Keaton at dkeaton@disl.org

Ocean Parks and the 2016 National Park Service Centennial Webinar - Online
Join the National Park Service for a webinar, November 12, 2015. The National Park Service is entrusted with managing 86 ocean and Great Lakes parks across 22 states and four territories, with over 11,000 miles of coast and 2.5 million acres of ocean and Great Lakes waters. The Park Service celebrates its 100th birthday in 2016. This webinar will provide a brief overview of the breadth and extent of coastal resources and issues in the National Park System and the NPS Centennial.
https://attendee.gotowebinar.com/register/4432513267598871554

Ocean Plastic Pollution Summit - California
The free Ocean Plastic Pollution Summit in Monterey, California, is a three-part summit designed for teachers wanting in-depth information about plastic pollution issues and solutions.

- October 9-10, 2015 Ocean Plastic Pollution Summit Kickoff Event
- February 6, 2016 Mid-year Check-in and Concurrent Sessions
- April 30-May 1, 2016 Final Project Symposium

http://www.montereybayaquarium.org/education/teacher-programs/ocean-plastic-pollution-summit

Ocean Policy Course - California
The Monterey Area Research Institution's Network for Education (MARINE) Ocean Policy Course, July 16-28, 2017 in Monterey, California, will introduce early career

professionals to ocean policy and governance, and how science influences public policy decisions at the international, national, and state levels. The intensive course is free.
https://stanforduniversity.qualtrics.com/jfe3/form/SV_bxOxV1pZh6FiJs9

Ocean Sampling Day - Transatlantic Ocean Science and Ocean Literacy - Online
This online workshop was hosted by NOAA's Office of Ocean Exploration and Research and partners May 4–22, 2015 in support of Ocean Sampling Day, June 21, 2015. Phase 2 will take place June17- 26, 2015 and will extend the conversation to document the actions of citizen scientists and continue to develop the MyOSD network.
http://www.coexploration.org/oe2015/

Ocean Science for Early Elementary Educator - Massachusetts
The New England Aquarium will host this educator workshop, August 3-6, 2015 in Boston, Massachusetts, for educators in grades K-2 (others are also welcome). Participants will explore essential scientific concepts such as water properties, ocean habitats, and animals, while making connections to literacy, math, and art.
http://www.neaq.org/education_and_activities/teacher_resources/professional_development/workshops/index.php

Ocean Science Professional Development Workshop - Washington
This four-day *Ocean Science Professional Development Worksho*p for teachers of grades 4-5, August 4-7, 2008 in Forks, Washington, explores the dynamic relationships in the marine environment from Puget Sound to the Olympic Coast to the deep ocean. Participants in this course will be eligible for free admission to the Seattle Aquarium and a field trip to a local beach, including free transportation for their class. Registration is required and space is limited.
Contact Jacqueline Laverdure at Jacqueline.Laverdure@noaa.gov

Ocean Science Professional Development Workshop - Washington
This four-day Ocean Science Professional Development Workshop for teachers of grades 4-5, August 4-7, 2008 in Seattle, Washington, explores the dynamic relationships in the marine environment from Puget Sound to the Olympic Coast to the deep ocean. Participants in this course will be eligible for free admission to the Seattle Aquarium and a field trip to a local beach, including free transportation for their class.
Contact Karen Matsumoto at karen.matsumoto@seattle.gov

Ocean Science Summer Institute – Washington
This institute, June 24-27, 2013 June 25-28, 2012 from Port Townsend, Washington, is a Training of Trainers for both formal and informal educators. Participants will receive hands-on experience with the Ocean Sciences Sequence including implementation strategies, daily field trips, and more. Be sure to check out the other professional development opportunities on the website.
http://www.ptmsc.org/teacher.html

Ocean Science Webinar Series - Online
The National Ocean Sciences Bowl, in conjunction with IODP-Deep Earth Academy, offers A Sea of Change: Development and Evolution, a professional development opportunity for middle and high school educators, November 10-early December, 2011. The series will provide teachers with the opportunity to enhance their knowledge of topics related to evolution and how society is adapting to changes in the global ocean.
http://www.nosb.org/professional-development/

Ocean Science Workshop – Washington
This Ocean Science Workshop will focus on marine ecosystems of Puget Sound and the coastal ocean of Olympic Peninsula. From July 24-27, 2007, this 4-day course will provide opportunities for learning about coastal ecology and the interconnections between humans and the ocean. Participants will focus on activities, lesson planning, and investigations that support Washington State learning standards and grade level expectations in elementary science.
http://www.sanctuaries.noaa.gov/education/teachers

Ocean Sciences Education Leadership Institute - Georgia
Middle and high school teachers, pre-service teachers, and informal educators in North Carolina, South Carolina, and Georgia are invited to build and test their own Remotely Operative Vehicle (ROV) from the MIT Sea Grant SEA PERCH program. This COSEE SE Ocean Sciences Education Leadership Institute, June 24-30, 2007 in Savannah, Georgia, will allow participants to discover how ROVs are used to study the seafloor to understand habitats, geology, and effects of surface storms on the bottom.
Contact Margaret Olsen at olsen@uga.edu

Ocean Sciences Education Leadership Institute – North Carolina
The Center for Ocean Sciences Education Excellence SouthEast invites middle and high school science teachers to participate in the Ocean Sciences Education Leadership Institute, *Estuaries and Living Resources*, July 23-28, 2006 in Pine Knoll Shores and Beaufort, North Carolina. This Institute is designed to promote ocean sciences in formal and informal education and forge lasting relationships between ocean sciences researchers and educators. Twenty teachers (5th grade - 12th grade) will be selected from North Carolina, South Carolina and Georgia.
http://www.scseagrant.org/se-cosee/teacher/06_leadership.htm

Ocean Sciences 2014 K-12 Student Poster Session
The 2014 Ocean Sciences Meeting, February 23-28, 2014 in Honolulu, Hawai'i, offers an opportunity for students to present their classroom marine science projects to other educators and researchers through a special evening session of K-12 student research posters. Students are encouraged to follow the conference theme of combining traditional knowledge and Western-based science and/or through submissions that demonstrate research-based projects.
http://www.mbari.org/education/osm2014.htm

Ocean Sciences Sequence for Grades 6-8 - California
This professional development opportunity offered by the University of California, Berkeley's Lawrence Hall of Science, July 22- 23, 2013 in Berkeley, California, will focus on the science of climate change and how to provide middle school students with opportunities to gather evidence and use scientific argumentation to make evidence-based explanations. A limited number of scholarships are available.
http://www.regonline.com/Register/Checkin.aspx?EventID=1239360

Ocean Sounds Workshop - Massachusetts
This teachers' professional development workshop, December 13, 2010 in Woods Hole, Massachusetts, will focus on research on ocean sounds of marine mammals and squid.
http://www.whoi.edu/page.do?pid=25995
Contact Kathy Patterson at kpatterson@whoi.edu or Kate Madin at kmadin@whoi.edu

Ocean System: Integrated Science - Online
This summer, the American Museum of Natural History's award-winning online professional development program, Seminars on Science, is presenting eight standards-based courses, including The Ocean System: Integrated Science. This course explores the origin and evolution of the ocean, as well as its vast diversity of life and ecosystems. Other summer online courses include The Diversity of Fishes and Sharks and Rays - Ecology.
http://learn.amnh.org

Ocean Treasure: The Natural and Cultural Resources of the Stellwagen Bank National Marine Sanctuary – Massachusetts
The Stellwagen Bank National Marine Sanctuary and Cape Cod Museum of Natural History are sponsoring a 13-week lecture series and course entitled *Ocean Treasure: the Natural and Cultural Resources of the Stellwagen Bank National Marine Sanctuary*. Graduate credits are available. Each session, Tuesday nights from 6-9pm, February 1-May 9, 2005, will feature specialists who will introduce the resource and discuss cutting edge research in the field.
http://www.ccmnh.org/

OCEANIA Fall Conference – Hawai'i
The OCEANIA Marine Educators Association will host its conference October 3, 2009 in Honolulu, Hawai'i following the Hawai'i Science Teachers Association Conference. That evening, join them for an Educator's Evening at the Waikiki Aquarium sponsored by the National Marine Sanctuary Foundation for an introduction to the Ocean Explorer program's educator resources.
http://www.hawaii.edu/mcc/oceania/announcements.html

Oceans à la Carte – Rhode Island
Join the University of Rhode Island's Bay Campus for *Oceans à la Carte: A Workshop for K-12 Educators,* May 22, 2010 in Narragansett, Rhode Island, with oceanography, marine, and environmental science presentations and workshop sessions for formal and informal educators. Choose from a variety of presentations by leading scientists, hands-on activities, and content information sessions.
http://omp.gso.uri.edu/ompweb/content/educator-training

Oceans, Coasts and Climate for Teachers - Massachusetts
This course for teachers in grades 7 -12, August 2-5, 2010 with a follow-up session November 6, 2010, from Falmouth, Massachusetts, will present information, research, and activities on climate topics with a special focus on Massachusetts marine and coastal systems. Participants will carry out field studies, practice using marine and coastal data, and engage in lessons and activities for teaching about climate.
http://www.waquoitbayreserve.org/eventshow.aspx?eventid=257

Oceans, Literacy and Science Residential Teacher Institute - California
The Educator Programs of the Monterey Bay Aquarium in Monterey, California, offers this free summer institute for non-local K-5 teachers, August 1-6, 2010. The program offers curriculum, inquiry investigations, explorations of ocean and coastal habitats, and more.
http://www.montereybayaquarium.org/lc/teachers_place/edu_program_literacy.aspx

Ocean's Role in Weather and Climate - Maryland
This symposium for middle and high school level educators on the topic of the ocean's influence on weather and climate is a blended professional development opportunity including this face-to-face learning opportunity at the conference followed by several online experiences. The half-day symposium will focus on the interconnections among air, sea, and land; the processes by which energy is stored, released and transferred among them; and how our understanding and ability to monitor ocean conditions is key to predicting climate change.
http://institute.nsta.org/fall06/oceans/symposium.asp

Oceans for Life Virtual Teacher Workshop
Oceans for Life Virtual Teacher Workshop Earth Day 2007 was a two-week online workshop held April 16-28, 2007. It is still open for viewing, but not for input. Keynotes are provided by scientists in the field conducing cutting edge research. You can access their presentations as well as their online discussions with participants in the workshop. The keynotes have National Science and other standards linked to them, and are supported by additional resources and materials to help your efforts improving ocean literacy in the classroom. Check out the Teacher's Tool Kit and Share-a-Thon sections.
http://coexploration.org/ngs/EarthDay/index.html

Ocean and Human Health Seminar - Online
The College of Exploration and Ocean Technology Foundation offer this online seminar on the relationship between the oceans and human health, April 6-17, 2009. It is designed to be a general overview of some of the ways in which our ocean provides benefits and risks to human health. The effects of climate change and Harmful Algal Blooms on ocean and human health, marine animals as biomedical models, and the discovery of new medicines from marine life will be some of the topics presented.
http://www.coexploration.org/ohh/seminar09.html

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

Olympic Park Teacher Training and Summer Field Science Studies - Washington
The Olympic Park Institute is offering Environmental Science teacher training, July 28-31, 2005, in Olympic National Park, Washington. In addition, two five-day field science study sessions are offered for students entering grades 8-12 in July, 2005.
http://www.olympicparkinstitute.org/

OMICS Professional Development – Connecticut
The University of Connecticut, Department of Marine Sciences has limited space available in the OMICS Professional Development Institute for high school science teachers, August 9-10, 2013 in Groton, Connecticut. The free workshop includes lodging, resources, and a stipend.
https://www.facebook.com/scmea/posts/442385252468238

On the Cutting Edge – Geoscience Workshops and Resources
The 2006 series of workshops for current and future geoscience faculty is available from the Science Education Resource Center website. The *On the Cutting Edge* project helps geoscience faculty stay up-to-date with both geoscience research and teaching methods. The workshop series and website combine to provide professional development opportunities, resources, and opportunities for faculty to interact on-line and in person with colleagues around the world.
http://serc.carleton.edu/NAGTWorkshops/index.html

On-Island Teacher Professional Development - Florida
The Pigeon Key Foundation and Marine Science Center offers all inclusive marine science based environmental education teacher workshops June 17-19 and July 1-3, 2011 in Marathon, Florida. Teachers will be housed on island with all programs, snorkel gear, collecting resources, and meals provided.
http://www.pigeonkey.net/events.html

On the Lynn Waterfront – Massachusetts
The New England Aquarium, in partnership with Northeastern University's Marine Science Center in Nahant, offers a summer institute for teachers funded by the Massachusetts Department of Education. This institute, On the Lynn Waterfront: Integrating Science Standards through Classroom and Field Investigations, will run for 8 days in the summer and two follow-up days in the fall (August 6-15, October 27, and November 17, 2007 in Nahant, Massachusetts).
http://www.neaq.org/scilearn/ed_progs/subpage.php?id=31

On the Waterfront - Massachusetts
The New England Aquarium offers the professional development program for teachers in grades 3-8, *On the Waterfront: Integrating Science Standards through Classroom and Field Investigations*, July 27-August 1, 2009 in Boston, Massachusetts, with a call-back in fall, 2009.
Contact the Teacher Resource Center at trc@neaq.org

OneNOAA Science Seminars – Maryland and Online
The OneNOAA Science Seminar Series is an integrated summary of NOAA-wide science and climate seminars. Many are available for distance viewing. Check out topics including Coral Reefs in a Changing Climate: Combining Indigenous Traditions and Western Science, Bering Strait Shipping: Sea Ice, Economics, and Governance, Marine Microbial Toxins and Nature's Pharmacy, and more, coming up in January 2016.
http://www.nodc.noaa.gov/seminars/

Online Professional Development Courses
The National Science Teachers Association provides a convenient webpage featuring providers of online courses for science educators. These providers—from universities to informal science institutions—invite you to learn more about their courses to see if they are right for you. Current links include the American Museum of Natural History, Montana State University, University of Maryland, and University of Massachusetts Extension.
http://institute.nsta.org/tier2.asp

Online Teacher Academy
The Wildlife Conservation Society offers professional development courses through their Online Teacher Academy, April 6-May 27, 2012. Habitat Ecology for Educators is currently being offered at a special reduced rate of only $50. Spring also brings Conservation Biology for Educators. Summer courses will include Nature's Thread: Weaving Environmental Education into Your Classroom, Marine Biology for Elementary Educators, and Predators: Biology and Conservation.
http://www.wcs.org/teachers/teacherpd/online-teacher-academy.aspx

Onshore and Offshore: Investigating the Marine Environment - Washington
The Port Townsend Marine Science Center offers Onshore and Offshore: Investigating the Marine Environment, a week-long course on marine science, July 29-August 3, 2007. Learning takes place on the beach, in the Port Townsend Marine Science Center's tanks and labs, and on board the *Adventuress Schooner*. Teachers will receive standards based-activities for K-12 classrooms in content areas ranging from biology, geology, art, chemistry, physics, and language arts.
http://www.ptmsc.org/education/teacher.html

Onshore/Offshore Workshop - Washington
The Port Townsend Marine Science Center offers *Onshore/Offshore, Workshop on Marine Ecology and Conservation for Teachers*, a week-long course, June 24-29, 2006, on the Olympic Peninsula, Washington. Learning takes place on the beach, in the lab, and while sailing on board the Adventuress Schooner. Teachers take home standards-based activities for K-12 classrooms on marine biology, physical oceanography, basic navigation, tide and currents, marine mammals, and sand studies. Credits are available.
http://www.ptmsc.org/programs/onshore_offshore.htm

Open House for Educators at The Mariners' Museum - Virginia
The Mariners' Museum and the NOAA Monitor National Marine Sanctuary will be co-sponsoring an open house on September 26, 2007 for teachers and school administrators at The Mariners' Museum in Newport News, Virginia.
Contact Krista Trono at Krista.Trono@noaa.gov

Ossabaw Island Educator Workshops - Georgia
Ossabaw Island is managed by the Georgia Department of Natural Resources (DNR). The Ossabaw Island Foundation, a Savannah-based non-profit organization which has the exclusive right to use certain areas on the north end and non-exclusive access to other areas, works cooperatively with DNR to manage access to Ossabaw for public educational programs. Upcoming educator workshops include *Biostudy of Birds*, April 28-30, 2006, and *Sea Turtle Ecology*, July 14-17, 2006.
http://eeingeorgia.org/net/content/go.aspx?locationid=13063&eventid=39124&c=28668&locationid=13063&s=13063.0.68.4863

Oregon Coast Education Program Summer Workshop - Oregon
Science Educators in grades 6-12 can join the educators at the Oregon Coast Education Program, August 13-15, 2014 in Charleston, Oregon. Topics include coastal ecology and habitats, impacts and solutions including climate connections, working with data sets, and making connections to your schools. Participants will receive continued support during the school year. A stipend may be available.
http://www.pacname.org/news.shtml

Original Classroom Series: Headwaters to Baywaters - Texas
The Environmental Educators Exchange and Get Outdoors Houston! offer field experiences and classes for educators designed to help educators connect with local ecosystems and their cultural, economic, and agricultural stories in June and July, 2013. Continuing education unit credits are available. See the website for details.
http://getoutdoorshouston.com/page/original-classroom

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

Our Wetlands, Our World Educator Workshops - California
The California Coastal Commission is hosting free teacher workshops based on the downloadable *Our Wetlands, Our World* curriculum, in Newport Beach, California. This high school curriculum is focused on the natural history of and human impact on wetlands, specifically the Upper Newport Bay in California. Participate in several activities from the curriculum while previewing a potential field trip for you and your students at the Upper Newport Bay.
Contact Matt Yurko at myurko@coastal.ca.gov

Outdoor Classroom Symposium - Georgia
The 2005 Outdoor Classroom Symposium, *Teaching Outside the Box*, will be held October 14, 2005, in Acworth, Georgia. This year's symposium will provide ideas how to better use your outdoor learning center and offer creative ways to teach outdoors.
http://eeingeorgia.org/net/calendar/details.aspx?c=27057&s=31021.0.68.4863

Outdoor Teaching Mistakes - Online
Green Teacher offers free, one-hour webinars lead by experienced educators. Each session features a 20-30 minute presentation and a 30-40 minute question and answer session. Check out the upcoming webinar, Outdoor Teaching Mistakes, December 7, 2011.
http://greenteacher.com/webinars

Overview of Science Communication Tools - Online
The Integration and Application Network produces a variety of communication products including newsletters, posters, books, reports, brochures, and conceptual diagrams. These products synthesize scientific findings using effective science communication techniques. This webinar, September 30, 2009, will give an overview of the scientific communication products that the network produces, with a focus on conceptual diagrams and conceptual diagramming tools.
http://www.ebmtools.org/september-30-2009-overview-science-communication-tools-bill-dennison-and-tim-carruthers-university-m

Pacific Marine Mammals – California
Camp Ocean Pines is hosting a seminar on Pacific Marine Mammals for the general public with Pieter Folkens, marine mammal researcher and artist, February 19-21, 2010 in Cambria, California. The weekend includes food and lodging, lectures, field trips, and more. Options are available for those wishing to only attend the lectures.

http://www.campoceanpines.org/upcoming

Pali Institute Outdoor Weekend for Educators - California
Not marine, but near the lake and a great opportunity for those in the area. Teachers, principals, and science educators are invited for a free weekend, March 23-25, 2007, at the Pali Institute in Running Springs, California. Learn more about science, outdoor, and experiential education curriculum; challenge yourself on high and low ropes course elements; explore the night sky through telescopes; and reenergize yourself in 74 acres of majestic beauty of the San Bernardino Mountains near Lake Arrowhead.
http://www.paliinstitute.com/

Parks as Labs, Studies of Wildland Fire Ecology & Globe Workshop in Santa Monica
This combination workshop, Santa Monica Mountains National Recreation Area, California, August 9-12, 2004, for middle and high school teachers, presents participants with skills and knowledge about these three environmental education programs. Participants will receive teacher manuals, GLOBE protocols and data sheets. Priority enrollment is given to middle and high school teachers of science and environmental studies.
http://www.nps.gov/samo/educate/workshops/PAL-Fire-GLOBE.htm .

PAST Foundation Field School - Florida
The PAST Foundation (Partnering Archaeology with Science and Technology) will host its 2005 Field School August 1-12, 2005 in Biscayne National Park, Florida. The field school will teach basic underwater documentation techniques and explore how archaeological information is translated into the creation and management of underwater parks. The application deadline is June 10, 2005.
http://www.pastfoundation.org/Field%20School%202005.htm

Pathways to Parks – California
Channel Islands National Park and partners will host two Pathways to Parks: Get Outdoors with NGSS workshops, February 4 and March 4, 2017 in Ventura, California. See the website for complete details.
http://tinyurl.com/Pathways-to-Parks

PBS TeacherLine - Online
PBS TeacherLine works in partnership with PBS member stations across the county to provide educators and administrators with resources, support, and opportunities for flexible, online professional development for PreK-12 Educators. Science courses include Human Impacts on Environmental Systems, Earth's Changing Climate, and more.
http://www.pbs.org/teacherline/

Persistent Organic Pollutants Awareness Training Module - Online
This free online training module was developed through the GEF in collaboration with the International Persistent Organic Pollutants (POP) Elimination Network, with a purpose of building awareness about the Stockholm Convention on POPs, its legal and institutional arrangements, and good cases or examples of community-based POPs management.
http://www.sgp-pops.org/

Picking Up STEAM: Using Models and Data to Understand Clouds - Online
Practice STEAM through the use of inquiry-based science activities from NASA curriculum guides, December 6, 2016. This workshop will guide participants through inquiry-based learning activities related to clouds, phase change, light, water cycle, weather and climate, all using authentic data sets. Free registration is required.
https://www.eiseverywhere.com/ehome/index.php?eventid=205303&

PicturePost Webinar - Online
Lifelines for High School Climate Change Education, a project for high school teachers, is holding a webinar that will cover PicturePost, October 30, 2012. PicturePost is a part of the Digital Earth Watch network that supports environmental monitoring by citizens, students, and community organizations through digital photography and satellite imagery. Learn how teachers and students can contribute using digital images in a growing archive aimed at measuring environmental change.
https://sites.google.com/a/globalsystemsscience.org/courses-lifelines/presentations-mtgs

Place-Based Learning Symposium - Massachusetts
Join the New Bedford ECHO Project for the first symposium on Place-Based Learning, December 1-3, 2010 in New Bedford, Massachusetts. Conference attendance is free.
http://www.oceanexplorium.org/

Planning of Wetlands Facilitator Training – Maryland
This three-day course, August 3-5, 2005, in St. Michaels, Maryland, is designed to guide educators to become a trained facilitator and teach others to turn their schoolyard into a wetland. Participants will be guided through the steps of planning and designing a wetland.
Contact Suzanne Greene at wow@wetland.org or (410) 745-9620

Polar Connections Summer Institute - Massachusetts
The International Polar Year STEM Polar Connections Summer 2010 Institute is designed to promote the teaching of science concepts and processes related to the polar regions, and to emphasize connections to State and National Science Standards for middle and high school. It includes a one-week summer institute, July 12-16, 2010 in Amherst, Massachusetts, along with academic-year online discussion forums.
http://www.umassk12.net/ipy/

Polar Workshop – Build an ROV - California
Bring polar science and engineering to your classroom through hands-on building of remotely operated vehicles (ROVs). Teachers from the Monterey Bay and Santa Cruz areas can learn from local polar scientists and engineers and mentor-teachers to design and build their own ROV, July 30-August 1, 2013 in Monterey Bay, California. The workshop is free and offers opportunities for classroom mini-grants.
Contact Arctic Research Consortium of the United States at info@polartrec.com

Post-Graduate Mangroves Course – Online
The United Nations University and The Nature Conservancy have teamed up to offer this open-access course on mangroves, designed to build expertise in mangrove biology, ecology, assessment, management, and restoration. Free registration is required.
http://inweh.unu.edu/postgrad-mangroves/

POW! The Planning of Wetlands – Bringing Schoolyards to Life - Georgia
Environmental Concern, Inc. will help you find the bog behind your cafeteria and the marsh next to the parking lot on October 15, 2005, in Kennesaw, Georgia. Using a schoolyard as the classroom, this one-day workshop will take you through all the steps of designing a wetland with your students. Learn basic wetland ecology, assess the schoolyard for suitable sites using topography and soils, measure the drainage area, calculate a water budget, design the wetland, and create an appropriate planting plan.
http://eeingeorgia.org/net/calendar/details.aspx?c=27391&s=32850.0.68.4863

POW! Planning of Wetlands – North Carolina
This two-day course, September 10-12, 2004, at the Cape Lookout Environmental Education Center, North Carolina, guided educators in the construction, restoration, enhancement and monitoring of wetlands in or near schoolyards using natural and/or artificial sources of water. Participants planned a wetland using hands-on activities. Each participant received a copy of *POW! The Planning of Wetlands.*
http://www.wetland.org/educa.htm .

POW! The Planning of Wetlands Facilitator Training
Through a grant from The Waterfowl Festival, Environmental Concern constructed a demonstration wetland at their facility in St. Michaels, Maryland, August 25-27, 2004. Rather than building the wetland as an end unto itself, it was incorporated into a 3-day POW! Facilitator's Training for those interested in working with schools and communities to build schoolyard habitats as areas for outdoor education.
www.wetland.org .

Power Presentations - Online
The American Society of Training and Development, Southcentral Alaska chapter, is offering a two hour on-line seminar that focuses on creating exciting PowerPoint® presentations. The seminar is not a class in PowerPoint®. Rather, it's a fun, interactive course on how to more effectively use PowerPoint® and other applications to work creatively and efficiently to create world-class graphics and present with confidence.
http://www.astdalaska.org/PowerPresentations.htm

Powerful Presentation Tools and Techniques – West Virginia
The U.S. Fish and Wildlife Service offers Powerful Presentation Tools and Techniques (OUT8106), designed to help natural resource professionals communicate more effectively with both general and technical audiences through oral presentations using dynamic visual aids, July 30-August 3, 2007, in Shepherdstown, West Virginia. Topics include developing communication strategies for specific audiences, creating computer-generated PowerPoint images, Photoshop tools, and solving equipment problems.
Contact Juanita Gustines at Juanita_Gustines@fws.gov
http://training.fws.gov/catalog/coursecontents.html

Pre-NMEA Conference NOAA Workshop – Rhode Island
As a precursor to the NMEA conference June 28-July 2, 2015, NOAA's Office of Ocean Exploration and Research is offering a free, half-day professional development workshop for educators of grades 5-12, June 27, 2015 in Newport, Rhode Island. Registration is required and space is limited.
Contact Susan Haynes at susan.haynes@noaa.gov

Principles of Science Inquiry for the K-8 Classroom - California
The Birch Aquarium at Scripps Institution of Oceanography is hosting this workshop March 5, 2008 in La Jolla, California. Teach your students how to ask scientifically oriented questions and initiate a life-long learning process, developing explanations that connect their science knowledge base to the natural world. This workshop includes a trip to a sandy beach field trip for a low-tide investigation. Scholarships are available.
http://aquarium.ucsd.edu/Education/For_Schools/For_Teachers/Professional_Development/

Priority Issues of the Gulf of Mexico Alliance Workshop - Mississippi
Grand Bay National Estuarine Research Reserve and partners will host this professional development workshop, July 8-10, 2014 in Moss Point, Mississippi. The workshop is free for Alabama, Louisiana, and Mississippi science teachers, and a stipend may be available. Subjects will include water quality, habitat conservation and restoration, and more. Space is limited.
Contact Shelia A. Brown at shelia.brown@usm.edu

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

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

Professional Development from the National Marine Sanctuary Program
The NOAA National Marine Sanctuary Program aims to provide teachers with resources and training to support ocean literacy in America's classrooms. Check out the workshop and professional development opportunities for educators, from short courses in California to Georgia's Rivers to Reefs, from shipwreck archaeology to marine technology, and much more.
http://www.sanctuaries.noaa.gov/education/teachers/professional.html

Professional Development in Georgia
The Georgia Youth Science and Technology Center provides professional development for Georgia's educators, including workshops and excursion classes that involve travel to unique areas of the globe. Upcoming training includes:

- Changes in Latitudes: A Study of the Ecosystems of the Florida Keys
- Sapelo Island Excursion: Introduction to the Coastal Ecology of Sapelo Island
- Cumberland Island

http://www.spsu.edu/gystc/events.html .

Professional Development Institute - Massachusetts
The New England Aquarium offers a free summer Professional Development Institute for Massachusetts science teachers, July 28-August 6, 2008 and two Saturdays in Fall, 2008, in New Bedford, Massachusetts. Funded by the Massachusetts Department of Education, the institute will serve upper elementary and middle school science teachers from districts of need, but all Massachusetts teachers are welcome to apply.
Contact the Teacher Resource Center at trc@neaq.org

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/

Professional Development Opportunities - Washington
The education department at Woodland Park Zoo is offering professional development opportunities for educators, including pre-service teachers. Workshop topics include creating backyard/schoolyard habitat, climate change impacts on wildlife of land and sea (with the Seattle Aquarium and Cool School Challenge), and more.
http://www.zoo.org/education/teacher-development

Professional Development Programming for K-12 Teachers Available On-Line
Annenberg/CPB, a partnership between The Annenberg Foundation and the Corporation for Public Broadcasting, uses media and telecommunications to advance teaching in American schools. The partnership funds and distributes educational video programs with coordinated Web and print materials for the professional development of K-12 teachers, for both course content and teaching methods.
www.learner.org

Professional Development Weekends - California
Camp Ocean Pines is offering two professional development opportunities this winter in Cambria, California. *All About Abalone* is a weekend conference with tour and dinner, January 29-February 1, 2009. *Humpback Whales* is a weekend conference, January 23-25, 2009.
http://campoceanpines.org/

Professional Development Workshop - Pennsylvania
The Susquehanna Aquatic Biodiversity Network is offering a four-day professional development workshop for environmental educators, middle, and high school teachers of the Chesapeake Bay Watershed, August 3-6, 2009 in Lock Haven, Pennsylvania. Lodging and field trip implementation grants may be available.
http://seagrant.psu.edu/education/workshops.htm

Professional Grant Proposal Writing Workshop - Michigan
The Grant Institute's Grants 101: Professional Grant Proposal Writing Workshop will be held April 10-12, 2006 in Detroit, Michigan. The course is a detailed introduction to the process, structure, and skill of professional proposal writing. It can provide a thorough overview, introduction, and refresher at the same time. Check out the website for additional times and locations.

http://www.thegrantinstitute.com

Professional Science Master's Degree Program - Online
The University of Maryland Eastern Shore's Professional Science Master's degree programs provide an alternate professional career path for bachelor's degree holders in the STEM disciplines. They are recruiting students with strong quantitative backgrounds for admission into the Professional Science Master's Degree Program in Quantitative Fisheries as well as Resource Economics. Courses are offered online.
http://www.umes.edu/psm/Default.aspx?id=30892

Project Atmosphere Summer Workshop for Master Teachers - Missouri
Project ATMOSPHERE is the comprehensive national program of teacher enhancements of the American Meteorological Society based on studies in the atmospheric sciences. The workshop, July 14-26, 2013 in Kansas City, Missouri, is directed towards improving teacher effectiveness in generating interest and understanding in science, technology, and mathematics among students at precollege levels. July 16-28, 2017
http://www.ametsoc.org/amsedu/Proj_ATM/projatm.html
https://www.ametsoc.org/ams/index.cfm/education-careers/education-program/k-12-teachers/project-atmosphere/

Project WET – New Jersey
The Jacques Cousteau National Estuarine Research Reserve offers this Project WET Curriculum Guide Workshop, February 22, 2014 in Tuckerton, New Jersey. Project WET activities use the importance of water to cover diverse topics and disciplines.
http://jcnerr.org/education/educators.html

Project Wild Aquatic Workshop - Maine
The Maine State Aquarium is hosting a Project Wild Aquatic workshop, May 23, 2008 in Boothbay Harbor, Maine, for teachers and education students. The workshop will include curriculum materials and the Project Wild Aquatic activity book and provide hands-on activity training. Participants will receive a complimentary 2008 Family Pass to the aquarium, and more.
http://www.maine.gov/dmr/rm/aquarium/resources.htm

Professional Development Workshops - Connecticut
Immersion Learning, Institute for Exploration and Mystic Aquarium present the following professional development workshops in Mystic, Connecticut:

- Return to Titanic, Wednesday, August 1, 2010
- Adventures to the Black Sea Thursday, August 12, 2010
- Life at the Extremes Friday, August 13, 2010

http://neosec.wordpress.com/2010/06/11/pd-workshops-connecticut/

Project Design and Evaluation Training - California
This course, offered through the University of Southern California Sea Grant Program on October 10-11, 2007 in Los Angeles, California, will provide coastal resource management extension and education professionals with the knowledge, skills, and tools to design and implement projects that have measurable impacts on the audience they want to reach. The interactive curriculum can help increase the effectiveness of projects by applying valid instructional design theory to their design.

Contact Lynn Whitley at lwhitley@.usc.edu
http://www.csc.noaa.gov/cms/cls/project_design.html

Project Design and Evaluation Workshop – North Carolina
This course, February 13-14, 2006, on Roanoke Island, North Carolina, provides coastal resource management extension and education professionals with the knowledge, skills, and tools to design and implement projects that have measurable impacts on the audience they want to reach. The workshop is provided by NOAA Coastal Services training staff. There is no charge for the workshop, but pre-registration required.
Contact Wanda Best at Wanda.M.Best@ncmail.net

Project Design and Evaluation Workshop
A Project Design and Evaluation Workshop, February 17-19, 2004, Fairhope, AL, will be hosted by Weeks Bay National Estuarine Research Reserve. The workshop is designed to provide coastal educators in the Southeastern U.S. with the knowledge, skills, and tools to design and implement projects that have measurable impacts on the audience they want to reach.
tsanchez@sarpc.org

Project Design and Evaluation Workshop
NOAA Coastal Services Center offers a three-day *Project Design and Evaluation Course* in the Charlotte Harbor National Estuary Program study area, December 8-10, 2003, Punta Gorda, Florida. The course provides coastal resource management extension and education professionals with the knowledge, skills and tools to design and implement projects that have measurable impacts on the audience they want to reach.
www.CharlotteHarborNEP.org

Project Design and Evaluation – New Jersey
The Project Design and Evaluation course, November 17-19, 2004, Tuckerton, New Jersey, provides coastal resource management extension and education professionals with the knowledge, skills, and tools to design and implement projects that have measurable impacts on the audience they want to reach. This interactive curriculum can help you increase the effectiveness of your projects by applying valid instructional design theory to their design.
Contact Lisa Weiss at weiss@imcs.rutgers.edu .

Project Design and Evaluation Workshop - Oregon
The Project Design and Evaluation course, February 15-17, 2005, in Hillsboro, Oregon, provides coastal resource managers and education professionals with the knowledge, skills, and tools to design and implement projects that have measurable impacts on the audience they want to reach. This interactive curriculum can help you increase the effectiveness of your projects by applying valid instructional design theory to their design. Please register by February 4, 2005.
Contact Patrick Willis at patw@ci.hillsboro.or.us or (503) 681 6206

Project E3 Workshops - Texas
Project E3: Expanding Energy Education is an interdisciplinary, PreK-12th grade energy education program. This workshop offers teaching ideas for use in science, math, social studies, language arts, art, physical education, and music to increase your students' energy and earth science literacy. Each activity utilizes readily available materials and contains all of the information necessary, including grade levels, concepts, skills,

objectives, materials, time constraints, and a glossary.
http://www.oceanstaroec.com/education/education.htm

Project Learning Tree E-Learning Workshop
This online workshop, February 21 - April 3, 2005, is designed for educators in grades preK-8. Educators from the following states are invited to participate in this workshop: Arkansas, Colorado, Florida, Idaho, Maine, Minnesota, Missouri, New York, North Dakota, Oklahoma, Oregon, Rhode Island, Vermont, and West Virginia. The course syllabus is available on the website. Registration deadline is February 11, 2005.
http://www.creative-conservation.com/trainingopps.htm

Project Shark Awareness Teacher Workshops - Florida
The Florida Program for Shark Research and Florida Museum of Natural History offer two upcoming "train the teacher" Project Shark Awareness workshops, August 4-5 and 18-19, 2005. Participants will receive information and teaching kits that will enable them to conduct shark awareness programs in their individual school districts. These include a teaching kit consisting of a PowerPoint presentation, teaching guide, handouts, and more. Also included are hands-on items such as a shark jaw, embryo, teeth, and skin.
http://www.flmnh.ufl.edu/fish/education/psa/psa.htm

Project Shark Awareness Teacher Training Workshops - Florida
Join the Florida Program for Shark Research to learn about the myths and realities of shark behavior, biology, and conservation. Workshop participants will receive information and materials that will enable them to conduct shark awareness programs in their individual school districts and classrooms. Materials include a teaching binder and CD with a PowerPoint presentation, teaching guide, handouts, and classroom learning activities, as well as a shark jaw, shark skin, shark embryo, shark vertebrae and more. Workshops will be held March 8-9, 2007 and April 19-20, 2007 in Gainesville Florida. Registration priority is given to Florida elementary school educators.
http://www.flmnh.ufl.edu/fish/education/psa/psa.htm
Contact Cathy Bester at cbester@flmnh.ufl.edu

Project Soundwise Teacher Workshops - Connecticut
Schooner Inc. offers Project Soundwise, a marine education curriculum, to New Haven area schools. This hands-on curriculum covers a variety of topics including oceanography, water chemistry, and marine biology. With funding from the NewAlliance Foundation, they are offering free teacher workshops and educational resources. Two workshops will take place, on December 13, 2005 and January 24, 2006, in New Haven, Connecticut.
Contact Heather Blankenstein at educator@schoonerinc.org

Project Wet Facilitator Workshops - California
Two workshops are scheduled in California, in Fresno, October 1, 2005, and El Cajon, December 2, 2005. The goal of Project WET (Water Education for Teachers) is to promote the awareness, appreciation and knowledge of water resources. Facilitator training is an 8-hour workshop providing training in using the Project WET activities with your students and to help train fellow educators. Participants will be trained in the basics of how to use Project WET materials as well as in facilitation and organization skills.
Contact Brian Brown at projectwet@watereducation.org

Projects WET, WILD and Learning Tree Facilitator Workshop - Georgia
The Charlie Elliott Wildlife Center will host facilitator training workshops, January 23-24, 2007 in Mansfield, Georgia. Participants will receive certification and resource materials to become Project WET, WILD and Learning Tree facilitators.
http://eeingeorgia.org/net/calendar/details.aspx?c=29418&s=43308.0.68.4863

Projects WET, WILD and Learning Tree Facilitator Workshop - Georgia
Projects WET, WILD and Learning Tree Facilitator Workshops will be held January 23-24, 2007 in Mansfield, Georgia. Participants will receive certification and resource materials to become Project WET, WILD and Learning Tree facilitators. Facilitator training is for individuals interested in conducting workshops for their school or organization on how to teach these environmental education programs.
http://eeingeorgia.org/net/calendar/details.aspx?c=29418&s=43308.0.68.4863

Project WET Workshops - Tennessee
Project WET (Water Education for Teachers) Tennessee provides free six-hour workshops for teachers and non-formal educators of grades K-12. Participants receive the Project WET Curriculum and Activity Guide with interdisciplinary, hands-on activities and classroom-ready lessons.

- Clarksville, June 5, 2007
- Robertson County, June 15, 2007
- Knoxville, July 16, 2007
- Houston County, July 16 (K-5) and 17 (6-12), 2007

Contact Michelle Rogers at ogersm@apsu.edu

Project WET/Webfoot Training - Tennessee
Educators at Reelfoot Lake State Park will conduct Project WET and Project Webfoot training on May 3, 2008 in Tiptonville, Tennessee. Participants will receive both Project WET and Project Webfoot curriculum guides, along with additional materials.
Contact Kim Crews at kcrews@utm.edu

Project WILD Aquatic Facilitator Training - California
Facilitator training will certify participants to conduct WILD workshops that train and provide the WILD materials to others. Facilitators are expected to conduct one workshop, presentation or staff an exhibit each year to remain active. This free workshop will take place February 21, 2006 in El Sagundo, California.
Contact Bobbie Winn at bwinn@dfg.ca.gov

Project WILD & Monarchs Across Georgia Workshop
Cobb County Adopt-A-Stream, Marietta, Georgia, presents this dual workshop September 21-22, 2004. Project WILD emphasizes the intrinsic and ecological values of wildlife, as well as its importance as a basis for teaching how ecosystems function. Monarchs Across Georgia teaches ways to make your schoolyard or backyard an attractive habitat for monarchs and many other butterflies. Curriculum and resources are provided for both programs.
http://eeingeorgia.org/event.asp?eventID=19621 .

Project WILD and WILD Aquatic - Virginia
The Hoffler Creek Wildlife Preserve will host a free workshop for teachers and informal educators, February 16, 2015 in Portsmouth, Virginia.

http://www.hofflercreek.org/calendar-of-events/

Promoting Diversity on a Changing Planet – Washington, D.C.
The American Meteorological Society and partners offer the free AMS Climate Studies Course Implementation Workshop for 25 minority-serving faculty, May 19-24, 2013 in Washington, D.C. Faculty will be trained to offer the climate course and will hear presentations from NASA, NOAA, and university scientists.
http://www.ametsoc.org/amsedu/online/climateinfo/diversity.html

Protected Area Systems: Management and Design – Online
This free, 8-week e-course from the United Nations Development Programme is aimed at policy makers, managers, and practitioners of protected area systems. Participants will gain an overview of key issues related to the design and management of protected area systems and have a chance to interact with protected area experts.
http://nbsapforum.net/#read-thread/1672

Protected Species Observer - Florida
Marine Protected Species Consulting will hold a Protected Species Observer training February 25-26, 2017 in Juno Beach, Florida. The certification course covers the regulations for reducing seismic survey impacts to marine mammals and sea turtles, objectively documenting animal behavior, and how to visually locate and identify the animals.
http://www.protectedspeciesobservers.com/

Public Lecture Series – Washington, DC
The Library of Congress and cosponsors continue a series of free public presentations by scientists on current science topics. All programs will be held in Washington, DC. Webcasts are typically posted for each program a couple of months after the event.
http://www.loc.gov/rr/scitech/events/events.html

Puget Sound Marine Science Education Workshop
Join a workshop to coordinate and advance the state of field-based marine science education in Puget Sound. The workshop, *Coordinating and Advancing Field-Based Marine Science Education in Puget Sound: Creating a vision for the future*, will be held March 14-15, 2004, Seattle, Washington.
http://www.oceaninquiry.org/workshop/ .

Puget Sound Workshops - Washington
Padilla Bay National Estuarine Research Reserve and partners will host a free workshop, August 10-12, 2010 in Olympia, Washington, for teachers of grades 4-6. The focus of the workshop will be the science of estuaries, marine life, and curriculum to support teaching those topics. A second workshop for K-6 teachers, July 14, 21, and 28, 2010 will be held near Mt. Vernon, Washington.
Contact Alex at alex@padillabay.gov

Reef Fish and Friends - Florida
REEF Fish and Friends is a monthly meeting/seminar series in Key Largo, focused on fish. The lectures, offered the second Tuesday of each month in Key Largo, Florida, are free and open to the public. Upcoming topics focus on Lionfish, Parrotfish, and Wrasse.
http://www.reef.org/fishandfriends

Quantifying Debris Workshop - Louisiana
The Louisiana Environmental Education Commission offers the cross-curriculum Quantifying Debris workshop, June 25-27, 2014 in Cameron Parish, Louisiana, to teachers from EPA Region 6. Participants will discover the local flora and fauna with area biologists, conduct beach profiling, receive GPS training, and up to 16 professional development hours, and return home with lessons and activities for their classrooms. Scholarships and stipends may be available. .
http://www.wlf.louisiana.gov/newsletter-issue/special-enews-quantifying-debris-workshop-june-27-29

Question Everything - Online
This free 8-week MOOC from the University of Queensland, Query 101x: Question Everything: Scientific Thinking in Real Life,. High school students learn how to use math and science to solve everyday problems and better prepare to continue studying science in high school and beyond.
https://www.edx.org/course/question-everything-scientific-thinking-uqx-query101x

Reclaiming Broken Places; an Introduction to Civic Ecology - Online
This free MOCC, April 10–May 22, 2015 will explore the people, places, and practices that link restoring nature with revitalizing neighborhoods. Civic ecology practices such as community gardening, restoring streams, and removing invasive species to restore native habitat, can be a means for communities to rebuild and express resilience in places impacted by war, natural disaster, poverty, crime, and environmental degradation.
https://www.edx.org/course/reclaiming-broken-places-introduction-cornellx-envsci1500x

Reconstructing Earth's Climate History Workshop - Texas
The Consortium for Ocean Leadership and partners invite minority-serving institution faculty to attend the free MSI-REaCH Reconstructing Earth's Climate History workshop August 1-5, 2016 in College Station, Texas. In addition to the workshop, participants will receive mentoring, a stipend, and more.
http://msi-reach.oceanleadership.org/

Reef Rendezvous - Texas
The Houston Zoo and the Flower Garden Banks National Marine Sanctuary offer this one-day workshop, November 12, 2005, in Houston, Texas. Come explore the life that lives just below the surface of the ocean. Learn the basics of coral reef biology and ecology and tie it in to what you'll see at the zoo. There will be activities and plenty of resources for participants. This workshop is for elementary and middle school teachers.
http://www.houstonzoo.org/index.asp?page_ID=344

Reef Resilience and Responding to Climate Change - Palau
The Nature Conservancy, in partnership with NOAA, and with support from the John D. and Catherine T. MacArthur Foundation, will offer a Workshop for Trainers from throughout the Western Pacific to learn about building resilience into reef management and the tools available for addressing the impacts of climate change, June 3-7, 2011 in Koror, Palau. Space is limited to 25 participants for this workshop and selection is competitive.
http://www.reefresilience.org/Training_of_Trainers.html

Reef Resilience Training Course - Online
This free online training program on reef resilience offers guidance on building resilience to climate change into the design of MPAs and daily management activities. The course incorporates the science, lessons learned, case studies, and practices that have been included in the on-line Reef Resilience toolkit and is designed to accelerate the knowledge and facilitate access to essential information and tools needed to incorporate resilience principles into management strategies.
https://www.conservationtraining.org/
http://www.reefresilience.org/Training_Online.html

Reflecting on Practice Professional Development - California
This professional development program specifically designed for informal science educators, December 12-14, 2011 in Berkeley, California, is focused on connecting everyday practice to research and theory on learning and teaching science.
Contact Lynn Tran at lynn.tran@berkeley.edu

Reflecting on Practice - Various
The Reflecting on Practice program is a professional learning program for informal science educators, preferably in teams. Check out the upcoming workshops in Texas, California, and elsewhere.
http://missionaransas.org/reflection-practice

Regional Oceans Conference for Students and Teacher Preconference - Florida
The Florida Aquarium will be hosting the Regional Oceans Conference for Students (ROCS), on December 7, 2005. The teacher pre-conference workshop will be held on November 9, 2005. ROCS is a one-day workshop to ignite the curiosity and imagination of young people and to instill a sense of ownership and stewardship for the environment, specifically our marine and estuarine resources. Our topic, *Estuary Action*, will challenge students to explore the various local, state, and national environmental agencies involved in estuary education. This year, Suncoast Earth Force strategies and a Six Step Process for action will be included.
Contact Debbi Berger at Dberger@flaquarium.org

Regional Student ROV Competitions in the Sanctuaries
The NOAA National Marine Sanctuary Program offers ways to get students involved with marine technology and its application in ocean studies through the ROV program. The National Marine Sanctuaries are hosting three Regional Student ROV (Remotely Operated Vehicles) competitions. Teachers and students can attend a variety of ROV workshops around the country to learn how to build Lego and PVC pipe ROVs, as well as sign up to compete in regional ROV competitions.

- April 8, 2006: First-Annual Mid-Atlantic Regional ROV Competition, Norfolk, Virginia
- April 21-23, 2006: Southeast ROV Regional Competition, Savannah, Georgia
- May 13, 2006: Virginia and Maryland ROV Regional Competition, Norfolk, Virginia

http://sanctuaries.noaa.gov/education/events/welcome.html

Remote Sensing Applications for the Geosciences Workshop - Wisconsin
The University of Wisconsin–Madison offers this remote sensing workshop, July 10-11, 2007 in Madison, Wisconsin. This workshop will equip science teachers with the knowledge and skills to utilize data and teach remote-sensing applications in four geoscience topics: meteorology, oceanography, geology and climate change. The

workshop will culminate with a climate change session that highlights the connections between remote-sensing applications and Earth system science.
http://cimss.ssec.wisc.edu/satmet_workshop/

Reptiles and Amphibians of Everglades National Park eFieldTrip
The eFieldTrip, Don't Let It Loose! Invasive Species of Everglades National Park, has three major components – a virtual visit, a trip journal, and Ask the Experts, open November 17-19, 2009.
http://www.efieldtrips.org/Everglades/index.htm

Research-Based Online Learning Event (ROLE) Webinars - Online
The next round of COSEE Ocean Systems ROLE webinars start February 16, 2011. These free events will feature presentations and live Q&A with leading scientists in ocean and climate science. Previous webinars are also archived.
http://cosee.umaine.edu/programs/webinars/upcomingwebinars/

Research and Education: Volcanoes, Exploration and Life (REVEL) Project 2005
The Research and Education: Volcanoes, Exploration and Life (REVEL) Project invites grade 5-12 science teachers to bring cutting-edge earth and ocean research into their classrooms. Through the program, teachers are immersed in the scientific process as they participate in and contribute to a deep-sea, seagoing research cruise in the northeast Pacific Ocean.
http://www.ocean.washington.edu/outreach/revel/

A Resilient Future: Science and Technology for Disaster Risk Reduction - Online
Discover how science and technology can help reduce disaster risk and increase resilience in this free seven-week MOOC, starting November 5, 2016. This course introduces participants to existing and emerging technologies suitable for disaster risk reduction while promoting the overall aim of sustainable development. The course focuses on three main natural hazards - floods, landslides and earthquakes.
https://www.edx.org/course/resilient-future-science-technology-epflx-tech4drr

Resource Management and Conservation Workshop – Panama
A Darwin Project conference and workshop, *Resource Management and Conservation in the Las Perlas Special Management Zone*, will be held March 29-31, 2006, in Panama City, Panama. This free meeting will include presentations on the scientific results of the 3-year Darwin Project aimed at assessing the biodiversity and conservation needs of the Las Perlas Archipelago in the Gulf of Panama, along with additional presentations from similar projects in Ecuador and Colombia, and issues on Marine Protected Areas. Contact Inez Campbell at campbeli@si.edu for more information about the workshop.
http://striweb.si.edu/darwin_initiative/

Resources for Designing and Implementing Effective EE Programs - Online
NAAEE offers this webinar, May 8, 2013 to help participants find resources that can help them design and implement effective environmental education programs. This introduction to the National Project for Excellence in Environmental Education will explain the Guidelines for Excellence, how they are being used, and more.
http://www.surveymonkey.com/s/guidelines2013

REVEL Project 2004
The Research and Education: Volcanoes, Exploration and Life (REVEL) Project invites highly-motivated 7-12 grade science teachers who want to bring cutting-edge earth and ocean research into their classrooms to apply to the program. Through the REVEL Project, teachers are immersed in the scientific process as they explore the seafloor of the Juan de Fuca Plate in the Northeast Pacific Ocean.
http://www.ocean.washington.edu/outreach/revel/ .

REVEL Visions 2005 Project
The REVEL (Research and Education: Volcanoes, Exploration and Life) Project is a professional development program for science teachers, providing an opportunity to engage in science by pursuing cutting-edge research alongside deep-sea scientists. The practice of the research process empowers these teachers to become better facilitators of genuine, inquiry-based science learning in their classrooms, schools, and districts.
http://www.ocean.washington.edu/outreach/revel/missionframework.html

Remotely Operated Vehicles (ROVs) Workshop – Massachusetts
The Stellwagen Bank National Marine Sanctuary, Woods Hole Oceanographic Institute and other partners offer an ROV Teacher Workshop, October 15-16, 2004, in Falmouth, Massachusetts. Participants will be introduced to ROV technology, research, monitoring and exploration; discuss infusing technology into the high school curriculum; help develop lesson plans for use in high school classes and after school programs get connected with a technology mentor; and more.
http://stellwagen.nos.noaa.gov/ .

Remotely Operated Vehicles (ROVs) Workshop – Texas
The Flower Garden Banks National Marine Sanctuary is sponsoring a teacher workshop to bring science technology into the classroom. Workshop participants will learn how technology, especially underwater ROVs, is used to research and explore sanctuary ecosystems in support of resource management. They will leave the workshop having constructed and tested their own mini-ROV to take back to the classroom, along with lesson plans and ideas for incorporating their new knowledge into the classroom. Contact Shelley DuPuy at shelley.dupuy@noaa.gov .

Resilience: It's Not Just Surviving the Zombie Apocalypse - Connecticut
This Climate Science & Education Professional Development Workshop from the University of Connecticut and partners, July 11-July 13, 2017 in Groton, Connecticut, will focus on topics of climate science and resilience strategies for the northeast region of the United States, with a goal of connecting educators and their students and/or audiences to the best available science-based information and pedagogic resources.
https://docs.google.com/forms/d/14jBiqVlNP0W6loE8gUOQkUbSEY790QZhhIg-W5dHnj4/viewform?edit_requested=true

Resource Management Workshop - Mississippi
The Mississippi State University Coastal Research and Extension Center will host a free Natural Science Teacher Workshop, July 18, 2012 in Biloxi, Mississippi, targeted toward 5th- to 8th-grade teachers along the Gulf Coast. The workshop will cover local management methods and science used to protect coastal ecosystems including forest ecology and management, watershed science, coastal ecology, and more. Participants will receive educational resources.

Contact Chris Boyd at cboyd@ext.msstate.edu

Rising Tides and Changing Times Workshop – South Carolina
Explore past, present, and future impacts of climate change, August 3-4, 2016 in South Carolina. This free workshop for formal and informal educators will provide a close look at the challenges of rising seas on eastern coasts.
https://www.climate.gov/teaching/professional-development/climate-education-workshop-rising-tides-and-changing-times

Rivers to Reefs - Online
This webinar from the National Marine Sanctuaries Webinar Series took place October 11, 2016 and will be archived for future viewing. Using the Altamaha River watershed as an example, the webinar focused on human impacts on watersheds and how they influence ocean habitats. The webinar series provides educators with educational and scientific expertise, resources, and training to support ocean and climate literacy in the classroom.
http://sanctuaries.noaa.gov/education/teachers/webinar-series.html

Rivers to Reef Teacher Workshop - Georgia
This week-long teacher workshop, June 14-19, 2009 June 12-17, 2011 from Atlanta, Georgia, is led by staff from the Georgia Aquarium and NOAA's Grays Reef National Marine Sanctuary. Teachers will learn about watersheds, water quality, current aquatic issues and river, marsh, and reef ecosystems. The workshop takes teachers from the headwaters of the Ocmulgee River to the Georgia coast. Application to this workshop is competitive and is based on the three essay questions. June 11-16, 2017
http://www.georgiaaquarium.org/teachersAndKids/professionalDevelopment.aspx
http://www.georgiaaquarium.org/media/pdf/R2RWorkshopAnnouncementandApplication2011.pdf
http://www.georgiaaquarium.org/education/teachers/professional-development.aspx
http://www.georgiaaquarium.org/experience/learn/school-programs/educators/professional-development

ROLE Model Webinars - Online
COSEE-Ocean Systems offers a Fall series of Research-Based Online Learning Event (ROLE) Model webinars featuring ocean scientists and educators from across the country. Join scientists as they present marine science content through concept-map presentations of their research and hear from educators who've used concept mapping in their work in innovative ways. The hour-long webinars are free and offer direct access to scientists as well as customizable, take-home resources.
http://cosee.umaine.edu/programs/webinars/upcomingwebinars/

ROLE Model Webinars - Online
Remember that COSEE-Ocean Systems offers a Fall series of Research-Based Online Learning Event (ROLE) Model webinars featuring ocean scientists and educators from across the country. The hour-long webinars are free and offer direct access to scientists as well as customizable, take-home resources. Check out upcoming and previous webinars – all posted online.
http://cosee.umaine.edu/programs/webinars/

Rookie Science Weekend Workshops - Delaware
The University of Delaware, College of Marine Studies and the Delaware Teachers of Science will once again be sponsoring two workshops for rookie science teachers, January 27-29, 2006 in Lewes, Delaware. These secondary and elementary workshops are for any teacher who has taught science in Delaware for five years or less. Participants will leave this workshop with successful activities that they can use in their classrooms.
http://www.ocean.udel.edu/public/teachercourses.html

ROV Building Workshop - Massachusetts
The Museum Institute for Teaching Science, MIT Sea Grant, and partners offer an ROV building workshop for middle and high school teachers, November 6-7, 2009 in Worcester, Massachusetts. Participants will experience the MIT SeaPerch program through building their own ROV and then exploring how this ROV can be used in the classroom and field. Teachers will receive a complete ROV kit to use in the classroom along with the SeaPerch curriculum guide.
Contact Amy Hoffmaster at ahoffmaster@mits.org

ROV Teacher Workshops – Delaware and Virginia
These workshops, hosted by the Monitor National Marine Sanctuary and partners, teach educators about Remotely Operated Vehicle (ROV) technology and its application in ocean studies. Participants learn how to build a ROV with students, sponsor a student team to participate in a regional ROV competition, and more.

- July 25, 2007 in Norfolk, Virginia
- October 5, 2007 in Lewes, Delaware
- November 10, 2007 in Norfolk, Virginia

http://sanctuaries.noaa.gov/education/events

ROV Workshop - Georgia
Learn about Remotely Operated Vehicle (ROV) technology and its use in ocean exploration and research, January 26-27, 2007 in Atlanta, Georgia. Teach your students how to build an ROV and put together a student team to participate in a regional ROV competition. This workshop is hosted by NOAA Gray's Reef National Marine Sanctuary and Georgia Aquarium in partnership with Marine Advanced Technology Education Center.
http://eeingeorgia.org/net/calendar/details.aspx?c=30113&s=46328.0.0.4863

ROV Teacher Workshop – North Carolina
This workshop, hosted by the Monitor National Marine Sanctuary and partners, November 17, 2007 in Manteo, North Carolina, teaches educators about Remotely Operated Vehicle (ROV) technology and its application in ocean studies. Participants learn how to build a ROV with students, sponsor a student team to participate in a regional ROV competition, and more.
http://monitor.noaa.gov/news/features/0507_rov.html

ROVing the National Marine Sanctuaries - Texas
Discover how ROVs are used in real life ocean science and exploration; build your own ROV with LEGOs; and take home lesson plans, images, and other materials to help bring into your classroom with a new twist. This workshop, brought to you by Texas Marine Education Association and NOAA's Flower Garden Banks National Marine Sanctuary, takes place April 27-29, 2007, in Galveston, Texas.

http://statweb.org/TMEA/DTMar07.htm

Rutgers Ocean Days – New Jersey
Bring your students (grades 3-12) to Rutgers University to celebrate their knowledge of ocean science, learn from other New Jersey students, and experience ocean science research. The free events, April 9-11, 2013, asks students to investigate a component of the ocean and think about how it relates to their lives. Participating teachers should attend the professional development workshop on October 13, 2012 in New Brunswick, New Jersey.
http://coseenow.net/mare/opportunities-resources/ocean-day/

Salish Sea Educator Sails - Washington
Salish Sea Expeditions is a Washington State-based non-profit organization that combines Inquiry-Based Learning with classroom scientific study and boat-based field research, enabling students to learn scientific principles and practice problem-solving skills while navigating the waters of Puget Sound. They offered a chance for teachers to learn first-hand about their programs during free, three-hour, informal sails.
http://www.salish.org/Teacher%20Sails%20031802.htm .

Salish Sea Expeditions Teacher Trainings - Washington
Salish Sea Expeditions invites teachers to free teacher trainings geared for classroom educators, September 18, 2010 and others – check for future expeditions - from Anacortes, Washington, and September 25, 2010 from Seattle, Washington. The workshops are aimed at helping students make valuable connections between the ecology of their local watershed and the Puget Sound.

- April 14, 2012 aboard the 61' sailing vessel *Carlyn*, from Anacortes, Washington
- April 15, 2012 in Tacoma, Washington

Contact Nikken Palesch at nikken@salish.org

Sanctuary Advisory Council Meeting - Texas
The public is invited to attend the Flower Garden Banks National Marine Sanctuary Advisory Council Meeting, December 6, 2007 in Galveston, Texas, and provide comment during a public forum period. The agenda will focus on the following priority issues for management plan review: enforcement, education and outreach, and impacts from visitor use.
http://flowergarden.noaa.gov/advisory_council/council.html

Sanctuary Currents Symposium - Call for Research Posters - California
The 2009 Sanctuary Currents Symposium, *Back to the Future - Preserving the Sanctuary by Exploring its Past*, will be held April 18, 2009 in Monterey, California. Proposals for the research poster session are being accepted; abstracts that address the theme of the symposium are especially encouraged, however, submissions may be from all types of coastal and marine research in the central California area.
http://sanctuarysimon.org/monterey/posters/
http://montereybay.noaa.gov/research/currsymp2009/welcome.html

Sapelo Island National Estuarine Research Reserve Celebrations - Georgia
2006 marks the 30th anniversary of Sapelo Island National Estuarine Research Reserve on Sapelo Island, Georgia. To celebrate, there a variety of programs that will showcase the reserve and the beauty of Sapelo Island. Programs include history, natural resource ecology, art, music, and more.

Contact Brooke Vallaster at brooke@darientel.net

Sawfish in Peril Educator Workshop - Florida
The free Sawfish in Peril Educator Workshop, May 16, 2011 in Gainesville, Florida, will educate educators about endangered sawfish including biology, behavior, research, and conservation. The workshop will offer multimedia presentations given by elasmobranch research scientists on subjects ranging from sawfish diversity, to biology and behavior, to conservation efforts.
http://www.flmnh.ufl.edu/fish/sharks/sawfish/SawfishInPeril.html

Sawfish in Peril Workshop – Florida
The purpose of this free workshop developed by the Florida Program for Shark Research at the Florida Museum of Natural History, with funding provided by NOAA's National Marine Fisheries Service is to educate educators in Florida and surrounding states about endangered sawfish including biology, behavior, research, and conservation. Workshop participants will each receive a teaching kit consisting of an educator's guide, teaching activities, and power point presentations.
http://www.flmnh.ufl.edu/fish/sharks/sawfish/SawfishInPeril.html

Scaling Up Workshops - Maryland
Undergraduate and graduate students are invited to apply for the Ecological Society of America workshop, Scaling Up: Future of Environmental Decisions, June 2–7, 2013 in Baltimore, Maryland. Scholarships may be available.
http://www.esa.org/scalingup/

School of Rock 2009 – At Sea
The School of Rock 2009: Cores, CORKS and Hydrology on the Juan de Fuca Ridge, is a hands-on, research-based expedition for Earth and ocean science educators. Slated for June 23 –July 5, 2009 aboard the *JOIDES Resolution*, this workshop is open to science teachers at all levels, including undergraduate faculty, preservice, and informal educators.
http://www.oceanleadership.org/learning/school_of_rock/09

School of Rock– Delaware and Pennsylvania
The School of Rock Expedition for Earth and Ocean Science Educators is for middle and high school educators interested in experiencing scientific ocean drilling research with experts. During the workshop, August 10-16, 2014 in Lewes, Delaware, educators work with core material and lab technology to learn how science reveals clues about Earth's history. Students and faculty at minority serving institutions can join the workshop, Understanding Earth Through Ocean Cores School of Rock 2014, June 8-14, 2015 in Indiana, Pennsylvania.
http://joidesresolution.org/node/3298

School of Rock - Texas
During the School of Rock 2008, *Using Ocean Cores to Explore Past Climate Change*, July 6-14, 2008 in College Station, Texas, educators will conduct geological, physical and/or chemical analyses of sediment and hard-rock cores. Scientists will instruct participants on mid-ocean ridges, composition and structure of the oceanic crust, paleoceanography, and more. Educators will brainstorm and begin planning classroom activities based on their research and new knowledge.
http://www.oceanleadership.org/learning/SOR2008

School of Rock Workshop – British Columbia
Deep Earth Academy, the Integrated Ocean Drilling Program and the Consortium for Ocean Leadership announce the Spring 2013 School of Rock Expedition for Earth and Ocean Science Educators aboard the JOIDES Resolution, a platform outfitted for scientific exploration and education. The workshop will cover topics such as paleoceanography, sedimentology, and biostratigraphy; seafloor spreading; climate change; and more.
http://www.oceanleadership.org/2012/apply-now-school-of-rock-2013-exploring-cores-and-the-geology-of-the-pacific-northwest/

Schoolyard Habitats Distance Learning and Electronic Field Trip
The Happenin' Habitats! website has a wealth of resources about the National Wildlife Federation's Schoolyard Habitats® Program. Tune in for a 30-minute broadcast, *Happenin' Habitats: An Introduction* on March 14, 2005. This distance learning program will teach your students about wildlife habitat and provide information about how to create and preserve habitat. In addition, check out the live electronic field trip on April 13, 2005.
http://happeninhabitats.pwnet.org/index.php

Schoolyard Habitat Webinars - Online
Sign up to be advised of an upcoming free Schoolyard Habitat webinar and tips for educators from the National Wildlife Federation.
http://online.nwf.org/site/Survey?ACTION_REQUIRED=URI_ACTION_USER_REQUESTS&SURVEY_ID=19021

Schoolyard Habitat Workshop – Virginia
Educators and community resource professionals are encouraged to attend this free workshop, July 11-13, 2005, in Gloucester, Virginia, to learn how to turn unused portions of your local schoolyard into an area that attracts wildlife, helps protect the Chesapeake Bay, and stimulates student achievement. The U.S. Fish and Wildlife Service, the Maryland Association for Environmental and Outdoor Education, and the Chesapeake Bay National Estuarine Research Reserve in Virginia are cosponsoring this workshop.
http://www.vims.edu/cbnerr/education/teachers_sy_2005.htm

Schoolyard Habitat Workshop – Wisconsin
Plan, design, and create an outdoor classroom, July 28-29, 2006 in Poynett, Wisconsin. The Wisconsin Wildlife Federation and National Wildlife Federation are teaming up to teach Wisconsin educators how to plan, design, and create a National Wildlife Federation certified outdoor classroom for your school, and will provide the instructor, curriculum, and $200 in start up funds.
http://www.wiwf.org/page3.htm

Schweppe Public Lecture Series - Texas
The Laura Randall Schweppe Endowed Lecture Series in Marine Science at The University of Texas Marine Science Institute in Port Aransas, Texas, brings scientists to the institute to interact with its faculty, staff, and students. Sign up to receive email notification about the lectures given (usually on Thursdays.
http://www.utmsi.utexas.edu/visit/public-lectures/schweppe-public-lecture-series

Science for Citizens Seminar Series - Maryland
The University of Maryland Center for Environmental Science's Chesapeake Biological Laboratory hosts free evening seminars, Thursdays, in Solomons, Maryland. The 2016 Science for Citizens Seminar Series can engage formal or informal educators who wish to learn more about the Chesapeake Bay and current research efforts.
http://www.umces.edu/cbl/outreach-seminars

Science and Civic Issues – Virginia
SOLstice: Summer of Learning: Science Teachers Investigating the Chesapeake Environment, July 2013 online and in Virginia, brings together university faculty, practicing middle-school and upper elementary teachers, and pre-service teachers to work collaboratively as teacher-researchers. The Chesapeake Bay is the context in which these teacher-researchers will conduct research and consider curricular linkages. See the website for complete details. A stipend may be available.
http://www.longwood.edu/liberalstudies/33955.htm

Science Education for 21st Century Learners - Online
The College of Exploration Online Campus offers this course, January 15-February 9, 2014, geared for science educators of all grade levels. It will use videos, websites, articles, and more.
http://www.coexploration.org/online-campus/index.html

Science Education at Sea – New Jersey
This professional development workshop for teachers and environmental educators is presented by The Wetlands Institute and the New Jersey Marine Education Association, October 4, 2011 October 3, 2013 from Keyport, New Jersey. The workshop includes a boat trip and hands-on activities land activities.
http://www.njmarineed.org/education/atsea.html
http://njmarineed.weebly.com/uploads/1/1/5/0/11502005/njmea_fall_workshop_registration_2013.pdf

Science of Happiness - Online
Start the new year right and treat yourself to some happiness with this MOOC from the University of California, Berkeley. Through the eight-week, self-paced course, participants will learn science-based principles and practices for a happy, meaningful life.
https://www.edx.org/course/science-happiness-uc-berkeleyx-gg101x-4

The Science and Impacts of Weather Prediction - Pennsylvania
Science and Impacts of Weather Prediction: How Weather Forecasts Shape our Daily Lives workshop participants, July 8-13, 2007 in State College, Pennsylvania, will launch a weather balloon, predict the weather, and visit state-of-the-art forecasting facilities both on- and off-campus, while immersing themselves in a scenario-based journey starting with the weather forecast and leading through its effects on our day-to-day activities. The workshop is designed for 6–12 grade educators.
http://teachscience.psu.edu/weather_prediction.html

Science Institute 2013-2014 – Minnesota
The Great Lakes Aquarium and Wolf Ridge Environmental Learning Center offer the *Science Institute 2013-2014: Real Stories in Research: the Lake Superior Edition*. This free opportunity for educators to access current Lake Superior research and supporting

lesson plans focuses on the nature of science and the steps involved in conducting scientific research in the context of research from the Lake Superior watershed. Visit the website for complete details; note that the workshop series has already started.
http://glaquarium.org/education-programs/teacher-workshops/

Science of Oil Spills – Alabama and Michigan
NOAA's Emergency Response Division will host a Science of Oil Spills class in Mobile, Alabama, March 28-April 1, 2016 and in Ann Arbor, Michigan, May 16-20, 2016. The deadlines for registration are January 22 and March 11, 2016, respectively. See the website for complete details.
http://response.restoration.noaa.gov/training-and-education/training/workshops/science-oil-spills-workshops.html

Science at Sea Talk - Delaware
The University of Delaware will present the annual faculty lecture sponsored by the University of Delaware Library Associates, *Ships, Submersibles and Underwater Habitats: Diving into the Adventures of Science at Sea*. The lecture focused on the multiple research platforms that scientists use to conduct work on the surface and under the sea and the unexpected adventures they sometimes encounter.
http://www.udel.edu/PR/UDaily/2008/mar/sea031708.html

Science at Sea Workshop – Texas
This workshop with educators from the Flower Garden Banks National Marine Sanctuary, June 21-25, 2010 from Galveston, Texas, is designed to give educators first-hand knowledge and experience of the role science and technology play in managing and protecting our natural resources.
http://flowergarden.noaa.gov/education/workshops.html

Science Lectures - California
Join Point Reyes National Seashore and Cordell Bank National Marine Sanctuary staff for presentations on scientific research being performed at Point Reyes and other locations in California. On November 20, 2008, join them for *MPA Fish Assessments at the Channel Island*s in the afternoon, and *A Conversation on Sharks* in the evening.
http://www.nps.gov/pore/planyourvisit/events_sciencelectures.htm

Science of Story Webinar - Online
NOAA's Climate Connection Webinar, Using the Science of Story to Enhance Climate Writing, August 1, 2014, will feature information on Narrative Tension, Reader Engagement, and more. The webinar will be archived for future reference; check out the extensive archives in the NWS Climate Services Seminar Series.
https://www1.gotomeeting.com/register/916585992
http://www.nws.noaa.gov/om/csd/index.php?section=seminar

Science through Scuba Symposium – Washington, D.C.
The *Research and Discoveries: The Revolution of Science through Scuba Symposium,* May 24-25, 2010 in Washington, D.C. is presented by the Smithsonian Institution, the National Science Foundation, and the National Research Council. Registration is free.
http://www.si.edu/sds/

Science Training Programs
The Science Training Programs Directory for Teachers and Students from Science Service Inc. has more than 300 programs in their on-line catalog of science, mathematics and engineering enrichment programs for pre-college students and teachers. The training programs listed in the directory cover a wide variety of scientific disciplines and take place throughout the year at a variety of institutions.
http://www.sciserv.org/stp

Scientific Photography - Bermuda
Scientific Photography, July 31-August 20, 2005, and July 30-August 19, 2006 at the Bermuda Biological Station for Research, is an intensive class comprised of lectures, required reading, laboratory exercises, demonstrations, and field assignments. This three-week course exposes students to the use of photography as a scientific tool. Partial scholarships may be available.
http://www.bbsr.edu/Education/summercourses/photog/photog.html
http://www.bbsr.edu/Education/summercourses/summercourses.html#photog

Scientist in Your Classroom GK-12 Program - Texas
The National Science Foundation sponsors this UT Austin Environmental Science Institute program that partners graduate students in the sciences with K-12 teachers in Texas to enhance science education through new classroom activities, workshops, and field projects. The program emphasizes collaboration in K-12 classrooms and in field projects on Texas watersheds, estuaries, and ocean-going vessels.
http://www.esi.utexas.edu/gk12/

SciREN – North Carolina
Scientific Research and Education Network (SciREN), February 20, 2014 i February 18, 2016 n Pine Knoll Shores, North Carolina, is an annual evening workshop that aims to connect local marine and environmental scientists with K-12 teachers. This networking event allows teachers to obtain classroom-ready exercises from scientists that help bring local research to the classroom.
http://sciren.web.unc.edu/

Scott Aquarium Teacher Workshops
The University of Southern Mississippi and the Scott Aquarium offer teacher workshops:

- Storm Drains: Pollution Solution workshops, March 9, and April 20, 2004
- Marine Biotechnology: The Wave of the Future, February 11 - 13, 2004
- Aquatic Nuisance Species teacher workshop, February 15 -17, 2004
- Centers for Ocean Sciences Education Excellence: Central Gulf of Mexico

(COSEE:CGOM) will sponsor

- Educators' Workshop, March 4-5, 2004
- The Wonders of Wetlands teacher workshop, April 21 - 23, 2004

shelia.brown@usm.edu or kay.baggett@usm.edu .

SCUTES Workshop – Massachusetts and Online
The SCUTES (Students Collaborating to Undertake Tracking Efforts for Sturgeon) program is a collaboration between NOAA Fisheries, sturgeon researchers, teachers, and informal educators to bring more awareness about Atlantic and shortnose sturgeon to the classroom. Check out the website for a list of lesson plans, rubrics, and more.
http://www.nero.noaa.gov/prot_res/scutes/workshop.html

SCUTES Educator Workshop - Virginia
Formal and non-formal educators can participate in this SCUTES (Students Collaborating to Undertake Tracking Efforts for Sturgeon) Educator Workshop, September 21, 2013, September 13, 2014 in Chester, Virginia from Chester, Virginia. Hurry – space is limited to 25 participants. Check out the lessons for grades 3-12 on the Teacher Page. Registration fees include a one year membership with the Mid-Atlantic Marine Educators Association (MAMEA). The website has a link to the lesson plans and activities.
http://www.nero.noaa.gov/prot_res/scutes/teachers.htm
https://www.facebook.com/events/1408762506004195/?ref=22
http://www.mamea.org/vamini2014.html

Sea ExChange
NMEA and the Australian based Marine Education Society of Australasia (MESA) team up to bring marine educators together for professional development experiences through Sea ExChange, a cooperative program to assist marine educators working at similar jobs and facilities to set up exchanges. The program offers three types of exchange: short-term Partner and Education Group ExChanges, and longer term Job Exchanges.
http://www.mesa.edu.au/careers/sea_ExChange.asp

Sea Grant Law and Policy Journal Inaugural Symposium - Mississippi
The National Sea Grant Law center is developing a Sea Grant Law and Policy Journal ti explore legal topics of relevance to the Sea Grant network of extension agents, researchers, coastal managers and users, and local decision-makers. An inaugural symposium, March 25-26, 2008 in Oxford, Mississippi, from which the Law Center will invite papers for the publication in June, will focus on coastal resiliency. Relevant topics might include land use planning, emergency management, risk analysis, and mitigation.
http://www.olemiss.edu/orgs/SGLC/National/SGLPJ/SGLPJ.htm

Sea Science Career Day - Florida
This career day will be hosted by Florida Sea Grant Extension and the Miami Museum of Science, February 26, 2005 in Miami, Florida. The Sea Science Career Day is for high school students who are enrolled in the Upward Bound Program or in 9-12th Grades. There will be several speakers and it is open to the public.
Contact Marella Crane at mgcrane@mail.ifas.ufl.edu

Sea Star Wasting Disease in Washington Waters - Washington
Join the Seattle Aquarium for a free teacher workshop for educators of grades 3-7 that will explore the natural history of sea stars, current research on Sea Star Wasting Disease, and opportunities to engage students in citizen science in the field. Register for either of two dates or locations.
http://www.seattleaquarium.org/teacher-resources

Sea Turtle Conservation Teacher Workshop - Georgia
Join educators at the Sapelo Island National Estuarine Research Reserve, June 10-12, 2013, June 16-18, 2014, June 15-17, 2015, June 6-8, 2016 on Sapelo Island, Georgia, for the Georgia Sea Turtle and Conservation Teacher Workshop. June 12-14, 2017
http://eeingeorgia.org/net/calendar/details.aspx?s=40374.0.0.4863&dateid=7054
Contact Georgia Graves at georgiabeachwalk@bellsouth.net

Sea Turtle and Diamondback Terrapin Conservation Teacher Workshop - Georgia
Join biologists from Georgia and South Carolina, June 22-26, 2009, June 14-18, 2010, June 13-17, 2011, June 4-8, 2012, on Sapelo Island, Georgia, who will share their knowledge in anatomy and life history, conservation, and management of the Loggerhead Sea Turtle and Diamondback terrapin. Learn why the Georgia coast is important to these animals and ways you can help them by educating your students. Contact Georgia Graves at georgiabeachwalk@bellsouth.net
http://www.georgiaseaturtlecenter.org/education-programs/group-programs/teacher-professional-development/

Sea Turtle Ecology - Georgia
Ossabaw Island in Georgia is used exclusively for educational and scientific purposes. From July 10-13, 2007, it will host a Sea Turtle Ecology course, offering participants the opportunity to study the ecosystems of the island as well as many aspects of sea turtle ecology including classification, behavior patterns, migration, nesting, and threats to sea turtle survival. Hurry – the course is limited to twelve participants.
http://www.eeingeorgia.com/net/calendar/details.aspx?c=32773&s=53032.0.68.4863

Sea Turtle Exploration – North Carolina
The North Carolina Aquarium at Fort Fisher presents Sea Turtle Exploration: a curriculum to help educators engage students in the fundamentals of STEAM through ready-to-use, standards based lesson plans and sea turtles. Sign up for the workshop, February 7, 2015 at Fort Fisher, North Carolina, which will guide you through the new curriculum and website. Note: do not explore the online curriculum yet, as the host website may have a malware problem.
https://reservations.ncaquariums.com/fortfisher/Info.aspx?EventID=20

Sea Turtle Professional Development - California
The Science Exchange is partnering with Ocean Connectors to offer a free sea turtle education program for Title I high schools and middle schools in San Diego County, summer of 2011. The International Sea Turtle Society will convene the International Sea Turtle Symposium, April 12-15, 2011 in San Diego, California; the theme is *The Next Generation of Research and Conservation*. In support of the symposium, there will be a free workshop for teachers of grades 5-8, Bringing the Ocean and Sea Turtle Science into the Classroom, April 14, 2011, which will focus on ocean conservation through the biology of sea turtles, while meeting state learning standards.
http://www.seaturtlesociety.org/
Contact Frances Kinney at frances@propeninsula.org

Sea TURTLE Program for Students - Massachusetts
The New England Aquarium offers the Sea TURTLE (Teen Underwater Research, Training and Learning Expedition) program for students in grades 10-12. Students earn Open Water SCUBA diving certification, immerse themselves in the marine biology of New England, and test their diving skills on a local overnight expedition. Need-based scholarships are available for a limited number of applicants.
http://www.neaq.org/education_and_activities/programs_and_classes/teen_programs/Sea_TURTLE.php

Sea Turtle Saturday - Texas
Join the Houston Zoo, February 23, 2008 in Houston, Texas, for a sea turtle restoration symposium with a line-up of lectures by sea turtle experts aimed to educate the public

on conservation efforts. This is an opportunity for students, teachers, and the public to learn more about sea turtles and how to get involved locally in sea turtle conservation.
http://www.houstonzoo.org/seaturtle/

Sea Turtle Workshop – Texas and Online
The Sea Grant Oil Spill Science Outreach Team offers this free sea turtle workshop, March 23, 2017 in Brownsville, Texas and through a webinar online. Topics will include oil spill science, emergency response, natural resource management, and more while discussing the impacts of oil spills on sea turtles.
http://gulfseagrant.org/sea-turtles-oil-spills/

Sea Turtle Workshop for Educators - Georgia
The Sapelo Island National Estuarine Research Reserve presents a Sea Turtle Workshop for educators, June 26-29, 2006, on Sapelo Island, Georgia. Work with sea turtle biologists from Georgia and South Carolina who share their research in physiology, behavior, and conservation. Learn why the Georgia Coast is so important to these magnificent animals, and ways you can help through educating your students. Participants will receive resource and curriculum materials.
http://eeingeorgia.org/net/calendar/details.aspx?c=28886&s=40374.0.68.4863

Seabird Workshop - California
This free ocean stewardship workshop, sponsored by Oikonos Ecosystem Knowledge and Cordell Bank National Marine Sanctuary, is funded by the California Coastal Commission. The workshop, October 18, 2005 in Sausalito, California, is designed for middle- and high-school educators. The workshop will focus on using current research on the Black-footed Albatross and Sooty Shearwater to directly link scientists, seabird research, and marine pollution with teachers and students. For more information about the project and Oikonos, check out www.Oikonos.org. For workshop information, contact Keley Stock at (415) 332-3871.

Seacamp Marine Education Workshop - Florida
The Marine Education Workshop, February 12-15, 2010 from Big Pine Key, Florida, will offer the opportunity to study sub-tropical program sites within the Florida Keys National Marine Sanctuary. Study sites include soft and hard corals, mangrove islands, sponge and sea grass beds, and more. All educators, naturalists, and others (over 21 years of age) with an interest in the marine environment are invited.
http://www.nhmi.org/PDF/NHMI2010TeacherWorkshop.pdf

Seacoast Science Center Distance Learning
The Seacoast Science Center in Rye, New Hampshire offers distance learning opportunities. All of the programs can be adjusted to meet the learning styles and curriculum needs of each audience. In addition to the following four standard programs, science center educators can work with you and their resources to custom create a program or a series of programs.

- The American Lobster
- Coastal Creatures and Animals Adaptations
- Horseshoe Crab Program
- Love and Lifecycles at the Seacoast Science Center

http://www.seacoastsciencecenter.org/programs/distance_learning.php

Seafood Sense: Fisheries Technology for Food Educators - Delaware
Seafood specialists will lead a two-day training on seafood preparation and safety. Hands-on cooking activities will provide participants will practical opportunities to learn about buying, handling and preserving seafood, seafood composition and nutrition, and commercial fishing practices. The workshop will include seafood cooking and sampling, curriculum ideas for use in the participant's own educational workshops, a tour of a local seafood market, and a seafood issues internet tour.
http://www.ocean.udel.edu/seagrant/outreach/seafood/seafoodsense.html

Seagrass, Mangroves, and Corals Workshop - Florida
Learn about the seagrass, mangrove, and coral reef communities of the Upper Florida Keys at this weekend workshop, February 18-20, 2011 in Key Largo, Florida. The workshop includes snorkeling field trips, evening activities, and more. Space is limited.
http://www.marinelab.org/Teacher_Workshops.html

Seagrass and Salt Marshes - Florida
The Apalachicola National Estuarine Research Reserve Coastal Training Program offers a summer Panhandle Habitat Series for coastal decision makers such as consultants, park rangers, volunteer organizations, and others. Seagrass and Salt Marshes Class will take place May 26, 2014 in Port Saint Joe, Florida. The class covers the ecology, geology, and the economic importance of coastal marshes and seagrass beds.
http://www.eventbrite.com/o/apalachicola-national-estuarine-research-reserve-coastal-training-program-3569409179

SeaPerch/NOAA Ocean Exploration Workshop - Louisiana
The U.S. Naval Academy, NOAA's Office of Ocean Exploration and Research, and the Audubon Aquarium of the Americas will offer a professional development workshop for educators of grades 5-12, June 24-25, 2013 in New Orleans, Louisiana. Participants will learn how to build a SeaPerch underwater robot to start a SeaPerch program in your classroom or after school program, and be introduced to the NOAA Ship Okeanos Explorer Education Materials Collection, How Do We Explore?.
Contact Tricia LeBlanc at tleblanc@AudubonInstitute.org

SeaPerch & OE Workshop - Ohio
The United States Naval Academy's STEM Office, NOAA's Office of Ocean Exploration and Research, and Greater Cleveland Aquarium present a two-day SeaPerch/NOAA Ocean Exploration Professional Development Workshop For Educators of Grades 5-12, February 14-15, 2014 in Cleveland, Ohio.
Contact Ray Patacca at rpatacca@greaterclevelandaquarium.com

Seaside Chats – Texas and Online
Flower Garden Banks National Marine Sanctuaries will host a series of free Seaside Chats. The presentations will take place at Sea Scout Base in Galveston, Texas, and those outside of the area can attend via webinar.
http://flowergarden.noaa.gov/education/seasidechats.html

Seattle Aquarium's Marine Protected Areas Conference
This past August, the City of Seattle designated much of the Seattle shoreline as a no-take marine protected area. To raise general public awareness of MPA issues, the Seattle Aquarium is hosting a workshop on Puget Sound MPAs on Saturday, March 27,

2004.
Contact Leo Shaw at Leo.Shaw@Seattle.Gov

SECORE Workshop – Online
The SECORE (SExual COral REproduction) Project is an initiative of public aquariums and coral research institutions dedicated to nature conservation through the sustainable management of coral reefs. This website allows viewers to follow the daily update of the 3rd SECORE workshop, August 1-8, 2007 in Puerto Rico, focused on developing appropriate breeding, aquaculture and cryopreservation techniques for the threatened Elkhorn coral, Acropora palmata.
http://www.secore.org//index_weblog.htm

SECOSEE 2004 Ocean Leadership Institute
The SouthEast Center for Ocean Sciences Education Excellence (SouthEast COSEE) will hold the second Ocean Education Leadership Institute for middle and high school science teachers from NC, SC, and GA, June 25-July 1, 2004, Savannah, Georgia. Teachers will be introduced to ocean science research in island dynamics, physical and biological parameters of the South Atlantic Bight region, and develop and implement leadership skills necessary to share what they learn with their colleagues.
http://www.scseagrant.org/se-cosee/education.htm

Secret of Sequels - Online
Youth Service America will host The Secret to Sequels webinar, March 11, 2015 The webinar brings together youth experts, organizational leaders, and educators to discuss best practices for how to sustain service projects.
http://www.ysa.org/sequels

Seminar Fellowship – Gulf of Mexico Region
Metcalf Institute, Louisiana State University, and Louisiana Universities Marine Consortium (LUMCON) offer fellowships to informal science educators and journalists for a science seminar, Impacts of the Deepwater Horizon Oil Disaster, April 6-8, 2011 in Cocodrie, Louisiana. Participants will gain hands-on knowledge of oceanographic techniques in labs and on board LUMCON's *R/V Acadiana* and will discuss the latest research on the Deepwater Horizon oil disaster with leading experts.
http://www.metcalfinstitute.org/programs/icosr.htm

Seminars on Science - Online
Seminars on Science courses from the American Museum of Natural History Fall 1 courses include Earth: Inside and Out and runs August 27-October 7, 2007; the deadline for registration is August 20, 2007. Fall 2 courses include The Ocean System and runs October 22-December 2, 2007; the registration deadline is October 8, 2007. Designed for K-12 educators, each six-week course is led by an experienced classroom teacher and a scientist affiliated with the American Museum of Natural History. The deadline for registration for summer session 1 (June 7-July 18, 2010) is May 25, 2010; for summer session 2 (July 5-August 15, 2010), June 21, 2010. Upcoming courses include The Ocean System, Earth: Inside and Out, Water, and more. The deadline for registration for fall session 1, September 6-October 10, 2010 is August 27, 2010; for fall session 2, October 25-December 5, 2010, October 12, 2010. Spring Session 1 runs January 24–March 6, 2011; the deadline for registration is January 10, 2011. Spring Session 2 runs March 14-April 24 2011; the deadline for registration is February 28, 2011. This session runs May 9-June 19, 2011, June 6-July 17, 2011) , (June 6-July 17, 2011 for summer

session 2 (July 4-August 14, 2011, The deadline for registration for summer session 1 (May 28-July 8, 2012) is May 14, 2012; for summer session 2 (July 2-August 12, 2012), June 18, 2012. Spring Session 1 runs January 25-March 6, 2016, with a deadline for registration of January 11, 2016; Spring Session 2 runs March 14-April 24, 2016 with a deadline for registration of February 29, 2016. http://www.amnh.org/learn/calendar
http://www.amnh.org/learn/
http://learn.amnh.org/about/

Seminars on Science: Sharks and Rays – Ecology, Classification and Evolution
The American Museum of Natural History offers this six-week summer workshop, June 28 - August 8, 2004. Key science concepts and processes covered in the course include diversity and adaptation, anatomy, fossil evidence, and data analysis. Participants will have access to Museum scientists and educators and receive teaching tools to take back to their classroom.
http://learn.amnh.org/courses/sharks.php .

Sensing Planet Earth – Online
Deepen your understanding of global change by learning about the techniques and tools used to study the Earth through this free MOOC from Chalmers University of Technology. Sensing Planet Earth – From Core to Outer Space, a five-week course, starts February 1, 2016.
https://www.edx.org/course/sensing-planet-earth-core-outer-space-chalmersx-chm003x#!

Sensing Planet Earth – From Core to Outer Space - Online
This MOOC from Chalmers University of Technology will cover different Earth observation tools for studying the solid Earth, atmosphere, and biosphere. Learn why, where, and how these techniques are applied .
https://www.edx.org/course/sensing-planet-earth-core-outer-space-chalmersx-chm003x-0

Sharing the Climate Story with Young Learners Through Elementary GLOBE - Online
NOAA's Climate Stewards Webinar Series offers this free webinar February 6, 2017. The webinar introduces a new GLOBE elementary school level storybook and set of classroom activities that showcase the science of climate change. The book, What in the World is Happening to Our Climate?, builds K-4 student understanding of climate science through storytelling.
https://www.climate.gov/teaching/professional-development/sharing-climate-story-young-learners-through-elementary-globe

Sharing Stories About Climate Change - Online
Join the NOAA Climate Stewards Education Project, June 6, 2016, for this webinar with the director of the Climate Stories Project. Learn about this educational and artistic forum for sharing stories about personal and community responses to climate change.
https://attendee.gotowebinar.com/register/4319746264851488769

Sharks of the Channel Islands
The Channel Islands National Marine Sanctuary will present the webinar, Sharks of the Channel Islands, August 23, 2016. This webinar series will provide educators with

educational and scientific expertise, resources, and training to support ocean and climate literacy in the classroom.
http://sanctuaries.noaa.gov/education/teachers/webinar-series.html

Sharks! Global Biodiversity, Biology, and Conservation - Online
In this free MOOC from Cornell University and the University of Queensland, starting June 28, 2016 for four weeks, learn about sharks, their senses, and how sharks and their relatives have impacted human history and culture. Join researchers as you track the movement of a wild shark on Twitter, observe shark habitats, and more.
https://www.edx.org/course/sharks-global-biodiversity-biology-cornellx-uqx-bioee101x

Shedd Aquarium Fall Teacher Workshops - Illinois
The Shedd Aquarium offers a variety of professional development for classroom teachers throughout the year. Upcoming workshops include:

- *Classroom Habitats* - October 13, 2007
- *Learning Ocean Science through Ocean Exploration* - November 3, 2007 (Part 1) and April 12, 2008 (Part 2).

Check the website for more offerings, along with lesson plans, interactives, and more.
http://www.sheddaquarium.org/teacherprogram_listings.html

Shedd Aquarium's Digital Learning - Online
Shedd Aquarium is piloting an online professional development badging program. The program will explore topics surrounding Great Lakes science along with ideas for classroom connections and opportunities to share with other teachers. Participants complete a series of mini-lessons and activities in environmental literacy, science literacy, and 21st century skills.
http://shedd.badgestack.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.
http://www.paseagrant.org/projects/rv-lake-guardian-workshop/

Shipboard and Shoreline Science Workshop Cruise - Ohio
The Center for Ocean Sciences Education Excellence Great Lakes invites 4th-10th grade teachers and non-formal educators to participate in its first annual Lake Guardian Shipboard and Shoreline Science workshop, June 18-24, 2006. This year's cruise on Lake Erie is designed to promote Great Lakes and ocean sciences in formal and informal education. It will offer first hand explorations of Lake Erie geography, resources, processes and issues, and demonstrate how Great Lakes science parallels the science of the world ocean.
http://coseegreatlakes.net/events/

Shipboard Spring Teacher Trainings - Washington
Salish Sea Expeditions invites educators to join them for a free teacher training on board the *Carlyn*, a 61' sailing vessel, from Seattle or Anacortes, Washington geared for the classroom educator to facilitate student-designed, field-based science research. Both sails will focus on building knowledge and skills in coordinating inquiry-based learning

approaches, and orient teachers to a variety of field research methods that will help their students investigate both marine and terrestrial environments.
Contact Nikken Palesch, at nikken@salish.org

Shipwreck Archaeology Workshop for Students – North Carolina
The Graveyard of the Atlantic Museum offers its third Shipwreck Archaeology Workshop to be held June 18-24, 2006 in Hatteras, North Carolina. The Shipwreck Archaeology Workshop is designed for ten students from eighth grade and above. The workshop will provide a glimpse of what it is like to study a shipwreck and use skills learned in math, science, history, social science and writing in a real life, hands on situation.
http://www.graveyardoftheatlantic.com/

Shipwrecks and Maritime Landscapes of the Great Lakes - Michigan
Thunder Bay National Marine Sanctuary and Alpena Community College offer the chance to attend *United by Water: Exploring American History through the Shipwrecks and Maritime Landscapes of the Great Lakes*, July 17-23 and July 24-30, 2011 in Alpena, Michigan.
http://www.alpenacc.edu/shipwrecks/application.html

Shoals Marine Laboratory Summer Courses - Maine
Shoals Marine Laboratory offers college credit courses that will be taught on Appledore Island, Maine, in the summer.

- Forensic Science for Marine Biologists - http://www.sml.cornell.edu/college/pc-ccfsmb.htm
- Field Marine Biology and Ecology - http://www.sml.cornell.edu/college/pc-ccfmbe.htm
- Underwater Research - http://www.sml.cornell.edu/college/pc-ccur.htm
- Marine Vertebrates - http://www.sml.cornell.edu/college/pc-ccmv.htm
- Sharks - http://www.sml.cornell.edu/sml_cc_sharks.html
- Biological Illustration - http://www.sml.cornell.edu/sml_cc_bi.html

Contact them by e-mail at shoals-Lab@cornell.edu as soon as possible
http://www.sml.cornell.edu/
http://www.sml.cornell.edu/sml_students_creditcourses.html

Shorebirds Conservation Teacher Workshop - Georgia
The Georgia Shorebirds Conservation Teacher Workshop, December 2-5, 2010 on Sapelo Island, Georgia is open to formal and informal educators of all grade levels. All participants will receive curricula and resource materials. Topics will include: life history, anatomy, morphology, management, rehab, and research.
http://eeingeorgia.org/net/calendar/details.aspx?s=54703.0.68.4863&mode=p&c=3526135&p=6286

Shorecombers Trash Blast Leaders Workshop - Online
Participants in the seven-week online Shorecombers Trash Blast Leaders Workshop, starting March 6, 2017, learn how to design a cleanup and protection plan tailored to the water, land, and community in which they live. Up to 25 full scholarships may be available.
http://www.shorecombers.org/apply-for-a-scholarship.html

ShortCourses.com: Digital Cameras and Photography Courses – Online
This website, created by Dennis Curtin, offers tutorials and informational essays on all aspects of digital photography, camera operation, and editing digital photos. In the site's seventeen sections, visitors can learn about how to choose a digital camera, how to display and share digital photos, and how to best use one's digital camera for a variety of purposes. There's also an on-line photographic journal of natural events in and around Marblehead, Massachusetts.
http://www.shortcourses.com/

Sky Rangers Online Workshop for Outdoor Astronomy Interpretation - Online
Sky Rangers workshops, part of the Astronomy from the Ground Up program, are designed for educators and interpreters from parks, nature centers, and other informal outdoor and environmental educational facilities. The free 8-week workshop, January 23-March 16, 2012, will get participants out under the night sky, build confidence in locating constellations and planets, and provide the tools to interpret the sky for their audiences.
http://www.afguonline.org/mod/resource/view.php?id=1857

Social-Ecological Resilience and Changing Landscapes Webinar Series
The U.S. Forest Service's Rocky Mountain Research Station and partners are hosting a free Spring Webinar Series that will explore activities and tools that facilitate effective adaptation and build social-ecological resilience in the context of changing landscapes. Topics include Understanding the Views of Decision-Makers, interdisciplinary teams, and more. Webinars will be archived for future viewing for those unable to attend.
https://www.fs.fed.us/rmrs/social-ecological-resilience-and-changing-landscapes-webinar-series

Social Interpretation: Graphic Design and Social Media - California
The National Association for Interpretation will hold this Social Interpretation workshop May 22-23, 2014 in Monterey, California. It is designed for interpreters who have little or no training in graphic design or social media, but find themselves responsible for creating nonpersonal media.
http://www.interpnet.com/nai/Certification/Social_Interpretation__Graphic_Design___Social_Media/nai/_certification/Social_Interpretation.aspx?hkey=644bc161-e54d-47d4-914c-96f3f0f66e41

Social Marketing Webinar - Online
The webinar from Open Channels, "To Target Everyone Is to Target No One": What Social Marketing Can Offer Conservation and Management, will review marketing techniques. The webinar will cover what social marketing is and isn't, what it offers to conservation and management practitioners, and examples of social marketing being used in a marine conservation context.
https://www.openchannels.org/upcoming-events/webinar/target-everyone-target-no-one-what-social-marketing-can-offer

Smithsonian Environmental Leadership Course - Virginia
The Smithsonian Institution's Monitoring and Assessment of Biodiversity Program offers professional training courses for international scientists, resource managers and educators. The Environmental Leadership Course, September 11-23, 2005 in Front Royal, Virginia, teaches communication skills and problem solving techniques. This

course covers foundation skills for the environmental leader, negotiation and conflict resolution strategies, creating compelling futures, and environmental communication.
http://nationalzoo.si.edu/ConservationAndScience/MAB/training/leader.cfm

Smithsonian-Mason School of Conservation Courses - Virginia
The newly renamed Smithsonian-Mason School of Conservation, a partnership between George Mason University and the Smithsonian Conservation Biology Institute, is offering courses focused on training in different aspects of biodiversity conservation, from effective conservation leadership, to technical tools in statistics and field sampling. All courses are one- or two-week intensive residential courses and will be held in Front Royal, Virginia. Upcoming courses include the Ecology and Conservation of Migratory Birds, Spatial Ecology, Geospatial Analysis and Remote Sensing for Conservation, and more.
http://SMConservation.gmu.edu

Social Interpretation: Graphic Design and Social Media – North Carolina
The National Association for Interpretation will hold this Social Interpretation workshop August 18-19, 2014 in Charlotte, North Carolina. It is designed for interpreters who have little or no training in graphic design or social media, but find themselves responsible for creating nonpersonal media.
http://www.interpnet.com/nai/Certification/Social_Interpretation__Graphic_Design___Social_Media/nai/_certification/Social_Interpretation.aspx?hkey=644bc161-e54d-47d4-914c-96f3f0f66e41

Social Media for Environmental Communication - Online
Check out the Duke Environmental Leadership Program's Social Media for Environmental Communication, April 6-May 15, 2015. April 4-May 13, 2016; Scholarship funding for the course may be available for teachers and educators who reach a K-12 audience through the Coca-Cola Advancement in Teaching in the Environment Scholarship (CATES). Check the website for complete details, including additional courses in environmental communication and behavioral change.
https://nicholas.duke.edu/del/social-media-environmental-communications
http://nicholas.duke.edu/del/cates-program
https://nicholas.duke.edu/programs/execed/courses
https://nicholas.duke.edu/programs/execed/cates

Society for Conservation GIS Domestic Scholarship Program
The SCGIS Domestic Scholarship Program offers competitive scholarships to conservation GIS users to attend advanced GIS training courses focused on conservation applications. Scholarship funds will cover all or partial airfare, waivers for SCGIS conference related fees, as well as pre- and post-conference training. The annual ESRI User Conference is August 9 - 13, 2004, in San Diego, California. The annual SCGIS conference will be held September 27-29, 2004, in West Virginia.
http://www.scgis.org/ .

Something Fishy Aquaculture Workshop - Alabama
Auburn University offers the free aquaculture workshop for teachers, *Utilizing Recirculating Aquaculture Systems,* June 8-12, 2009 in Gadsden, Alabama, to teach principles of math and science.
Contact Hugh Hammer at hhammer@gadsdenstate.edu or David Cline at clinedj@auburn.edu

SouthEast Portals to Ocean Research for Teachers (SEPORTs)
The SouthEast COSEE supports Action Projects in North and South Carolina and Georgia, with state and regional efforts to promote coastal environment projects, professional development opportunities for educators, and research activities. November 2004 events included the Southeast Phytoplankton Monitoring Network, *From Watersheds to Oyster Beds* and the North Carolina Estuarium, and *Eastern North Carolinians' Impact on the Atlantic Ocean*. Additional workshops are scheduled for January through March.
http://www.scseagrant.org/se-cosee/ .

Southeast Regional Sea Turtle Meeting
The theme of the 3rd Southeast Regional Sea Turtle Meeting, February 9-12, 2016 in Mobile, Alabama, is *Embracing the theme of Changing Attitudes: Meeting the Challenges of Sea Turtle Conservation*. The program will feature a morning Education, Outreach and Social Media Workshop, a Special Session on the Deepwater Horizon Spill – Natural Resource Damage Assessment and Restoration of Sea Turtles, and more.
http://www.serstm.org/

Space Science Institute Workshops
The Space Science Institute is hosting two education workshops this spring:

- Designing Exemplary Professional Development Experiences for Educators, March 18-20, 2004, http://halvas.spacescience.org/registration/SpecialTopicSpring2004/1.asp
- 4-Day Education Workshop for Scientists, Engineers, and E/PO Managers, April
- 25-28, 2004, http://halvas.spacescience.org/registration/k12spring2004/1.asp#ann.

Spring Workshops - California
The Exploratorium Teacher Institute in San Francisco is offering field workshops for middle and high school science teachers, February 18, March 17, and April 21, 2012. Explore a part of the California's watershed through hands-on experiences while cruising on the Marine Science Institute's 90-foot research vessel.
http://www.exploratorium.edu/teacher_institute/

State of the Arctic Conference - Online
The State of the Arctic Conference, March 16–19, 2010 in Miami, Florida, is an international science conference focused on understanding the arctic system, arctic change, its connections to the Earth system, and translating research into solutions to environmental change. The conference will be webstreamed to allow virtual participation, including real-time video and text chat. Webstreaming is free; registration as a participant is appreciated.
http://soa.arcus.org/

State of the Bay Educator Summit - Texas
The theme of the eighth biennial State of the Bay symposium of education-focused sessions, January 23-25, 2007 in Galveston, Texas, is *Teaching Science using our Bay System as an Integrating Context*. The summit offers workshops, field workshops, symposium, and resources for educators.
http://www.gbep.state.tx.us/news-events/Educator_Summit_Webpage.htm

State of the Gulf of Mexico Summit - Texas
The Harte Research Institute and partners will host Summit 2011: State of the Gulf of Mexico, December 4-8, 2011 in Houston, Texas. The summit serves as a platform for the diverse interests in the Gulf of Mexico to come together in one place for a candid discussion of what's working and where we need to go.
http://www.harteresearchinstitute.org/state-of-the-gulf-summit/

Statistics: Unlocking the World of Data
This six-week MOOC from the University of Edinburgh introduces key ideas and concepts of statistics. Participants will explore statistics using interactive applets, and learn to interpret and evaluate data encountered in everyday life. No previous knowledge of statistics is required, although familiarity with secondary school mathematics is advisable.
https://www.edx.org/course/statistics-unlocking-world-data-edinburghx-statsx

STEM Educators' Series – New Jersey and Online
Rutgers University hosts these STEM educator events for teachers interested in bringing current STEM research into their classrooms. Each meeting includes a scientific presentation followed by the opportunity to review curriculum developed to align with the research presented that evening. Background Materials, topic-related and data-specific Lesson Plans, and the presentation will be posted for each lecture.
http://coseenow.net/mare/ocean-lecture-educators-night/

STEM Forum & Expo – New Jersey
The first NSTA STEM Forum & Expo, May May 17–19, 2012 in Atlantic City, New Jersey, will bring together STEM experts, practitioners, and educators interested in learning about successful approaches and implementation of STEM education into our schools. Check the website for more information and the call for proposals.
http://www.nsta.org/conferences/2012atl/?lid=exp

STEM Student Research Facilitation Course - Online
Northwestern University's Office of STEM Education Partnerships offers a free, 11-week professional development opportunity for STEM teachers to develop or advance a program that facilitates their own students' research. The program starts February 16, 2015. Teachers learn about models and tools for implementing student research in their school district, advance planning efforts to facilitate student research opportunities, and share best practices with experienced area teachers and STEM leaders.
http://www.surveygizmo.com/s3/1778107/STEM-Student-Research-Registration-Fall-2014

Stingray Tracking – Hawai'i
This course offered by the University of Hawai'i (MARE 394), May 29 - June 4, 2005 on O'ahu, Hawai'i, includes guest speakers, lectures on general ray and shark ecology, and practical techniques of tracking and telemetry. Participants assist with a tracking study of stingrays using transmitters and data loggers. Gain experience in field research and conservation ecology. For more information, contact Mark Heckman at mheckman@hawaii.edu.
http://www.uhh.hawaii.edu/depts/summer/credit.php

Stone Lab Courses for Educators & High School Students - Ohio
Stone Laboratory, Ohio State's Island Campus on Lake Erie, is offering courses designed for educators in geology, ecology, oceanography, and Great Lakes education. Introductory summer science courses for high school students offer small class sizes and the ability to earn college credit that could cover undergraduate course requirements.
http://stonelab.osu.edu

Stone Laboratory Summer Courses – Ohio
Stone Laboratory, Ohio State University's island campus on Lake Erie, offers more than 25 science courses each summer for educators and advanced high school students, as well as undergraduate and graduate students. They also offer non-credited workshops. In one week of intensive, hands-on experiences, teachers can learn innovative ways to incorporate Great Lakes science into their classrooms. Educator courses include Ocean and Great Lakes Literacy, Teaching with Google Earth and Google Ocean, and more.
http://stonelab.osu.edu/

Stone Lab Summer Teacher Courses
F.T. Stone Laboratory, Ohio State University's Island Campus in Lake Erie, offers college credit courses to undergraduate and graduate students, educators, and outstanding high school students every summer. From Lake Erie geology to aquatic biology courses, students receive a hands-on science experience in one-day, one-week, or term courses.
http://www.sg.ohio-state.edu/SLAB/PRINT.HTM#workshops .

Stone Laboratory Summer Courses – Ohio
Stone Laboratory, Ohio State University's island campus on Lake Erie, offers science courses each summer for educators, advanced high school students, undergraduate, and graduate students. Teachers can learn innovative ways to incorporate Great Lakes science into their classrooms. Educator courses include Climate Change Education, Principles of Oceanography for Educators, Field Ecology, and much more. Scholarship funds are available.
http://stonelab.osu.edu/

Stormwater and Aquaculture Effluent Technology Fair
This two-day workshop will highlight innovative technologies and practices for controlling stormwater runoff and aquaculture effluent. Various companies and engineering firms will demonstrate their products or past projects. The fair will take place in Beaufort, North Carolina, March 8-9, 2005. It will also be broadcast over the Internet for those who are unable to attend in person.
www.CoastLive.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

Strategic Conservation Planning Using the Green Infrastructure Approach – West Virginia
This introductory course from the Conservation Fund, the U.S. Fish and Wildlife Service, and the Forest Service, March 8-12, 2010 in Shepherdstown, West Virginia, provides participants with a strategic approach for prioritizing conservation opportunities and a planning framework for conservation and development. This course is designed to be a collaborative learning experience; as such it is applicable to individuals from a variety of disciplines, sectors, and scales engaged in land use planning and management.
http://www.conservationfund.org/node/239

Strategies for Cultural Inclusiveness – Online
The Consortium for Ocean Science Exploration and Engagement (COSEE) 2016 Webinar Series has engaged participants with experts to discuss examples of COSEE's effective practices and activities. The final webinar of the 2016 season, July 26, 2016, is Strategies for Cultural Inclusiveness and Diversity for Ocean Science Education.
https://www.surveymonkey.com/r/COSEEWebinar_July2016

STREAM Citizen Journalism Institute – South Carolina
EarthEcho International will host a STREAM Citizen Journalism Institute for middle and high school educators, from July 23-25, 2012 in Charleston, South Carolina. The institute kicks off a year-long program which gets students involved in environmental journalism, service learning, and more.
http://earthecho.org/programs/stream/stream-citizen-journalism-institute/

Streamside Science – Online
Headlining this summer's online course offerings from the National Teachers Enhancement Network (NTEN) is a new course for teachers of grades 8-12. Streamside Science: Hands-On Approaches to Water Quality Education asks teachers to adopt a local stream and perform lab assignments in the field. There are 18 other online courses in nine disciplines, including biology, chemistry, Earth science, entomology, education, land resources and environmental science, math, microbiology, and physics.
http://www.scienceteacher.org/courses.htm

Student Climate Research Campaign Workshop Series – Washington, D.C.
NASA Langley Research Center, in partnership with the Virginia Air and Space Center, is offering a series of GLOBE Teacher Training Workshops supporting the Student Climate Research Campaign. These free workshops will cover Atmosphere and Climate, Phenology and Climate, and Land Cover and Climate.
http://science-edu.larc.nasa.gov/GLOBE/training-1.php

Student Environmental Conference – Iowa
The National Mississippi River Museum & Aquarium in Dubuque, Iowa and partners will hold their third high school student environmental conference on September 24-25, 2009. This conference focuses on environmental and conservation topics of the Mississippi River and its connection to the ocean. The conference is open to groups of four high school students and their teacher from the five Upper Mississippi River states of Minnesota, Iowa, Missouri, Wisconsin, and Illinois.
Contact Mark Wagner at Mdwagner@rivermuseum.com

Student Opportunities - Various
The Centers for Ocean Science Excellence in Education offers this downloadable file with opportunities offered through COSEE Center partners for undergraduates, graduate students, and post-docs. These include internships, fellowships, and more.
http://www.cosee.net/resources/students/index.cfm?FuseAction=ShowResourceDetails&ResourceID=340

Student-Teacher Field Studies in the National Marine Sanctuaries
Funding is provided through the National Marine Sanctuary Program in partnership with the National Geographic Society Education Foundation for two student-teacher field studies in the national marine sanctuaries, Gray's Reef Marine Sanctuary in Georgia, grade 9-12, July 23-28, 2004 and the Channel Islands Marine Sanctuary in California, grade 5-8, and August 9-12, 2004.
www.ngsednet.org/profdev .

Students on Ice - Antarctica
Experience a ship-based university expedition to Antarctica. University students and faculty members will embark on a journey to Antarctica to experience and learn firsthand the effects of climate change in one of the planet's most remote places. Students on Ice Expeditions is organizing the International Polar Year Antarctic University Expedition 2009, a two-week ship-based field course leaving Argentina from February 14-28, 2009. Additional expeditions are also planned.
http://www.studentsonice.com/

Submerged Cultural Resources Awareness Workshop - Tennessee
The Advisory Council on Underwater Archaeology will hold a Submerged Cultural Resources Awareness Workshop at the annual meeting of the Society for American Archaeology, April 18-22, 2012 in Memphis, Tennessee. The workshop introduces terrestrial archeologists, land managers, and regulatory agencies to basic concepts in underwater archeology in order to knowledgeably address and respond to underwater cultural resource issues.
https://ecommerce.saa.org/saa/source/meetings/meetingshome.cfm?section=events

Submerged Cultural Resources Law Enforcement Class
The National Park Service's Submerged Resources Center, the NOAA Marine Sanctuary Program, and Archaeological Resource Investigations are co-sponsoring a Submerged Cultural Resources Law Enforcement Class, in Convoy Point, Florida, May 15-19, 2006. The course provides training on all aspects of the investigation and prosecution of archeological crimes involving submerged cultural resources.
Contact Larry Murphy at larry_murphy@nps.gov

Summer Courses for K-12 Teachers - Maine
College of the Atlantic in Bar Harbor, Maine, offers a variety of summer courses for K-12 teachers. Some courses are primarily field based, while others offer more classroom time with occasional outings. All courses combine lecture and discussion with a variety of hands-on activities. Offerings include Introduction to Whales, Porpoises, and Seals; Earth Science Across the Curriculum; Biological Oceanography; and much more.
http://www.coa.edu/html/summercoursefacultybios.htm

Summer Education in Maine
Main Audubon offers summer sessions for adults and youth at their camp on Hog Island, Maine. Financial aid may be available.

- Educators Workshop Week, July 13-19, 2008, offers ideas and insights in a relaxed atmosphere.
- Climate Change Workshop, July 23-26, 2008, helps educators integrate nature and climate change into their curriculum.
- Coastal Maine Marine Science Session for teens, July 20-26, 2008, is designed to help teens explore the field of marine science and gain the basic knowledge necessary to begin thinking about a future career in marine science or simply appreciate the complexities of marine communities.

http://www.maineaudubon.org/explore/camp/hi_overview.shtml

Summer Institute – New Jersey
This week-long summer institute, August 9-13, 2010 in Jersey City, New Jersey, is for Earth and Marine Science teachers in grades 6-9. Participants will work with research scientists, teacher educators, college faculty, and science journalists in learning about an inter-disciplinary mission in January 2011 to Antarctica's Ross Sea to characterize the connection among ocean currents, ocean chemistry, and climate change. Teachers and students can also follow the mission on the website.
http://www.lsc.org/assets/files/Prof%20Dev/Summer_Institute_2010.pdf

Summer Institute for Climate Change - Minnesota
Climate Generation's 2016 Summer Institute, June 21-24, 2016 in St. Paul, Minnesota, will focus on their newest middle school curriculum resource, Next Generation Climate. take place March 13-15, 2017 in Sandstone, Minnesota.
https://www.climategen.org/what-we-do/education/professional-development/summer-institute/summer-institute-2017/
https://www.climategen.org/what-we-do/education/professional-development/summer-institute/institute-non-formal-climate-change-education/
http://www.climategen.org/what-we-do/education/professional-development/summer-institute/summer-institute-2016/

Summer Institute for Climate Change Education – Minnesota and Online
The Will Steger Foundation's Summer Institute for Climate Change Education, August 12, 2010 August 4-6, 2014 June 15-17, 2015 June 21-24, 2016 in St. Paul, Minnesota, will look back on their last five years of climate change education outreach and curriculum development and take time to *Go Back to the Basics*. Registration is open for 100 on-site participants and an unlimited number of participants for the online webinar. , June 26-28, 2017
http://www.willstegerfoundation.org/index.php/climate-lessons-blog/item/912-save-the-date-summer-institute-2010
http://www.willstegerfoundation.org/summer-institute
http://www.willstegerfoundation.org/summer-institute
http://www.climategen.org/what-we-do/education/professional-development/summer-institute/summer-institute-2016/
https://www.climategen.org/what-we-do/education/professional-development/summer-institute/summer-institute-2017/

Summer Institute for Climate Change Education - Online
The 2009 Will Steger Foundation Summer Institute for Climate Change Education, August 19, 2009, online, will focus on the international climate negotiations in Copenhagen and will unveil a new curriculum on international climate solutions for grades 9-12. The institute will highlight the critical need for international cooperation on climate change solutions, and equip educators with the tools necessary to empower student learning and leadership on the topic.
http://www.willstegerfoundation.org/

Summer Institute on Invasive Species - Maine
Bowdoin College offers a Coastal Science Institute for middle school science educators, June 26-July 1, 2005 in Brunswick, Maine. The theme for this year is invasive species, and will introduce teachers to laboratory and field techniques that will help to identify, monitor, and trace the spread of introduced species. Teachers will receive course packets, equipment, and software training that will help them implement invasive species monitoring and analysis in their own classrooms.
http://academic.bowdoin.edu/csc/bccsi/index.shtml

Summer Institute for Middle School Teachers - Maryland
The National Institute for Standards and Technology's (NIST) Summer Institute, July 6-17, 2015 July 10-21, 2017 in Gaithersburg, Maryland, brings together teachers and NIST scientists and engineers for hands-on science based on the cutting edge measurement science research at NIST, designed to match the middle school curricula.
http://www.nist.gov/iaao/teachlearn/aboutus.cfm
https://www.nist.gov/iaao/about-summer-institute

Summer Institute for Teachers - California
Middle and high school science teachers can join the Exploratorium Teacher Institute, June 19-July 7, 2017 in San Francisco, California for three weeks of science exploration. The free institute supports the content and pedagogy described in the Next Generation Science Standards.
https://www.exploratorium.edu/education/teacher-institute/summer

Summer Institutes - Massachusetts
The Museum Institute for Teaching Science is offering a series of Professional Development Summer Institutes offering EE STEM-based professional development for formal educators. To be responsive to the interests and needs of educators, the institutes will be offered in different locations and formats. All Institutes are collaborations of environmental education, science, and cultural institutions and organizations.
http://mits.org/2014-summer-professional-development-institutes/

Summer Leadership Institute - Texas
The National Science Education Leadership Association and NSTA offer the 2012 Summer Leadership Institute, June 24-28, 2012 in Austin, Texas. Science educators, teams, and administrators will explore the K–12 Framework and draft Next Generation Science Standards and determine key features of each.
http://www.nsta.org/pd/nsela/

Summer of Learning - Virginia
Longwood University is sponsoring the pilot institute, SOLstice: Summer of Learning - Science Teachers Investigating the Chesapeake Environment, July 11-August 5, 2011 in Farmville, Virginia. This Chesapeake Bay Academy will bring together university faculty, practicing middle-school teachers, and pre-service middle-school science teachers to work collaboratively as teacher-researchers.
http://www.longwood.edu/liberalstudies/33955.htm

Summer Marine Studies Courses - Oregon
The Oregon Institute of Marine Biology offers a variety of summer courses in Charleston, Oregon for undergraduates and teachers. Course length varies from weekend to 8-week courses, and range from Biological Illustration to Biology of Fishes. Scholarships may be available.
http://www.uoregon.edu/~oimb/Academics/summer.htm

Summer Programs – Alabama
Dauphin Island Sea Lab Discovery Hall Programs promote conservation through education, research, and outreach. Through hands-on activities in vibrant marine habitats, people can see the impact of science on their daily lives.
Students

- Barrier Island Explorer, for rising 5th-6th grade students; June 10-13, June 24-27, July 29-August 1, 2012
- Gulf Island Journey, for rising 7th-9th grade students; June 3-8, June 10-15, July 8-13, July 22-27, 2012
- High School Summer Course, for rising 10th-12th grade students; June 17-July 13, 2012. The deadline for application is April 13, 2012

Teachers – all programs are fully sponsored; registration fees may apply

- Mouth of the South: The Mobile-Tensaw Delta; June 3-7, 2012. The deadline for registration is May 11, 2012
- Reefs, Rhizomes and Restoration; June 17-21, 2012
- Fins, Fishes and Fisheries; July 15-19, 2012
- Climate Change in the Gulf of Mexico; July 17-20, 2012

See the website for details and for additional programs, including day camps and field trips.
http://dhp.disl.org/
http://www.disl.org/educational-programs/

Summer Teacher Coastal Stewardship Program - Florida
The 2012 Florida A&M University Summer Teacher Coastal Stewardship Program, June 14-28, 2012 and June 17-28, 2013 in Tallahassee, Florida provides teachers with the skills, materials and knowledge to teach watershed conservation and stewardship, and increase K-12 environmental literacy. The program is open to K-12 science teachers within upstream watersheds that drain into the Gulf of Mexico.
http://www.wlf.louisiana.gov/sites/default/files/pdf/simplenews/35359-weekly-enews-events-webinarsworkshops-lagniappe-resources-listservs/famu_coastal_program_for_teachers_2012.pdf
Contact Kimberly Davis at kimberly.davis@famu.edu

Summer Teacher Institutes – Washington, D.C.
The Library of Congress offers week-long Summer Institutes for K-12 educators in Washington, D.C. Education specialists facilitate sessions modeling strategies for using primary sources to engage students, build critical thinking skills, and construct knowledge.

- Open sessions (any subject area): June 27-July 1, July 11-15, July 18-22, and July 25-29, 2016
- Science focus: June 20-24, 2016
- Open sessions (any subject area): June 22-26, July 6-10, and July 27-31, 2015
- Science focus: July 20-24, 2015
- General Institutes: June 19-23, June 26-30, and July 10-14, 2017
- Science, Technology & Engineering: July 17-21, 2017
-

http://www.loc.gov/teachers/professionaldevelopment/teacherinstitute/
http://www.loc.gov/teachers/professionaldevelopment/teacherinstitute/?rssloc=eanft

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

Summer Teacher Workshops – Alabama
The 2009 Summer Teacher Workshops at the Dauphin Island Sea Lab are now open for registration. These workshops will help you bring the oceans, marshes, and barrier islands into the classroom. Some workshops are free; note registration deadlines on the website. Workshops include:

- The Delta, May 31-June 4, 2009
- Marine Application of Science and Technology (MAST), June 7-12 and July 12-17, 2009
- Centers for Ocean Sciences Education Excellence: Central Gulf of Mexico (COSEE: CGOM), June 21-26, 2009
- Coastal Connections Linking Watersheds to the Gulf of Mexico, July 6-10, 2009
- Sharks and Rays, July 20-24, 2009
- Submerged Grassbeds of the Northern Gulf of Mexico, July 26-30, 2009
- June 5-9, 2011, The Delta
- June 19-23, 2011, Fins, Fishes and Fisheries
- July 10-14, 2011, Reefs, Rhizomes and Restoration
- July 24-29, 2011, OTTER (Oceanographic Technology Tools in Education and Research)
-

http://dhp.disl.org/teachertraining.htm

Summer Teacher Workshops – Florida
Join MarineLab's biologist/instructors in an exploration of the marine communities in the Upper Florida Keys, July 25-27 and July 28-August 2, 2014. , July 23-27 and July27-31,

2015. Days are spent snorkeling or diving the seagrasses, mangroves, and coral reefs protected by the Florida Keys National Marine Sanctuary, Everglades National Park and John Pennekamp Coral Reef State Park. All workshops are content oriented and are designed for the middle and high school science teacher.
http://www.marinelab.org/Teacher_Workshops.html

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

Summer Tropical Marine Courses
The graduate program at the National University of México and The Florida International University are conducting a bilateral set of courses open to any interested student or manager. Two courses are offered for this summer: marine botany, with an emphasis on the Caribbean and South Florida, and a marine protected areas course. Scholarships may be available.
http://serc.fiu.edu/seagrass/FIU_UNAM_Course/PMcourse.htm

Summer Workshops - Maine
Herring Gut Learning Center offers three summer courses in Port Clyde, Maine: Introduction to Aquaponics, Discovery through Drawing, and Bringing Marine Ecosystems into the Classroom. Partial tuition scholarships may be available.
http://www.herringgut.org/forteachers.html

Summer Workshops for Teachers
This summer in June through August, 2006, the U.S. Department of Education will hold 14 Teacher-to-Teacher regional workshops for teachers to learn from fellow educators who have had success in raising student achievement. A number of workshops will focus on enhancing teaching skills in math and science. Three are cosponsored by the National Park Service and will be dedicated to math, science and history.
http://www.t2tweb.us/Workshops/Schedule.asp

Supervising Young Adults in Conservation - Online
OUT8045-Online from the U.S. Fish & Wildlife Service (FWS) is a recorded webinar, led by Student Conservation Association staff possessing practical hands-on experience working with and supervising young adults in both field-based and office environments. The webinar will relate critical thinking to common issues and situations often faced by supervisors working with young adults aged 16-25 years. Participants are given 90 days to complete this online self-study course.
Contact Sandy_Spakoff@fws.gov

Supervising Young Adults in Conservation - Online
The National Fish & Wildlife Service offers the free webinar, OUT8045: Supervising Young Adults in Conservation. This webinar, led by Student Conservation Association (SCA) staff that has practical hands-on experience working with and supervising young adults in both field-based and office environments, will relate critical thinking to common

issues and situations often faced by supervisors working with young adults aged 16-25 years.
http://nctc.fws.gov/NCTCWeb/catalog/CourseDetail.aspx?CourseCodeLong=FWS-OUT8045

Surfrider School Clubs Teacher Workshop - Florida
The free School Clubs Teacher Workshop Session during the Surfrider Foundation Annual Florida Conference, April 16, 2011 in St. Pete Beach, Florida, will include a panel discussion on how to start a Surfrider School Club. The workshop covers club details, how you and your students can benefit, support staff and tools, types of projects, and success stories from pilot club leaders and students.
http://florida.surfrider.org/2011conference

***Survey of Oceanography* Graduate Course Offered Via Web**
Texas A&M University, College Station, offers the *Survey of Oceanography* course. All lectures, homework, and quizzes will be offered remotely. The course emphasizes problem-based learning and the use of web resources in the classroom. Modules include the role of the oceans in climate, the role of the ocean in weather, fisheries and the ocean as food source, coastal erosion, and coastal pollution.
stewart@ocean.tamu.edu

Susquehanna Aquatic Biodiversity Network Workshop - Pennsylvania
Pennsylvania Sea Grant offers this professional development workshop for middle and high school teachers of the Chesapeake Bay Watershed, August 9-13, 2010 in Millersville, Pennsylvania. Lodging for a limited number of out-of-town participants and many free materials and implementation funds are available.
http://sites.google.com/site/pasabn/Home/new-re/2010sabnbrochureandregistrationform

Susquehanna Aquatic Biodiversity Teacher Research Fellowships
This fellowship based out of Wilkes-Barre, Pennsylvania, June 21-August 5, 2011, offers Middle and High School Teachers in the Chesapeake Watershed an introductory workshop, research fellowship, classroom follow-up, and additional professional development opportunities. Those who teach in the Chesapeake watershed will be given placement priority.
Contact Ann Faulds at 215-806-0894, afaulds@psu.edu

Sustainability in Everyday Life - Online
This free, online course from Chalmers University of Technology starting June 8, 2015, August 29, 2016offers information and skills required to make sustainable choices. The course is organized into five key themes: chemicals, globalization, climate change, food, and energy. These five themes represent challenges that people face day-to-day managing choices relating to sustainability.
https://www.edx.org/course/sustainability-everyday-life-chalmersx-chm002x
https://www.edx.org/course/sustainability-everyday-life-chalmersx-chm002x-0

Sustainability in Higher Education Student Summit - Maryland
Join the Association for the Advancement of Sustainability in Higher Education's Student Summit, October 9, 2016 in Baltimore, Maryland.
http://conference.aashe.org/program/student-summit/

Sustainable Marine Tourism Workshops – Southeast Florida
Marine entrepreneurs are invited to learn how preserving coral reefs will safeguard businesses. The Southeast Florida Coral Reef Initiative is sponsoring a series of free workshops for the marine tourism industry during May 2006 entitled "Coral Reefs and Sustainable Marine Tourism: Protect Your Business by Protecting Your Reef." The workshops, conducted by the Coral Reef Alliance (CORAL), will feature international and local experts discussing the socioeconomic value of the coral reefs, innovative local solutions and market sustainability.

- Broward County Workshop, May 3, 2006, Davie
- Miami-Dade Workshop, May 6, 2006, Miami Shores
- Palm Beach County Workshop, May 10-11, 2006, West palm Beach

Contact the workshop facilitator, Dr. Alex Brylske at abrylske@coral.org

Swamp School
The Swamp School provides education and training in environmental and wetlands management. Online, classroom, and field course offerings are focused on assessment for wetland delineation, design for mitigation, planning of watersheds, carbon offset through conservation and restoration, and education for teachers and wetlands enthusiasts.
http://www.swampschool.org/

Take the Pulse of Our Changing Planet Workshop
The Mid-Atlantic Center for Ocean Science Education Excellence (MACOSEE) offers a professional development workshop for middle school science teachers in Cambridge, Maryland, July 11-17, 2004. Scientists take Earth's pulse through a network of high-tech stations called ocean observing systems. This workshop showcases these new observatories and how observatory data can enhance your science lessons.
www.macosee.net .

Taking Conservation to the Public Workshop - California
The American Cetacean Society and Blue Ocean Society for Marine Conservation will be co-hosting a workshop in conjunction with the Society of Marine Mammology's biennial conference on December 10, 2005 in San Diego, California. The workshop, *Taking Conservation to the Public: Strategies for Getting the Message out there*, will be discussion-based to allow participants to discuss how they connect people to their experiences in conservation.
http://www.blueoceansociety.org/workshop/

Talking Fire Without Getting Burned - Online
The National Interagency Fire Center External Affairs staff is offering its first wildland fire communications webinar, February 23, 2010. The webinar can be informative for anyone who communicates with the public about fire and resource management practices. Social science researcher Sarah McCaffrey will also share useful information about how the public views wildfire as well as tips to enhance wildland fire communication strategies.
http://www.nifc.gov/PIO_bb.html

Talking Trash: Marine Debris Workshop – New Jersey
The Jacques Cousteau National Estuarine Research Reserve (JCNERR) will host this free workshop focused on marine debris, July 20-21, 2016 in Tuckerton, New Jersey. Educators will use NOAA's curriculum Turning the Tide on Trash and An Educators

Guide to Marine Debris to blend research, STEM, stewardship, and art. Attendees will be eligible to receive a stewardship stipend to use for a class marine debris project.
http://jcnerr.org/education/educators.html

Tampa Bay: Living Legacy Educator Workshop - Florida
Study the natural and cultural history of Tampa Bay, August 2, 2012 in St. Petersburg, Florida. The free workshop features grades 9-12 curriculum designed to accompany the documentary film, *Tampa Bay: Living Legacy*. The teaching guide offers six lesson plans that complement key chapters in the bay's natural and human history, highlighting important natural resources such as birds and seagrass habitats, and drawing on the memories and perspectives of the local "Bay Champions" who fought to save the bay.
http://events.r20.constantcontact.com/register/event?llr=e6budacab&oeidk=a07e5rljjkx49a1af22

Tangible Things
The free edX course from Harvard University, Tangible Things: Discovering History Through Artworks, Artifacts, Scientific Specimens, and the Stuff Around You, will help participants gain an understanding of history, museum studies, and curation by looking at, organizing, and interpreting art, artifacts, scientific curiosities, and the stuff of everyday life.
https://www.edx.org/course/tangible-things-discovering-history-harvardx-usw30x-0?utm_source=Course+Announcements+Mailing+List&utm_medium=email&utm_content=title&utm_campaign=Student_Newsletter_July_28

Teach at the Beach – New Jersey
The New Jersey Marine Educators Association announces the 2005 *Teach at the Beach,* May 13, 2005, in Sandy Hook, New Jersey and May 19, 2006, in Stone Harbor, New Jersey, May 16, 2008 in Pomona, New Jersey. May 17, 2013 in Camden Bring the ocean into any classroom -lessons and other hand-out materials will be distributed during each activity. NJ Core Content Standards will be listed in these materials. Register early; due to the increasing popularity of this workshop, the number of participants is limited and there will be no walk-in registration.
http://hometown.aol.com/newjerseymea/index.html
http://njmarineed.weebly.com/tatb-2013.html

Teach at the Beach– New Jersey
The New Jersey Marine Education Association will offer its annual Teach at the Beach, Friday, May 18, 2007 in Manahawkin, New Jersey and May 15, 2009 May 29, 2015 in Tuckerton, New Jersey. May 14, 2010 in West Long Branch, New Jersey.
The workshop is designed to provide educators of all grades and disciplines with a wealth of ideas, resources, lesson plans, and programs dedicated to utilizing marine and aquatic environments as a background to classroom teaching.
http://hometown.aol.com/newjerseymea/register.html
http://www.njmarineed.org/
http://www.njmarineed.com/T@TB2015

Teach Fundamentals of Environmental Education
To increase the number of educators receiving EE training, the Environmental Education and Training Partnership (EETAP) will make the course *Fundamentals of Environmental Education* available to universities across the country. There is no cost to obtain, and a

$500 honorarium is offered after faculty have successfully taught the course to at least 15 students.
http://www.naaee.org/programs-and-initiatives/distributionflyer.pdf

Teach the River - California
Teach the River is open to the families, teachers, parents, or anyone who wants to learn and discover the wonders of the greater Fresno, California area. A wide variety of seminars, field trips, and other special events are offered from January through June, 2007, including river workdays, seminars, and more. Many of the seminars and field trips are available for academic credit through California State University, Fresno.
http://www.teachtheriver.org/index.html

Teacher Development Workshop - Maryland
The University of Maryland Eastern Shore will offer the annual Teacher Development Workshop for grades 6–12, July 15–July 28, 2012 in Princess Anne, Maryland. Funding for this program comes from a CREST grant and aims to provide marine science research and educational opportunities to under-represented populations.
http://www.umes.edu/CREST/Default.aspx?id=33372

Teacher Institutes – California
The Monterey Bay Aquarium offers various summer teacher institutes in Monterey, California. They are free, and stipends and/or housing may be available.

- *Splash Zone* for pre-K-2 teachers; June 28-July 2, 2010, October 2, 2010, January 22, 2011, and April 2, 2011. The deadline for application is April 1, 2010
- *Coastal Systems Teacher Institute* for teachers of grades 3-5; July 12-16, 2010, October 16, 2010, March 12, 2011, and May 7, 2011. The deadline for application is April 1, 2010
- *Middle School Institute* for teachers of grades 6-8; June 21-25, 2010, September 18, 2010, February 5, 2011, and April 16, 2011. The deadline for application is April 16, 2010
- *High School Institute* for teachers of grades 9-12; July 26-30, 2010. The deadline for application is April 30, 2010.

http://www.montereybayaquarium.org/lc/teachers_place/edu_programs.aspx

Teacher Professional Development Institutes - California
The Monterey Bay Aquarium will host three free teacher professional development institutes for teams of full-time classroom teachers this summer. Coastal Systems Teacher Institute for grades 3-5, August 2-8, 2015 is open to teachers nationwide. The secondary institutes, Project-Based Science Teacher Institutes for grades 6-8, July 20-24, 2015 and Connecting with Marine Science Institute for grades 9-12, July 6-10, 2015, are open for teachers from California.
http://www.montereybayaquarium.org/education/teacher-programs
http://www.montereybayaquarium.org/education/teacher-professional-development
https://www.montereybayaquarium.org/education/teacher-professional-development

Teacher Programs during ASP Meeting
As part of the national education and public outreach meeting of the Astronomical Society of the Pacific (ASP), *Connecting People to Science*, July 30-August 3, 2011 in Baltimore, Maryland, ASP in partnership with the American Geophysical Union and the Space Telescope Science Institute, will offer a weekend workshop and short courses for

teachers in grades K-12. These sessions are open to all teachers; participants do not have to register for the full conference. Some scholarship support is available.
http://www.smdeponews.org/programs-events/hands-on-programs-for-classroom-teachers-as-part-of-asp-meeting-july-30-aug-3/

Teacher Programs - California
The Monterey Bay Aquarium is offering two institutes, for middle and high school science teachers, in Monterey, California. The *Project-Based Science Institute*, June 21-25, 2010 is specifically designed for teachers of middle school science; the deadline for application is May 24, 2010. For high school teachers, *Connecting with Marine Science*, will take place July 26-30, 2010. Both programs will include both field and classroom activities.
http://montereybayaquarium.org/lc/teachers_place/edu_program_cycles.aspx
http://montereybayaquarium.org/lc/teachers_place/edu_programs.aspx

Teacher at Sea
NOAA's Teacher at Sea program, is accepting applications from currently employed K-16 teachers. The mission of the program is to give teachers a clearer insight into our ocean planet and a greater understanding of maritime work and studies, and to foster an interdisciplinary educational experience that provides a unique environment for learning and teaching.
http://teacheratsea.noaa.gov/

Teacher at Sea – California
The Channel Islands National Marine Sanctuary is partnering with the NOAA Teacher at Sea Program on board the *R/V Shearwater*, June 19-21, 2007. The selected teacher will work alongside researchers on Xantus's Murrelet seabird population studies. As part of their experience, they will develop an online journal, a mini-unit of lessons, and will present activities at regional or national conferences or submit articles for publication in professional education journals.
http://sanctuaries.noaa.gov/education/teachers/fieldstudies.html

Teacher Seminar Research at SEA
The Sea Education Association in Woods Hole, Massachusetts, offers teachers (grades 5-9) its Teacher Seminar Research at SEA. The seminar, funded by the National Science Foundation, provides oceanographic research experience and affords the opportunity to explore the oceanic environment while learning about the scientific research process first-hand. Applications are reviewed monthly.
http://www.sea.edu/sea2000/admission2000/teachers.htm .

Teacher-to-Teacher Workshops – Various Locations
The U.S. Department of Education's Teacher-to-Teacher Initiative will be held in 22 cities throughout the country to provide free high-quality professional development opportunities for teachers. Prominent educators will share best practices in all grade levels and content areas. Check the website for locations and focus areas. Registration begins: April 8, 2007.
https://www.t2tweb.us/Workshops/Schedule.asp

Teacher Training Expeditions - Alaska
Discovery Southeast in partnership with Alaska Discovery, Alaska Natural History Association, U.S. Forest Service, and the Alaska Department of Fish and Game are

offering three Teacher Training Expeditions for 2007. Professional development credits are available.

- The Brown Bears of Admiralty Island, June 5-11, 2007
- Seals, Ice and the Wilderness Idea, June 26-July 2, 2007
- Whales of Icy Strait, July 19-25, 2007

http://www.discoverysoutheast.org/content/view/32/40/

Teacher Trainings - Alaska
Explore Alaska's natural and cultural heritage with the Alaska Geographic Institute. Accredited teacher trainings and field seminars are hands-on experiences set in remote locations throughout Alaska. Courses in 2008 include Recovering the Sound: After the Exxon Valdez; Seals, Ice, and the Wilderness Idea; Whales of Icy Strait, and more. All courses are offered in partnership with Alaska's national parks, forests, and refuges.
http://www.alaskageographic.org/static/169/teachers

Teacher Workshop - Florida
MarineLab will host a marine science weekend workshop for teachers, February 15-17, 2013 in Key Largo, Florida. Join marine biologists on an exploration of the seagrass, mangrove, and coral reef communities. Be sure to check out the Summer Teacher Workshops, July 29-August 3, 2013 while on the website.
http://www.marinelab.org/Teacher_Workshops.html

Teacher Workshops - Georgia
Sapelo Island National Estuarine Research Reserve is offering two teacher workshops this fall: Marine Mammals of Coastal Georgia, November 13, 2009 in Brunswick, Georgia; and Shorebirds Conservation, December 3-6, 2009 on Sapelo Island, Georgia. Contact Georgia Graves at georgiabeachwalk@bellsouth.net

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
- Ship Time & Shoreline, July 10-14, 2017
- Water Quality Training, May 30-June 2, 2017

http://cwc.lumcon.edu/?page_id=3101
Contact: M. Conover at mconover@lumcon.edu

Teacher Workshops – North Carolina
The North Carolina Aquarium at Fort Fisher offers a variety of teacher workshops from July 14-18, 2008. All workshops are free of charge and teacher credit is available.

- July 14: *Aquariums Teacher Workshop* introduces K-12 teachers to pre- and post-visit activities designed to enhance an aquarium field trip as well as integrate ocean awareness in the classroom across disciplines.
- July 15: *Incorporating Environmental Education* into the Humanities helps educators bring environmental appreciation and education into the humanities.
- July 15: *Art and Nature* with the North Carolina Museum of Art, investigates the artist's use of nature as a subject that reflects and addresses cultural attitudes and beliefs about the importance of the environment.

- July 16: *Project Learning Tree* uses trees as "windows" into natural and built environments, helping people gain an awareness and knowledge of the world around them and their place within it.
- July 17: *Project WET* provides water education curriculum for K-12 teachers.
- July 17: *Field Trip Earth* with the North Carolina Zoological Society, facilitates communication between classrooms and field scientists at work with wildlife around the world.
- July 18: *Plants that bite back* focuses on activities and resources for the middle grades to teach about carnivorous plants. (To register for this workshop, contact Martha Flanagan at martha.flanagan@ncmail.net)

To register for workshops on July 14-17, 2008, please email: ncaff.registrar@ncmail.net

Teacher Workshops – North Carolina

The North Carolina Aquarium is offering teacher workshops, July 14-18, 2008 in Kure Beach, North Carolina; all workshops are free of charge. The workshops introduce K-12 teachers to pre- and post-visit activities designed to enhance an aquarium field trip as well as integrate ocean awareness in the classroom across disciplines.

- **Aquarium Teacher Workshops**, July 14; aquarium education staff help participants become familiar with on-site activities and resources through a series of selected experiences.
- **Incorporating Environmental Education into the Humanities**; July 15; participants create their own journal and practice the art of papermaking, creative writing, and drawing from nature.
- **Art and Nature**; July 15; this North Carolina Museum of Art's workshop investigates the artist's use of nature as a subject that reflects and addresses cultural attitudes and beliefs about the importance of the environment.
- **Project Learning Tree**; July 16; the workshop uses trees as windows into natural and built environments, helping people gain an awareness and knowledge of the world around them and their place within it.
- **Project WET**; July 17; the workshop provides water education curriculum for K-12 teachers.
- **Plants That Bite Back**; July 18; the workshop focuses on activities and resources for the middle grades to teach about carnivorous plants. For this workshop, contact Martha Flanagan at martha.flanagan@ncmail.net.

To register, or for more information, contact North Carolina Aquarium staff at ncaff.registrar@ncmail.net.

Teacher Workshops - Virginia

The Chesapeake Bay National Estuarine Research Reserve in Virginia offers a series of free teacher workshops at the Virginia Institute of Marine Science in Gloucester Point, Virginia this summer.

- ***Estuarine Aquarium Keeping in the Classroom***; July 18-19, 2006; Teachers will learn the art and science of keeping Chesapeake Bay species in classroom aquaria, with an emphasis on raising juvenile blue crabs and summer flounder. In addition to learning the information necessary for proper maintenance and trouble-shooting, participants will tour the Virginia Sea Grant fish aquaculture facility and the Virginia Institute of Marine Science aquarium, and will receive the 20-page CBNERRVA *Estuarine Aquarium Keeping for Beginners* manual.

- ***Water Quality***; July 25-26, 2006; This workshop is designed to allow teachers to learn more about water quality, how to access water quality monitoring data from throughout the Chesapeake Bay and across the nation.
- ***Chesapeake Bay Habitats***; August 9-10, 2006; Learn more about York River estuarine habitats, the aquatic animals that live there, and York River water quality.

http://www.vims.edu/cbnerr/education/index.htm

Teacher Workshop on Geoscience Time Scales & Global Climate Change - Wisconsin
Supported by UW-Madison's Atmospheric and Oceanic Sciences Department, teachers can look backward and forward in time by studying weather for 1 day, 1 week, 1 month; climate for a year, 30 years, 400,000 years; and geology for millions of years. Workshop sessions, July 9-10, 2008 in Madison, Wisconsin, will include hands-on activities utilizing real-time satellite imagery in Google Earth to study the Earth System and discussions of the Intergovernmental Panel on Climate Change 2007 Summary for Policy Makers.
http://cimss.ssec.wisc.edu/teacherworkshop/

Teacher Workshops and Student Opportunities – Various
NMEA News keeps members up-to-date with news from regional chapters and committees, information about professional development opportunities, and communications from NMEA leadership. NMEA News is published exclusively online. Check out the **many** upcoming teacher workshops and other opportunities in the Spring issue, including *Sink into Science*, *Exploring Ocean Literacy through Science and Children's Literature*, *Ocean Expo Summer Camp*, and more.
http://www.marine-ed.org/docs/nmeanews.pdf

Teacher's Domain Online Courses
The Teacher's Domain courses, online professional development courses produced by WGBH Educational Foundation, are developed by educators specializing in science teaching. They are designed to broaden knowledge of science content and teaching methodologies and integrate that technology into the classroom. Courses feature interactive resources that can be incorporated into lesson plans, videos of classroom practices, and online discussions, enabling teachers to communicate with their peers.
http://www.teachersdomain.org/courses/

Teachers in Geosciences - Online
The Teachers in Geosciences program at Mississippi State University provides an opportunity to earn a Master of Science degree through distance learning. The program concludes with an 8- to 10-day capstone field course that is taught during the summer at a variety of locations including Western Lake Superior, the Outer Banks, the Bahamas, and more. The program includes courses in meteorology, geology, planetary science, oceanography, hydrology, and environmental geoscience.
http://www.msstate.edu/dept/geosciences/CT/TIG/Site.htm

Teachers on the Estuary (TOTE) – Various
NOAA's National Estuarine Research Reserve System educators and researchers offer a wide variety of professional development opportunities, grounded in research and fieldwork. The workshops include field activities, in-depth background information about estuaries and other coastal habitats, classroom resources, and more. Check out upcoming workshops in July and August; many are free.

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

Teachers on the Estuary Workshop – Florida
The Guana Tolomato Matanzas National Estuarine Research Reserve will host a Teachers on the Estuary (TOTE) Workshop, June 11-14, 2012 in Tallahassee, Florida. The workshop provides resources and hands-on experiences to support the incorporation of estuary and watershed topics into classroom teaching. Participants will work with local scientists and coastal educators to explore estuary habitats, practice scientific field activities, and bring data into the classroom.
Contact Kenneth Rainer at Kenneth.Rainer@dep.state.fl.us

Teachers on the Estuary - Maine
The Wells National Estuarine Research Reserve's summer professional development workshop, TOTE: Climate Stewards in Action, July 22-25, 2013 July 11-14, 2016 in Wells, Maine, is geared towards middle and high school science teachers. Content is focused on climate change, ecosystem services, estuaries, and more.
http://www.wellsreserve.org/blog/5-teachers_on_the_estuary_climate_stewards_in_action
http://www.wellsreserve.org/blog/742-teaching_about_coastal_impacts_of_climate_change

Teachers on the Estuary Workshop – Massachusetts
The Waquoit Bay National Estuarine Research Reserve will offer the free research and field-based teacher training program called Teachers on the Estuary (TOTE) for middle and high school science and math teachers, July 14-17, 2014 July 13-16, 2015; in Waquoit, Massachusetts, with a focus on planning and carrying out investigations. This program is designed to help teachers learn how to use real data and guide student investigations.
http://www.waquoitbayreserve.org/education-training/education-programs/teacher-training/

Teachers on the Estuary and the Wampanoag Circle of Life - Massachusetts
Join educators at the Waquoit Bay National Estuarine Research Reserve and the Mashpee Wampanoag Indian Museum in East Falmouth and Mashpee, Massachusetts for an interdisciplinary workshop for elementary teachers in collaboration with the Mashpee Wampanoag Indian Museum.
http://www.waquoitbayreserve.org/education-training/education-programs/teacher-training/

Teachers on the Estuary - Massachusetts and Rhode Island
Teachers on the Estuary is a National Estuarine Research Reserve System program featuring field and research-based professional development integrating content, methods, and activities on watersheds and estuaries. Two programs are scheduled for July 8-10, 2009 in Falmouth, Massachusetts, and July 27- 30, 2009 on Prudence Island, Rhode Island. Each includes an additional half-day program in the fall. Funds are available for participation.
http://www.nbnerr.org/tote.htm

Teachers on the Estuary – New England
The New England National Estuarine Research Reserves offer free Teachers on the Estuary (TOTE) professional development workshops. The workshops are research and

field-based professional development opportunities designed to improve teachers' and students' understanding of estuaries using local research examples. The workshops will provide resources and hands-on experiences to support the incorporation of estuary and watershed topics into classroom teaching.

- July 11-14, 2011 in Wells, Maine
- July 25-28, 2011 in Bristol, Rhode Island
- August 8-11, 2011 in Falmouth, Massachusetts
- Massachusetts: July 9-12, 2012 plus follow-up session
- Alabama: July 31- Aug.3, 2012
- Rhode Island: August 9-12, 2012 plus follow-up session
-

http://www.estuaries.gov/GetInvolved/Default.aspx?id=401

Teachers on the Estuary – New Jersey
The JCNERR in partnership with the National Park Service, is offering Teachers on the Estuary: Benthic Habitats and Advanced Technologies Workshop, August 9-12, 2016 in Tuckerton, New Jersey. Key topics include bathymetry, benthic biological communities, advanced technologies, and more. CE credits and a stipend may be available.
http://jcnerr.org/education/educators.html

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 – Rhode Island
Narragansett Bay National Estuarine Research Reserve's summer professional development workshop, Teachers on the Estuary (TOTE), August 1-4, 2013 August 15-18, 2016; on Prudence Island, Rhode Island, is a research and field-based workshop geared towards middle and high school teachers, designed to improve understanding of estuaries using local research examples. The workshop is limited to ten participants; a mini-grant may be available.
http://www.nbnerr.org/tote.htm

Teachers on the Estuary - Texas
The Mission-Aransas Reserve will host a free Teachers on the Estuary (TOTE) workshop for middle or high school Texas science teachers, July 14-16, 2015 in Port Aransas, Texas. The workshop will cover topics that affect the entire Gulf ecosystem, including freshwater resources, oil spills, and climate science. A stipend may be available. See the website for eligibility; hurry, only four spots remain.
http://www.eventbrite.com/e/teachers-on-the-estuary-at-mission-aransas-reserve-registration-14925397265

Teachers on the Estuary (TOTE) – Various
NOAA's National Estuarine Research Reserve System educators and researchers offer a wide variety of profession development opportunities, grounded in research and fieldwork. The workshops include field activities, in-depth background information about

estuaries and other coastal habitats, classroom resources, and more. Check out the 2016 Educator Training Opportunities page for the specific workshops.
http://estuaries.noaa.gov/Teachers/Default.aspx?ID=170
http://estuaries.noaa.gov/Teachers/Default.aspx?ID=387
https://coast.noaa.gov/estuaries/teachers-on-the-estuary/calendar.html

Teachers Teaching Teachers GIS - California
ESRI's Teaching Teachers GIS Institute is seeking 100 educators from all levels, who want to help other educators engage ArcGIS Online in their instruction. GIS experience is useful but not required. The institute will take place June 16-21, 2013 in Redlands, California.
http://edcommunity.esri.com/community/institute2013/index.cfm

Teacher's Workshop - California
The Ocean Futures Society's Ambassadors of the Environment offers this teacher's workshop, June 21-25, 2010 in Santa Barbara, California. The workshop offers experiential learning alongside specialists in the fields of marine and terrestrial ecology, sustainable living, and more.
http://www.oceanfutures.org/learning/ambassadors-environment/additional-opportunities/teachers-workshop

Teaching about the Gulf Oil Spill - Online
Registered EE Week 2011 participants are invited to participate in Teaching about the Gulf Oil Spill, an interactive educator webinar. The webinar will provide information on the timeline and effects of the spill and address questions about the spill and its long-term consequences. Participants will also learn about the National Wildlife Federation's Oil Spill educational materials, service projects, and how teachers and students can get involved.
http://www.eeweek.org/

Teaching About the Marine Environment - Online
The Department of Environmental Studies at the University of North Carolina, Wilmington offers an online course this fall, EVS 592: *Teaching about the Marine Environment, classroom-based methods for ocean education*. Participants will explore on-line sources and print materials for grades 5-12, many adaptable for informal learning. The course is online and asynchronous. Contact the instructor for details.
http://www.uncw.edu/evs/index_000.html

Teaching Environmental Issues - Online
This online EE Teacher's Institute, June 2-August 8, 2008 from the Colorado Alliance for Environmental Educator, is a professional development course designed to actively involve educators in facilitating the investigation and evaluation of environmental issues with their learners. It models a variety of EE strategies to assist learners in exploring and seeking responsible courses of action toward the resolution of environmental issues specific to their community. Hurry – note the starting date of June 2, 2008.
http://www.caee.org/development/online-ee-teacher-s-institute-1

Teaching Science by Ocean Inquiry Summer Workshop - Maine
The School of Marine Sciences and the College of Education & Human Development at the University of Maine and the Center for Ocean Sciences Education Excellence-Ocean Systems are offering a summer workshop, July 17-21, 2006 in Walpole, Maine. The

goals of the workshop are to help teachers develop inquiry-based units for teaching physical concepts using oceans and their climate-links as a vehicle; and to develop a network between teachers, scientists, and experts in education.
http://server.dmc.maine.edu/courses.html

Teaching Science by Ocean Inquiry - Maine
Applicants are invited for a summer workshop, July 23-27, 2007 in Walpole, Maine. The free workshop is intended for high school and middle school teachers who teach physics, chemistry, physical science, and/or earth sciences. Teachers will work with the program instructors to develop hands-on, inquiry -based activities, teaching materials, and means of assessment.
Contact Lee Karp-Boss at lee.karp-boss@maine.edu or Herman Weller at herman.weller@umit.maine.edu

Teaching with Technology and Inquiry - Online
In this MOCC edX eight-week course starting July 1, 2015, instructors from the University of Toronto will engage students in design-oriented collaborative activities focused on STEAM+ learning. INQ101x is designed with primary and secondary school teachers in mind, though teacher candidates, higher education instructors, and other educators may also find it relevant.
https://www.edx.org/course/teaching-technology-inquiry-open-course-university-torontox-inq101x

Teaching the Water-Energy Connection - Online
Registered National Environmental Education Week (EE Week) 2010 participants are invited to join EE Week's first webinar, Teaching the Water-Energy Connection, March 31, 2010. Educators will learn about the water-energy connection, water and energy conservation projects taking place in schools, lesson plans developed by Earth Day Network on the water-energy connection, and much more.
http://www.eeweek.org/webinars/water_energy

Technology Integration On-Line Courses
The George Lucas Educational Foundation provides a series of teaching modules developed by professional development experts and education faculty. For an understanding of effective technology integration, explore the modules focused on using technology in mathematics, science, language arts, and social studies curricula. An example integrates a digital microscope into pre-K through 5th grade science instruction.
www.glef.org/foundation/courseware.php .

Technology in Marine Science – Alabama
Dauphin Island Sea Lab Discovery Hall Programs promote conservation through education, research, and outreach. The ROV workshop, July 24-28, 2016 is for teachers in the Florida panhandle, Alabama, Mississippi, and Louisiana; see the website for complete details. Workshop registrations are refunded upon completion.
http://www.disl.org/educational-programs/professional-development-for-educators/list-of-workshops/

TechSurge Workshop - Virginia
Marine Technology Society offers the 2010 *TechSurge Workshop, Ocean Observing: Thinking Outside the Basin*, June 8–9, 2010 in Norfolk, Virginia. The workshop will provide knowledge and an interdisciplinary perspective to enhance your ability to collect,

deliver, and use ocean information. The program can be useful for federal and regional partners involved with marine spatial planning and ecosystem-based management.
https://www.mtsociety.org/conferences/OceanObserving2010.aspx

Texas A&M University's Marine Advisory Service Educator Workshops
Texas Marine Advisory Service will host two development workshops for Texas educators on the environment and natural resources in Texas and the Gulf Coast. Teachers, science curriculum specialists, and department heads working in public and private schools are encouraged to register. Training sessions for elementary school educators were June 28-30; training for secondary school educators July 7-9.
Contact lbeach@neo.tamu.edu .

Texas Bays and Estuaries Meeting - Texas
The Texas Bays and Estuaries Meeting, April 16-17, 2008 in Port Aransas, Texas will focus on work being done in the bays, estuaries, and near-shore Gulf of Mexico. The meeting provides an opportunity for both natural and social science researchers working in the Texas coastal zone to share information, results, and insights into this diverse coastal environment.
http://www.utmsi.utexas.edu/its/tbem2008/tbem2008.htm

Texas Estuarine Resource Network - Texas
The Coastal Program is launching a new citizen science program called Texas Estuarine Resource Network (T.E.R.N.) to collect data on colonial waterbird species. A free workshop will introduce the program, discuss the value of data collection to scientists, provide an overview of the waterbird species and feeding behaviors, and teach participants how to conduct monitoring and fill out survey sheets.
Contact Kari Howard at khoward@audubon.org

Texas State Aquarium Curriculum Writing Workshop – Texas
This annual workshop, July 20-24, 2015 in Corpus Christi, Texas, helps participants create and refine classroom curricula for improved STEM teaching and learning in and beyond South Texas, while providing additional training for the educators involved. This year, five K-12 classroom teachers will be selected.
https://texasstateaquarium.org/wp-content/uploads/2014/06/Curriculum-Writing-Wrkshop-Goals_Responsibilities-2015.pdf

Texas State Aquarium Fall Teacher Learning Opportunities – Texas
The Texas State Aquarium and Flint Hills Resources Center for Excellence in Science, Technology, Engineering and Math Education offer educators learning opportunities and resources designed to support and enhance classroom-based STEM curriculum, pedagogical best practices, and student-centered discovery. Check out the upcoming Brunch by the Beach, Tracking Sharks, and Aquavision Distance Learning opportunities.
https://texasstateaquarium.org/programs-camps/teacher-resources/

Tidal Wetlands Seminar - Virginia
The Center for Coastal Resources Management Wetlands Program will hold a Tidal Wetlands Seminar, March 9, 2005 at Gloucester Point, Virginia. The seminar will include a comprehensive review of tidal wetland community functions and values, the permit application review process, current scientific guidelines for evaluating impacts to tidal wetlands, and the Living Shorelines Stewardship Initiative.
Contact Dawn Fleming at dawnf@vims.edu

TIGed e-courses - Online
TakingITGlobal (TIGed) is offering three graduate-level, accredited e-courses for teachers this Fall designed to support teachers in bringing the world into their classrooms through the use of e-technologies and international partnerships. The courses aim to help students understand global perspectives, environmental issues, and student voice.
http://www.tigweb.org/tiged/professional-development/ecourses.html

Tiny But Toxic - Online
COSEE-West invites educators to participate in *Tiny but TOXIC! Harmful algal blooms: science, technology and YOU*!, a free, online workshop on harmful algae and their impacts on coastal systems, marine life, and human health, March 21-April 8, 2011. Participants have the opportunity to interact with marine scientists online and access free videos, slide shows, virtual field trips, information, and lesson ideas for teaching about harmful algal blooms. Materials are archived for future reference.
http://www.coexploration.org/cosee_west/spring2011/

The Arts: A Bridge Between Coral Reef Conservation Science and Policy – Hawai'i
There are many different sessions accepting contributions for the upcoming ICRS conference, but do you think if you see another PowerPoint spouting the same old messages and buzzwords that your head might implode? Join this session with a difference. They are inviting proposals and abstracts on any aspect of how the arts can contribute to (or detract from) communication, understanding, and persuasion around the subject of coral reefs in the Anthropocene. Think and present outside the lectern.
https://www.sgmeet.com/icrs2016/sessionschedule.asp?SessionID=84

Tools That Work Webinars
The COSEE Excellence in Networking Tools Sub-group recently held a webinar focusing on Tools for Online Presentations. The webinar explored the use of Elluminate, Moodle, Adobe Connect, and long-distance learning. The webinar was recorded and can be accessed from the Online Tools Guidebook. The next webinar will be on Social Media Tools.
http://www.cosee.net/about/cnn/

Tortugas Field Trip and Symposium – Carnegie Lab Centennial
The centennial celebration of the Carnegie Laboratory for Marine Biology in the Dry Tortugas will take place October 13-15, 2005 in Key West, Florida. The celebration includes a field trip to the Dry Tortugas and the site of the Laboratory, along with a Symposium on the Past, Present and Future of Research in the Tortugas. Limited financial aid is available for university students and high school and college teachers early in their careers.
http://www.rsmas.miami.edu/conference/tortugas/

TOTE, WOW, and WET Workshop – Rhode Island
The Narragansett Bay National Estuarine Research Reserve will offer a combined Teachers on the Estuary, Wonders of Wetlands, and Project WET workshop, August 8-10, 2014 on Prudence Island, Rhode Island. Most expenses other than transportation are covered.
http://www.nbnerr.org/tote.htm

Toxic Blooms - Online
Woods Hole Oceanographic Institution offers this online seminar, Toxic Blooms: Understanding Red Tides, reviewing the basic biology and ecology of harmful algal blooms, the organisms responsible, what kinds of toxins they produce, and what possible measures can be taken to control them.
http://www.fathom.com/course/10701012/index.html

Trail Management: Plans, Projects and People – California
The U.S. Fish and Wildlife Service offers a variety of professional development courses. OUT8194: Trail Management: Plans, Projects and People will be held March 30-April 3, 2009 in Marshall, California; the deadline for registration is January 19, 2009. Participants will learn to achieve sustainable and accessible trails of all kinds, using the best practices of the trail management process.
Contact Matt Gay at matt_gay@fws.gov .
http://training.fws.gov/documents/Section1_NCTC_Sponsored_Courses.pdf

Trans-disciplinary Approaches to Addressing Wicked Problems - Online
The goal of this course, starting February 1, 2016, is to create an online space where scholars and students gather to learn about multiple disciplines that shed light on how to improve environmental quality and change environmental behaviors. Each of the lectures, readings, discussions, and case studies will focus on the implications of a particular discipline for environmental education, as well as what environmental education has to contribute to related disciplines and sectors.
http://www.globalee.net/

Transforming Youth Outdoors Webinars - Online
Transforming Youth Outdoors is an online learning community committed to getting youth outdoors, offering fee membership and free resources curated by experts in the field. Check the Facebook page for information about upcoming webinars.
https://www.facebook.com/TransformingYouthOutdoors/
http://mytyo.org/

Treasures of the Deep Workshop - Florida
This one-day workshop, *Treasures of the Deep - Deep Water Corals of the South Atlantic and the Oculina Bank: A Local Resource Workshop for Teachers*, will be held September 17, 2005, in Titusville, Florida. Teachers will learn about deep-water coral ecosystems, the Oculina Bank Habitat Area of Particular Concern, research and monitoring efforts, and educational materials available for classroom use. The workshop also solicits educator input on deep-water coral outreach and education activities.
Contact Jennifer Schull at jennifer.schull@noaa.gov or 305 361-4204

Tread Lightly! Awareness Course - Online
The Tread Lightly!® Awareness Course is now available online. This course is appropriate for anyone who goes ATV riding, mountain biking, snowmobiling, or owns a four wheel drive vehicle or a personal watercraft; land and water managers are also encouraged to use it in their educational programs. The free 30-minute interactive course covers outdoor ethics. They combine flash animation, audio voice-overs, hypothetical scenarios and quick quizzes. Note that you may need to temporarily disable your popup blocker. Also new on the website is the Tread Lightly! Kids Club.
http://www.treadlightly.org/

Tread Trainer - Alabama and Florida
The Tread Trainer program is designed to train participants in innovative, practical methods of spreading outdoor ethics to the public with a curriculum specifically focused on motorized and mechanized recreation. A Tread Trainer course will be held March 22, 2006 in Birmingham, Alabama; the deadline for registration is February 27, 2006. The Ocala, Florida course will take place 5/1/2006; scholarships may be available.
http://www.treadlightly.org/trainer.mv?action=listcourses&coursetype=trainer&auth=

Tropical Coastal Ecosystems - Online
This edX course from the University of Queensland helps students develop the skills and knowledge needed to help preserve tropical coastal ecosystems. While the nine-week course starts September 1, 2015, students may be able to catch up if registering after the course begins.
https://www.edx.org/course/tropical-coastal-ecosystems-uqx-tropic101x-0
https://www.edx.org/course/tropical-coastal-ecosystems-uqx-tropic101x-1
https://www.edx.org/course/tropical-coastal-ecosystems-uqx-tropic101x-2
https://www.edx.org/course/tropical-coastal-ecosystems-uqx-tropic101x-3

Tsunamis and Storm Surges: Introduction to Coastal Disasters - Online
In this free MOOC from Waseda University, students learn about natural coastal disasters and how to help improve global disaster management. The six-week course starts January 18, 2016.
https://www.edx.org/course/tsunamis-storm-surges-introduction-wasedax-cosdis101x

Turning Learners Into Leaders - Online
The free Roots & Shoots Summer Online Course, Turning Learners Into Leaders: Empowering Youth Through Service in Education, June 29–August 2, 2015 teaches participants how to identify and implement a local service-learning campaign.
http://www.rootsandshoots.org/onlinecourse

Turning Learners Into Leaders – Online
Using the Roots & Shoots program model, the course will teach participants how to identify and implement a local service-learning campaign. Through the program, young people map their community to identify specific challenges their neighborhoods face. From there, they prioritize the problems, develop a plan for solutions, and take action. Check out the Roots & Shoots website; the projects can be filtered by focus areas including air, water, wildlife, and more.
https://jgionlineeducation.appspot.com/MOOC2015/preview
https://www.rootsandshoots.org/

Under the Sea Mosaic – Massachusetts
Northeastern University Marine Science Center will offer the Marine Science and Mosaic Art Program, April 18-21, 2017 in Nahant, Massachusetts. Open to students in grades 7-12, participants will learn about marine habitats via hands-on activities led by NUMSC educators, and learn and practice techniques to build a marine mosaic from a professional mosaic artist.
http://www.northeastern.edu/cos/marinescience/outreach/under-the-sea-mosaic/

Understanding Aquatic Nuisance Species and Their Terrestrial Counterparts
The Dauphin Island Sea Lab and the J.L. Scott Marine Education Center and Aquarium announce a new on-line course for March, 2004, *Understanding Aquatic Nuisance Species and Their Terrestrial Counterparts*.
www.coexploration.org/ans .

Understanding Tsunamis – Online
The College of Exploration will present *Understanding Tsunamis,* a 3-week online teacher workshop from April 22-May 15, 2005, funded by the National Science Foundation. The workshop will provide educational outreach to teachers, present information about current research, and offer a chance for teachers to interact with scientists about the topic of tsunamis and to gain resources for classroom infusion.
http://www.coexploration.org/tsunami/

Underwater Robotics - Illinois
The Shedd Aquarium is offering a *Teacher Field Experience: Underwater Robotics,* suggested for teachers of grades 6-12, August 10, 2009 from Chicago, Illinois. Teachers must apply in teams of 2-3. Participants will build their own ROV, use it to conduct field research, and take home several hundred dollars worth of materials and a full curriculum to share the excitement with their class.
http://www.sheddaquarium.org/teacherprogram_listings.html

University of New Hampshire Marine Science Graduate Fellowships
Ten fellowships, coordinated by the UNH Marine Program, are offered for a summer 2004 start. They are with: the Center for Coastal and Ocean Mapping, Northeast Consortium, Cooperative Institute for Coastal and Environmental Technology (CICEET), Cooperative Institute for New England Mariculture and Fisheries, Center for Excellence in Coastal Ocean Observation and Analysis, and UNH/NOAA Joint Hydrographic Center.
http://www.marine.unh.edu/aboutmpfellowship.html .

UQx – Online
The University of Queensland, Australia offers a myriad of free, online courses. Browse the courses, including Question Everything, Making Sense of Climate Change Denial, Working in Teams: a Practical Guide, and much more. The UQx courses can be audited free or students can choose to receive a verified certificate for a small fee.
https://www.edx.org/school/uqx

Urban Environmental Education - Online
Cornell University's Civic Ecology lab offers the online course, Urban Environmental Education, April 10-June 4, 2017. The nominal fee may be waived for those unable to pay.
https://civicecology.org/course-UEE/

Urban Science Education Leadership Academy - Louisiana
The purpose of the 2010 Urban Science Education Leadership Academy, August 2–5, 2010 in New Orleans, Louisiana, is to positively affect student achievement through the development of leaders who will help guide reform of the learning, teaching, and assessing of science in elementary and middle schools. Leaders will be driven by personal experiences, knowledge of the change process, use of research, relevant data, and the leadership skills developed in collaboration with others.
http://www.nsta.org/conferences/2010/uselacademy.aspx?lid=exp

Urban Water - Innovations for Environmental Sustainability - Online
Participants in this free edX online course will learn about innovative urban solutions to the global water crisis, with real-life examples from architects, engineers, planners, ecologists, and artists.
https://www.edx.org/course/urban-water-innovations-environmental-ubcx-water201x

Urban Watershed Summit - California
Heal the Bay, in conjunction with the Los Angeles and San Gabriel Rivers Watershed Council and others, will host an Urban Watershed Summit February 12, 2005, in Compton, California. The day-long summit will bring attendees together to create new partnerships and launch coordinated efforts to clean, restore, and revitalize local urban watersheds. Attendees will learn how to develop successful partnerships and effective community outreach tools.
Contact Debbi Dodson at ddodson@san.rr.com

U.S. Fish and Wildlife Service Courses
The U.S. Fish and Wildlife Service offers professional development courses at the National Conservation Training Center campus in West Virginia, through the University of Wisconsin Stevens Point, and with partners throughout the country.

- Making Environmental Education Relevant for Culturally Diverse Audiences, October 5-December 22, 2015, online. Contact Michelle Donlan at Michelle_Donlan@fws.gov
- Needs Assessment in Environmental Education, October 7-November 20, 2015, online. Contact Michelle Donlan at Michelle_Donlan@fws.gov
- Connecting People with Nature through Birds, April 25-28, 2015 in Soldotna, Alaska. Contact Michelle Donlan at Michelle_Donlan@fws.gov
- Teaching Youth Outdoors, May 2-6, 2016 in West Virginia. Contact Werner Barz at Werner_Barz@fws.gov
- River Assessment and Monitoring (Wildland Hydrology) CSP3410, May 8, 2017 in Shepherdstown, West Virginia
- Connecting Birds with Nature, OUT8163, June 5, 2017 in Fergus Falls, Minnesota
- Wetland Assessment, Restoration and Management, CSP3106, June 19, 2017 in Willows, California
- Freshwater Mussel Identification, CSP1103, June 26, 2017 in Shepherdstown, West Virginia
- Climate-Smart Conservation with Scenario Planning, ALC3187, May 15, 2017 in Shepherdstown, West Virginia
- Wetland Plant Identification, CSP3107, July 17, 2017 in Shepherdstown, West Virginia

https://training.fws.gov/courses/

Using Atlas of Science Literacy Workshop – New Hampshire and Calgary
Learn about AAAS's Atlas of Science Literacy and how to put it to use to improve curriculum, instruction, and assessment. The workshop gives participants a perspective on standards-based reform based on understanding the maps, clarifying standards, changing classroom practice, and improving curriculum.

- Lebanon, New Hampshire, August 16-18 (July 9 scholarship application deadline)
- Calgary, Canada, September 8-10 (July 23 scholarship application deadline)

Check out the website for future workshops.
http://www.project2061.org/events/workshops/default.htm

Using Giovanni for Geoscience Education - Online
The theme of this year's Giovanni workshop from NASA, November 15-17, 2016 is Using Giovanni for Geoscience Education. All of the presentations in the workshop will be given using the Adobe Connect environment. Free registration is recommended. All of the presentations will be archived.
http://disc.sci.gsfc.nasa.gov/giovanni/additional/third_leptoukh_online_giovanni_workshop

Using the Internet in Real Time Ocean Research for Education and Outreach – Call for Abstracts
Organizers of Session ED03: Using the Internet in Real Time Ocean Research for Education and Outreach, at the American Geophysical Union Ocean Sciences Meeting, February 22-26, 2010 in Portland, Oregon, announce a call for abstracts. This session will explore examples and lessons learned on the use of expedition and research project web sites and internet tools to engage and involve students and teachers in real time ocean research.
Contact Sharon Cooper at scooper@oceanleadership.org
http://www.agu.org/meetings/os10/program/abstract_submissions.php

Using Marine Biology to Teach Biology and Ecology - Florida
The Institute for Biomedical Philosophy offer teachers and students the opportunity to explore national standards-based biology and ecology concepts using hands-on marine biology models. Teachers and students will snorkel the coral reef, swim with dolphins, and participate in beach programs. The material includes extensions for statistics, computer science, and mathematics as well as for information technology, language arts, fine arts, library science, reading, and psychology.
Contact Melissa Demetrikopoulos, Ph.D. at mdemetr@BioPhi.org
http://www.biophi.org/pages/1/index.htm

Using Marine Biology to Teach Physiology and Ecology Workshops
The Institute for Biomedical Philosophy offers teacher workshops utilizing marine biology as a hook to teach physiology and ecology. These programs are open to teachers, preservice teachers, administrators, informal educators, and science educator faculty. They are based on the national science education and teaching standards with content that can be integrated across the curriculum. The workshops are scheduled right before or after the NMEA meeting in St Petersburg.
http://www.biophi.org/pages/1/index.htm .

Using NASA Observations to Study Changes in Chesapeake Bay - Maryland
Cutting edge science observations from space will be integrated with classroom-ready lessons in this workshop for middle school teachers, July 7-9, 2009 in Greenbelt, Maryland. An overarching theme of the bay's place in space, and time, and the Earth system will tie together lessons in geology, land use change, air quality, and the water cycle as participants look at the long-ago past and into the future. The workshop is limited to 30 participants.
http://education.gsfc.nasa.gov/bay/

Using Ocean Data in Education - Online
COSEE NOW has been presenting a free webinar series, Using Ocean Data in Education. The series explores effective strategies for incorporating ocean data in formal and informal education products and programs, as a way to connect students to scientific concepts and real-time science. The session, COOL Classroom: Building a Collaborative Design Team for Science Curriculum Development, will be held online at a future date; register to join.
http://coseenow.net/blog/using-ocean-data-in-education/

Using Social Media to Promote Programs and Ideas - Online
NAAEE is hosting this Social Media 101 Webinar for those starting out or needing new tips on how to use Facebook and Twitter, July 23, 2012. Social media can help increase your organization's effectiveness and help meet your goals of engaging your members, supporters, and target audiences.
https://naaee.webex.com/naaee/onstage/g.php?t=a&d=668985869

USS Monitor Professional Development Workshop - Virginia
Partners offer a professional development workshop for science and social studies teachers in grades 4-8, July 21, 2006, in Norfolk, Virginia. Join educators, historians, and ocean explorers in this one-time specially developed workshop for teachers related to exploration of the *USS Monitor* shipwreck site off the Virginia Capes. Teachers will participate in hands-on social studies and science activities related to the Battle of Hampton Roads, the *Monitor* shipwreck, remotely-operated vehicles used in deep-sea exploration, and metal degradation as it relates to marine archaeology.
Contact Brent Rudmann at brent.rudmann@noaa.gov

Valuing Ecosystem Services in the Face of Climate Change - Online
The Ecosystem-Based Management Tools Network will host a webinar on Valuing Ecosystem Services in the Face of Climate Change, January 22, 2014. While on the website, check out other upcoming and archived webinars.
http://www.ebmtools.org/webinar-valuing-ecosystem-services-face-climate-change-north-carolina-and-hawaii-ken-bagstad-usgs.ht

Virtual International Educators' Web Site – Conference Listing
This website, with listings about national and international conferences, is maintained by the Harvard Graduate School of Education. Please note that it does not currently have any environmental education conferences listed.
http://www.gse.harvard.edu/%7Eviews/conferences.html .

Visualizing Change Training - Online
Visualizing Change is a 3-year grant funded by NOAA's Office of Education to help build capacity in the informal science education field to more effectively use global data sets to communicate about climate change, its impact on coastal zones and marine life, and how people are working to use scientific information to shape our world. The webinars take participants through ways to engage audiences using narratives with global data visuals, along with best practices based on targeted social and cognitive research.
http://tinyurl.com/VisChangeTrainingWebinar

Visualizing Change - Various
Learn ways you can engage audiences with topics of climate and ocean change in various locations. The free educator workshops discuss storyboards that can be used

for climate change interpretation, helping to effectively communicate climate change in a positive way that leads the listener to action.
http://climateinterpreter.org/resource/visualizing-change-training-dates

Voices of the Bay - California
Monterey Bay National Marine Sanctuary is hosting Voices of the Bay: Fisheries Education, a free teacher workshop, July 11, 2012 in Santa Cruz, California. The workshop introduces teachers to the Voices of the Bay Fisheries Education standards-based curriculum and explores the multiple stakeholders involved in the local fisheries.
Contact Chelsea Prindle at Chelsea.Prindle@noaa.gov

Voices of the Bay - California
Monterey Bay National Marine Sanctuary is hosting *Voices of the Bay: Fisheries Education*, a free teacher workshop and squid fishing cruise, November 20, 2010, June 20-22, 2011 , from Monterey, California. The first half of the day will be spent learning about standards-based curriculum modules that immerse students in local fisheries, while the second half will be spent out at sea on a Humboldt squid fishing trip aboard the research vessel *Fulmar*.
Contact Kristin Hunter-Thomson at kristin.hunter-thomson@noaa.gov

Voices of the Bay Fisheries Education Workshop - California
The National Marine Sanctuary Program and the Monterey Bay National Marine Sanctuary invite teachers of all disciplines (grades 8-14) to become immersed in Monterey Bay fisheries, past and present, July 29-31, 2009 in Santa Cruz, California. This free workshop will introduce the new *Voices of the Bay* fisheries education curriculum and to help participants implement this curriculum in their classroom.
Contact Sabrina Beyer at sabrina.beyer@noaa.gov

Volunteer Monitoring in the Mid-Atlantic - West Virginia
This conference, *Volunteer Monitoring in the Mid-Atlantic: Citizen Scientists Involved in the Watershed*, November 4-5, 2005 in Davis, West Virginia, is sponsored by the US EPA Nonpoint Source Pollution Program. Share monitoring skills, technical advances, organizational and program ideas, and network with volunteer colleagues. Scholarships are available for a limited time.
http://www.wvca.us/workshops/vmc/

Volunteers and Invasive Plants: Learning and Lending a Hand
This e-learning website from the U.S. Fish and Wildlife Service provides science-based, introductory information about invasive plants. The five self-study modules address the purpose and history of the National Wildlife Refuge System, how volunteers help in invasive plant management, how refuges manage invasive plants, and tips for community outreach.
http://www.fws.gov/invasives/volunteersTrainingModule/index.html

Waquoit Bay NERR Workshops - Massachusetts
Check out the winter and spring courses for teachers sponsored by the Waquoit Bay National Estuarine Research Reserve in Massachusetts. The professional development courses integrate science content, math applications, recent research results, and sample classroom lessons. Upcoming courses include Salt Water Studies: Coastal Science Activities for the Classroom, Wings Over Water, and more. Graduate credit is available.

http://www.waquoitbayreserve.org/eventcalendar.aspx

Wastewater Issues in Watersheds – Massachusetts
The Waquoit Bay NERR and partners offer the free workshop, Wastewater Issues in Watersheds: The Perfect STEM Topic, April 10-11, 2015 in Waquoit, Massachusetts. The goal of this course is to increase understanding of wastewater issues by using them as examples to meet standards in science, technology, engineering and mathematics, and to improve teachers' and students' understanding of the importance of coastal salt marshes and bays and the impact of too many nutrients upon them.
http://www.waquoitbayreserve.org/event-registration/?ee=233

Wastewater in Watersheds – Massachusetts
Wastewater in Watersheds, a free workshop for middle and high school educators, April 8-9, 2016 in East Falmouth, Massachusetts, is co-taught by WHOI researchers and educators at the Waquoit Bay National Estuarine Research Reserve. The course includes field, lab, and on-line activities as well as field trips.
http://www.waquoitbayreserve.org/education-training/education-programs/teacher-training/

Water Conference for Educators - Texas
The 6th annual water conference for educators, *Water: A Living Lesson,* July 7-10, 2009 in San Antonio, Texas is an opportunity for formal, non-formal, and public agency educators to learn innovative, interactive, and tested methods of teaching water subjects to K-12 students. Note that the conference is free. Workshops and field trips feature hands-on activities, resources, and strategies for developing comprehensive water lessons to take into the classroom, lab, or field.
http://www.wateralivinglesson.org

Water: Ecological Connections - Georgia
The Gwinnett Environmental and Heritage Center offers the Water: Ecological Connections workshop, July 21-22, 2008 in Buford, Georgia. Participants will learn how to incorporate the complex relationships between water, humans, and the environment into classroom activities. The deadline for registration is June 30, 2008.
http://www.gwinnettcounty.com/cgi-bin/gwincty/envhc/Sub.do?mypageid=ProgramsEvents|BookClub

Water Education Conference – Colorado
Project WET USA Announces the 16th Annual Water Education Conference, August 7-9, 2013 in Boulder, Colorado. The conference will offer five conference strands, a full array of speakers, pre-conference field experiences, and more.
http://events.r20.constantcontact.com/register/event?oeidk=a07e6zm08iud62a63dd&llr=68kelrcab

Water: The Essential Resource - Online
National Geographic Education and Annenberg Learner will offer this free online teacher professional development course October 9-December 11, 2013 (note that the course has already started). Designed for 4th -8th grade teachers, the course will focus on ocean and freshwater systems and incorporating strategies for teaching environmental topics. October 15–December 17, 2014
http://www.eeipd.org/course
https://www.coursera.org/course/waterandenvironment?ar_a=1

Water Exploration Workshop - Texas
The Water Exploration workshop, August 24, 2010 in Austin, Texas, will provide training on the implementation of the Texas Water Development Board's new high school online curriculum. Water Exploration uses a project-based learning approach to promote inquiry learning about water science and critical water-related issues. Participants from across the state are encouraged to apply.
Contact Dr. Kathy Ellins at kellins@ig/utexas.edu

Water as Habitat Educator Workshop - Florida
The newly-formed COSEE Florida is offering this free Water as Habitat Educator Workshop, February 26, 2011 in Fort Pierce, Florida. Workshop registration includes activity guide and materials, lesson plans, and more. The workshop is open to formal and informal educators but registration is limited.
http://www.coseeflorida.org/events/index.cfm?FuseAction=Showevent&EventID=249

Water Quality Service Learning Program - Online
Join the California Water Boards for free training on their new water quality service learning program, November 15, 2005. This student-centered science investigation is designed to teach specific California Content Standards for grades four through six. Raise a student's awareness of polluted runoff and how it impacts them, local waterways, and the environment. Teachers will guide students through a campus audit to learn how water flows through school grounds collecting pollutants as it leads to other waterways. Students will learn how to reduce water pollutants through community-oriented projects. Lesson plans and teacher support are posted on the new website, http://www.waterlessons.org.
http://www4.scoe.net/ims/webcasts/cf/index.cfm

Water Quality Workshop - Virginia
The Chesapeake Bay National Estuarine Research Reserve in Virginia offers a free, two-day water quality workshop for teachers on July 25-26 and August 1-2 in Gloucester, Virginia. Training will include water quality parameters, use of new curricular activities that use water quality data from the York River to answer applied marine science questions, and learning to access water quality monitoring data on the Internet.
http://www.vims.edu/cbnerr/education/teachers_wq_2005.htm

Water Quality Workshop - Virginia
The Chesapeake Bay National Estuarine Research Reserve in Virginia is hosting a two-day workshop, August 7-8, 2007 in Virginia, designed to allow teachers to learn more about water quality, how to use curricular activities that use water quality data from the York River to answer applied marine science questions, and how to access both archived and real-time water quality monitoring data from throughout the Chesapeake Bay and across the nation.
http://www.vims.edu/cbnerr/education/index.htm#WaterQuality

Water, Weather, and Electricity Workshops – Los Angeles
The Los Angeles Department of Water and Power, in cooperation with the Los Angeles Unified School District, is offering a series of 13 workshops this fall emphasizing basic electricity and water science. Workshops will also include weather and air quality and advanced transportation for secondary teachers. All workshops are hands-on and

materials are free to participants. The workshops are developed to help address the physical science components of testing. Standards are addressed at each workshop. http://www.ladwp.com/ladwp/cms/ladwp004782.jsp? .

Water in the Western US - Online
This Massive Open Online Course (MOOC), a free, self-paced online course, will take place April 1-May 6, 2015. It will require 20-25 hours to complete and will cover management, policy, and research. Professional development credit is available for a fee.
http://www.climate.gov/teaching/professional-development/water-western-us

Water Wits Workshop - Oregon
The Oregon State Marine Board is seeking Pacific NW educators to pilot its new K-12 education program, WATER WITS: Aquatic Safety, Science, and Stewardship. The interdisciplinary lessons can help students better understand how to responsibly enjoy Oregon's aquatic and marine resources. Participants in the free workshop, November 7, 2015 in Salem, Oregon, will receive activity guides and a starter kit with activity materials.
http://www.oregon.gov/OSMB/BoatEd/Pages/WaterWits.aspx
Contact Sara Shaw Roberts at shawsar@oregonstate.edu

Water Words That Work! - Mississippi
Grand Bay National Estuarine Research Reserve partners offer this free communications workshop, April 19 or 20, 2012 in Stennis or Biloxi, Mississippi. The workshop aims to improve your ability to communicate science and resource management messages to the public, discuss controversial topics, and keep your cool under pressure.
http://grandbaynerr.org/training-sessions

Waterfowl Workshop - Georgia
Learn to identify the many species of waterfowl that find their way each winter to the ponds, reservoirs and wetlands of the Clayton County Water Authority in metro Atlanta, February 04, 2006, in Hampton, Georgia. Naturalist and Audubon field trip leaders will discuss the species, their habitat requirements and migration patterns, with resource materials. The majority of time will be spent in field observation and learning identification techniques.
http://eeingeorgia.org/net/calendar/details.aspx?c=28017&s=36190.0.68.4863

Waterfowl Workshop - Georgia
Newman Wetlands Center is offering a Waterfowl Workshop, February 17, 2007, in Hampton, Georgia. Learn to identify the many species of waterfowl that find their way each winter to the ponds, reservoirs and wetlands in metro Atlanta. The majority of time will be spent in field observation and learning identification techniques, with group discussions of the species, habitat requirements, and migration patterns.
http://eeingeorgia.org/net/content/go.aspx?s=6346.0.68.4863

Watershed Academy Distance Learning Program
The EPA provides an on-line Watershed Academy Distance Learning Program. The website offers a variety of training modules that present a basic and broad introduction to the watershed management field. The six module themes are introduction/overview,

watershed ecology, watershed change, analysis and planning, management practices, and community/social/water law. The program is also available on CD.
http://www.epa.gov/watertrain/

Watershed Course - Online
Watersheds: Connecting Weather to the Environment is a primer on how weather events relate to the health of a watershed, and how the public can take simple actions to protect watershed health. The course is produced by the Cooperative Program for Operational Meteorology, Education & Training (COMET) and National Environmental Education & Training Foundation (NEETF).
http://www.meted.ucar.edu/broadcastmet/watershed/

Watershed Institute - California
Follow the path of water as it moves down the Salinas Valley and into the ocean at Monterey Bay Aquarium's Watershed Institute for grade 4-6 classroom teachers, from August 8-12, 2005. Learn to implement new teaching strategies and activities, investigate local streams and rivers, integrate inquiry science into your curriculum, and visit aquarium exhibits. The summer session is free, but is limited to 40 participants. Contact Alfonso Brillantes at abrillantes@mbayqaq.org or (831) 648-4862

Watershed U. – Santa Clara, California
Every Wednesday afternoon for six weeks, from October 5 through November 9, 2005, the University of California Cooperative Extension offers Watershed U. for those who live, work, or spend time in the Santa Clara River Watershed and are interested in understanding how to sustainably manage it while balancing many issues.
http://celosangeles.ucdavis.edu/natural_resources/watershed-u/santaclara.html

Watershed Webs - Gulf Coast
Watershed Webs, June 5-8, 2017 on Grand Isle, Louisiana for teachers of students in grades 5-12, focuses on the dynamics of watersheds, water quality, trash, and the WET tracker app. Teachers in the coastal parishes/counties of Alabama, Florida, Louisiana, Mississippi, and Texas are eligible to participate; if you live in an eligible area, be sure to check this out. Funding for student field expeditions and equipment may be available.
http://www.wlf.louisiana.gov/professional-development-opportunities

Waves, Wetlands, and Watersheds Educator Workshops - California
Waves, Wetlands, and Watersheds is a classroom activity guide for teachers that addresses critical coastal and marine issues such as endangered species, marine debris, coastal geology, water use, and more. Aligned to the California State Science Content Standards for grades 3 through 8, it includes Community Action lessons adaptable for all ages up to and beyond grade 12. The connection between inland areas and the ocean is emphasized throughout. Three free workshops are scheduled:

- Berkeley California, February 7, 2007; register by February 2, 2007
- San Mateo California, February 24, 2007; register by February 20, 2007
- Long Beach California, March 3, 2007; register by February 28, 2007.
- Roseville, March 11, 2008; register by March 6, 2006
- Huntington Beach, March 31, 2008; register by March 25, 2008
- Santa Barbara, April 1, 2008; register by March 25, 2008
- San Luis Obispo, April 2, 2008; register by March 25, 2008
- San Francisco, April 15, 2008; register by April 10, 2008.

Contact Annie Kohut Frankel at afrankel@coastal.ca.gov

Waves, Wetlands, and Watersheds Educator Workshops
Waves, Wetlands, and Watersheds is a classroom activity guide for teachers that addresses California's coastal and marine issues such as endangered species, marine debris, coastal geology, water use, and more. It is aligned to the state standards for grades 3 through 8, and includes Community Action lessons adaptable for all ages. The connection between inland areas and the ocean is emphasized throughout. Upcoming workshops on the activity guide are scheduled in February and March.
afrankel@coastal.ca.gov
www.coastforyou.org
http://www.coastal.ca.gov/publiced/waves/waves1.html

Waves, Wetlands, and Watersheds Workshops - California
The California Coastal Commission offers free educator workshops as an introduction to the science activity guide for teachers, *Waves, Wetlands, and Watersheds*. The book addresses issues such as marine debris, coastal processes, water use, endangered species, and more. It is aligned to the California State Science Content Standards for grades 3 through 8, and includes Community Action lessons adaptable for all ages up to and beyond 12th grade.
http://www.coastal.ca.gov/publiced/waves/waves1.html

Ways of Whales – Washington
The Orca Network's annual Ways of Whales Workshop, January 28th, 2012 in Coupeville, Washington, addresses a variety of topics important to whale education and conservation.
http://orcanetwork.org/news/events.html

WCS Online Teacher Academy Discounts - Online
The Wildlife Conservation Society is offering discounts off two Summer 2012 programs, Nature's Thread: Weaving Environmental Education into Your Classroom and Marine Biology for Elementary Educators, July 6-August 26, 2012. While the courses started June 28-August 18, 2013.
http://www.wcs.org/teachers/teacherpd/online-teacher-academy.aspx
http://www.wcs.org/teachers/teacherpd/online-teacher-academy.aspx

Weather Science Workshops for Educators - Pennsylvania
Applications are being accepted for summer workshops sponsored by NASA and the Pennsylvania Space Grant Consortium. The workshops offer innovative ways to teach science in the classroom, information on the latest science research, and standards-based activities. The 2007 summer sessions include *The Science and Impacts of Weather Prediction: How Weather Forecasts Shape our Daily Lives*, July 8-13, 2007 in State College, Pennsylvania.
http://teachscience.psu.edu/index.html

Weather, Sea Level Rise and Climate Change Workshop - Online
COSEE-West and the College for Exploration invite formal and informal educators to participate in an online workshop, Weather, Sea Level Rise and Climate Change, November 3 - 23, 2008. Educators can learn learning how scientists are studying climate change and its accompanying effects on our planet. The online website will

include "rooms" to ask questions of keynote speakers; to hold discussions with other educators around the country and the world; for teacher resources; and more.
http://www.coexploration.org/cosee_west/nov08/index.html

Web Content Design and Evaluation Workshop – Alabama
The Weeks Bay Reserve will host a NOAA Coastal Services Center workshop on web content design and evaluation, February 24, 2005, in Fairhope, Alabama. Creating a website is much more than just turning your brochures and white papers into web pages. This one-day course focuses on how to plan, organize, and evaluate your website to ensure you are meeting your communication objectives.
Contact Margaret H. Sedlecky at weeksbay@gulftel.com or 251 928-9792 or Tina Sanchez at 251 433-6541

Western Upper Peninsula Center Professional Development – Michigan
The Western Upper Peninsula Center for Science, Mathematics and Environmental Education offers a variety of programs focused on enhancing the teaching and learning of science and mathematics in Michigan's Upper Peninsula. The center's primary goal is to build an educated workforce by providing quality student, teacher and community programming to improve K-12 science and mathematics education throughout the state. Check the website for a variety of watershed and lake-based professional development.
http://wupcenter.mtu.edu/

Wetland Boot Camp – Kentucky
Wolf Creek National Fish Hatchery will hold a Wetland Boot Camp, July 9-13, 2012 in Jamestown, Kentucky. The workshop will teach about wetland ecosystems and their functions. This comprehensive training will include Project WET, WOW: The Wonder of Wetlands, and the Biologist-in-Training programs along with wetland plant id, POW! The Planning of Wetlands, rain gardens, and a wetland field day. Check out this and the other workshops on Environmental Concern's education schedule web page.
http://www.wetland.org/education_schedule.htm

Wetland Courses for Educators
Environmental Concern, Inc. offers a variety of courses designed for formal and non-formal educators who are interested in learning more about wetlands, and who would like to bring the excitement of wetland education into their classroom. Check out their schedule on-line, or contact the education department to learn how to arrange for a course in your area. They can also design a custom course to meet your needs. Scholarships are available.
http://www.wetland.org/EC%20main/edu_schedule.htm
http://www.wetland.org/education_schedule.htm
http://www.wetland.org/educationhome.htm

Wetland Courses for Educators - Various
Environmental Concern, Inc. offers a variety of courses designed for formal and non-formal educators who are interested in learning more about wetlands, and who would like to bring the excitement of wetland education into their classroom. Upcoming *WOW! The Wonders of Wetlands course offerings include Georgia and Ohio.* Check out their upcoming schedule, along with hands-on education materials, programs, and more.
http://www.wetland.org/educationhome.htm

Wetland Education through Maps and Aerial Photography (WETMAAP) Workshop
A free WETMAAP Workshop for teachers will be held during the week of June 21-25, 2004. The workshop will be given twice, with each session lasting 2 ½ days. Discover the functions and values of wetland habitats, learn the basics of wetland mapping, aerial photography, airborne and shuttle imagery, topographic maps, and GIS technology. Educators will learn how they can integrate wetland issues, maps, and images into their existing curriculum. Materials and resources will be provided.
http://www.tbep.org/media/wetmaap.html .

Wetland Education through Maps and Aerial Photography Workshops - Florida
The Tampa Bay Estuary Program, the U.S. Geological Survey's National Wetlands Research Center, and other collaborators are sponsoring two Wetland Education through Maps and Aerial Photography (WETMAAP) workshops for middle and high school teachers. Participants will receive a variety of materials, including a resource guide, aerial photos, topographic and land cover maps, and educational exercises correlated to national standards. The workshops will take place at the end of June.
http://www.tbep.org/media/wetmaap.html

Wetlands Education Center Teacher Workshop - Texas
The Mission Aransas National Estuarine Research Reserve offers a K-12 teacher workshop, May 1-3, 2009 in Port Aransas, Texas, focusing on the Wetlands Education Center curriculum. Topics includes barrier islands, the salt marsh, and more. Participants will gain hands on experience aligned with grade level TEKS and National Science Standards.
http://www.utmsi.utexas.edu/outreach/teacher-workshops/current-workshops.html

Wetlands Education Project – Texas
The Waterborne Education Center in Anahuac, Texas, fosters appreciation and stewardship of coastal resources, heritage, and culture by providing hands-on, waterborne education services. This is accomplished through scientific training in the natural environment on the water and in the marsh. The public is invited to attend the Fall Public Wetlands Education Project, November 7, 2009, to participate in on-the-water, hands-on environmental education on the Trinity River.
http://www.txwaterborne.org/

Wetlands Institute - California
Discover the importance of wetland ecosystems at Monterey Bay Aquarium's Wetlands Institute, June 20-24, 2005. For grade 4-8 classroom teachers, this workshop helps you implement new teaching strategies and activities. Investigate wetlands and sloughs, integrate inquiry science into your curriculum, learn how to use LEGOS to gather and analyze data, and visit aquarium exhibits. This summer session is free, but is limited to 20 participants.
Contact Alfonso Brillantes at abrillantes@mbayqaq.org or (831) 648-4862

Wetlands Mitigation and Management Institute - Oregon
The Northwest Center for Sustainable Resources will offer a professional development opportunity for college faculty that examines the science and issues related to wetlands mitigation. The Wetlands Mitigation and Management Institute will be held July 10-15, 2011 in Silverton, Oregon.
http://www.ncsr.org/faculty.html

WETMAAP Workshop - Alabama
The Gulf Coast Research Laboratory offers a Wetland Education Through Maps and Aerial Photographs (WETMAAP) workshop, June 8, 2011 in Mobile, Alabama, for teachers interested in learning more about wetland changes near Mobile Bay. This workshop is open to all, but Alabama teachers who would like to receive professional development credit may request it at the STIPD website. Fall workshops will be held in Houston and Tampa/St. Petersburg.
Contact Jessica Kastler at Jessica.Kastler@usm.edu with "WETMAAP Workshop" in the subject line of the email.

WETMAAP Workshop -Texas
The University of Houston is hosting a WETMAAP (Wetland Education Through Maps and Aerial Photographs) Workshop, October 8, 2011 in Clear Lake, Texas. They are recruiting teachers who are interested in learning more about wetland changes near the Trinity River, part of the Galveston Bay watershed.
Contact Dr. Jessie Kastler at jessica.kastler@usm.edu

WETMAAP Workshops – Alabama and Texas
The U.S. Geological Survey's National Wetlands Research Center and partners are sponsoring free WETMAAP (Wetland Education through Maps and Aerial Photography) workshops for middle and high school teachers, June 8, 2011 in Mobile Bay, Alabama and Fall, 2011 in Houston, Texas.
Contact Jessica Kastler at Jessica.Kastler@usm.edu.

WETMAAP Workshops - California
The U.S. Geological Survey's National Wetlands Research Center and partners are sponsoring free WETMAAP (Wetland Education through Maps and Aerial Photography) workshops for middle and high school teachers, August 13-15 and August 16-18, 2007 in Tiburon and Menlo Park, California, respectively. The workshops will explore the changes in wetlands and changing habitats of the San Francisco Bay; introduce educators to wetland habitats, functions, and values; introduce wetland mapping, aerial photography, satellite imagery, topographic maps, and GIS technology; and more.
Contact Diane Gribschaw at dgribschaw@mail.arc.nasa.gov

Whale Camp
The Whale Camp offers one, two, and three week programs for students age 10-17 and teachers or adults interested in marine biology. The courses take place on the New Brunswick, Canada, island of Grand Manan, located in the the Bay of Fundy. Participants have the opportunity for whale encounters, Atlantic Puffin nesting colony visits, and more. There are sessions for adults and for students in July and August, 2004.
www.whalecamp.com .

Whale Class – Massachusetts
The University of Georgia, College of Education is offering the 2008 Whale Class, July 12-20, 2008 in Salem and Gloucester, Massachusetts. This is a graduate-level course for teachers who are interested in advancing environmental education through principles of contextual learning and teaching. Participating teachers serve as naturalists on whale watching boats while learning to apply aspects of contextual learning, teaching and reflective practice; new contextualized instructional materials are an expected outcome.
http://jschell.myweb.uga.edu/discovery/

Whaling Heritage Symposium – Connecticut and Massachusetts
NOAA's Maritime Heritage Program, along with Mystic Seaport, New Bedford Whaling Museum, and New Bedford Whaling National Historical Park, will sponsor a whaling heritage symposium, June 16-18, 2008 in Mystic, Connecticut and New Bedford, Massachusetts. The symposium will feature cultural practitioners, authors, archaeolo-gists, historians, curators, marine resource managers, and others.
http://sanctuaries.noaa.gov/maritime/whaling/

What Are Our Birds Telling Us? – Alaska Workshop
The Alaska Natural Resource and Outdoor Education Association will host an educators' workshop and lecture, October 20, 2004, Anchorage, Alaska to explore what can we learn from birds about environmental change. The evening event will include hands-on educator activities related to birds and the environment, dinner, a panel discussion of changes that are being observed in the scientific and native communities in regards to bird populations, and more.
www.anroe.org .

What Now? Emerging Technologies and Their Practical Application - Online
The free four-week MOOC from the University of Texas at Arlington, What Now? Emerging Technologies and Their Practical Application in K12 Teaching and Learning, starts July 11, 2016. This education and teacher training course takes participants to the intersection of research and actual classroom practice, where they can develop a practical framework for integrating technology into the K12 classroom.
https://www.edx.org/course/what-now-emerging-technologies-practical-utarlingtonx-edtech101x

What Works? Using NSDL Collections in the K-12 Classroom - Online
In the first of the three-part free webinar series from WGBH Teachers' Domain, *How to Use Rich Digital Media to Impact Science Teaching and Learning,* June 16, 2009, you'll explore some of NSDL's collections and highlight what works for teaching with rich media in chemistry, physics, and physical science. While finding quality resources is half the challenge, the seminar will also provide tips on how to use these materials more effectively.
https://cc.readytalk.com/cc/schedule/display.do?udc=1op253zn9d4dr

Why Bad Presentations Happen to Good Causes
Join NAAEE's monthly webinar series, Bringing New Ideas and Innovation to the field of EE, for a two-part webinar, March 28-29, 2017. Learn how to reach more people with more impact. Be sure to submit your questions in advance.
https://naaee.org/eepro/learning/webinars/why-bad-presentations-happen-good-causes

Why Do We Explore - Online
Join the College of Exploration and NOAA's Ocean Explorer for the free online teacher workshop, *Why Do We Explore*, October 5-16, 2009. June 21–July 2, 2010. Scientific keynote presenters and education facilitators will work with participants to delve into the benefits of ocean exploration targeting climate change, energy, human health and ocean health. The workshop will introduce the first in a series of Leader's Guides for *Classroom Explorers Why Do We Explore?* with associated exploration lessons and hands-on activities. http://www.coexploration.org/oe/

Why Do We Explore - Online
Join the College of Exploration and NOAA's Ocean Explorer for the free online teacher workshop, *Why Do We Explore*, October 5-16, 2009. This is the second workshop in a series of teacher professional development opportunities focused around NOAA's new ship, the *Okeanos Explorer*. The workshop will introduce the first in a series of Leader's Guides for *Classroom Explorers Why Do We Explore?* with associated exploration lessons and hands-on activities. The workshop will be available 24/7.
http://www.coexploration.org/oe/

Wicked Problems, Dynamic Solutions - Online
UNEP and partners offer this free MOOC, Wicked Problems, Dynamic solutions: The Ecosystem Approach and Systems Thinking, September 12-October 28, 2016. The course applies systems thinking to gain a better understanding of how ecosystems function and helps participants identify potential solutions to a myriad of problems inspired in part by the complex dynamics of ecosystems themselves.
http://www.environmentacademy.org/courses/course-v1:UNEP+ENV001+2016/about

Wiese Distinguished Lecture Series - Alabama
The University of South Alabama and the Dauphin Island Sea Lab present *Global Coastal Change* for the 14th annual Wiese Distinguished Lecture Series, November 13, 2007 in Mobile, Alabama.
http://press.disl.org/10_05_07wieselec.htm

Wild Careers Webinar - Online
The National Wildlife Federation's EcoLeaders Initiative hosts the Wild Careers webinar, October 15, 2015. It is the first webinar of the 2015-16 leadership and career skills webinar series from the NWF EcoLeaders Career Center.
http://online.nwf.org/site/Calendar?id=108241&view=Detail

Wilderness in the American Context – Distance Learning
Wilderness in the American Context provides a broad perspective of what wilderness is and how the idea developed, and exposes the student to some of the differing values, ethics, and expectations of wilderness held by society. Students will examine the early history of wilderness preservation that ultimately led to federal protection in the Wilderness Act and subsequent legislation, including how each agency applies these laws.
http://wmdep.wilderness.net/

Wilderness Management Certificate - Online
The University of Montana is now offering a Graduate Certificate in Wilderness Management, providing students and professionals training and expertise in key topics related to wilderness management. Four online courses cover the history and philosophy of the wilderness system, wilderness law and policy, wilderness recreation management, wilderness ecosystem conservation and resource monitoring, and wilderness planning.
http://wmdep.wilderness.net/

Wilderness Management Distance Education Program
The Wilderness Management Distance Education Program offers courses for a comprehensive study of wilderness management, including topics from philosophy and ecology to recreation and planning. The program offers on-line versions of the courses

in the spring and fall, cycling through the four courses. The courses are offered in two formats: 1) traditional correspondence and 2) online (spring and fall). Their distance education option removes the constraints of time and location, with study from the privacy of your own home and rolling admissions.

- Wilderness in the American Context
- Management of the Wilderness Resource
- Wilderness Management Planning
- Managing Recreation Resources

http://wmdep.wilderness.net/default.htm
http://wmdep.wilderness.net/

Wilderness Training - Online
Free, on-line courses are offered by Arthur Carhart National Wilderness Training Center. Courses include Natural Resource Management in Wilderness, Managing Cultural Resources in Wilderness, and more. Registration is open; prerequisites may be required.
http://carhart.wilderness.net/
http://www.wilderness.net/NWPS/elearning

Wildlife Conservation Society Courses and Webinars - Online
Free Wildlife Conservation Society webinars as an opportunity to learn more about animals and the science of studying wildlife. Participants learn about field research and conservation work as they listen to conservation stories from field researchers. Webinars also include elements specific to educators wishing to learn more about how to bring these engaging topics to students. The Bronx Zoo also offers online programs for environmental educators. Teacher scholarships are available. Upcoming courses include Nature's Thread: Weaving Environmental Education into Your Classroom, Marine Biology for Elementary Educators, and more. Summer courses include Marine Biology for Elementary Educators, Conservation Biology for Educators, and more.

http://www.wcs.org/teachers/online-professional-development.aspx
http://www.wcs.org/teachers/online-teacher-academy.aspx

Wildlife Conservation Society Courses - Online
The Bronx Zoo offers traditional and hybrid online programs for environmental educators. Upcoming classes include Marine Biology for Elementary Instructors, Conservation Biology, Habitat Ecology, and more.
http://www.bronxzoo.com/educators/online-professional-development.aspx

Wildlife Conservation Society Professional Development - Online
Wildlife Conservation Society Online Teacher Training Courses are for audiences of K-12 educators. The six-week courses provide an opportunity to examine the life sciences of zoology, ecology and conservation, through topics such as predators, marine biology, habitat ecology, and climate connections. Participants will learn from virtual and interactive simulations, videos, presentations from scientists and educators, while interacting with other teachers from around the world.
http://www.wcs.org/teachers/online-professional-development.aspx

Wildlife Recreation and Nature Tourism - Online
This graduate-level certificate program from the University of Wisconsin – River Falls, will help conservationists, community leaders, and recreation and hospitality providers build the skills necessary to effectively preserve the natural resources of and generate jobs and revenue for their communities.
http://www.uwrf.edu/ogs/programs/programs-index.php/wrnt/21/gs

Wildlife Recreation and Nature Tourism Certificate
The University of Wisconsin-River Falls, in partnership with Watchable Wildlife, Inc., has developed a new graduate-level certificate program to help conservationists, community leaders, and recreation and hospitality providers build the skills necessary to effectively preserve the natural resources of and generate jobs and revenue for their communities. The course can be taken on campus or through distance learning via the Internet.
http://www.uwrf.edu/ogs/wrnt/

Wildfire Community Preparedness Day Grants
The National Fire Protection Association is accepting applications for Wildfire Community Preparedness Day grants to help communities create wildfire hazard mitigation projects. Free registration is required.
http://www.nfpa.org/public-education/campaigns/national-wildfire-community-preparedness-day

William P. Ridley 4-H Center Workshops - Tennessee
The William P. Ridley 4-H Center's Science program in Columbia, Tennessee invites participation in two free teacher workshops in Columbia, Tennessee - *Project Archeology* and *Project Flying WILD*.

- Flying Wild, February 16, 2006; register by February 10, 2006
- Project Archeology, March 2, 2006; register by February 24, 2006.

Contact Terri Quillin at tlquilln@utk.edu

Winged Ambassadors Summer Workshop - California
The Oakland Museum of California and partners offer this free teacher workshop, Winged Ambassadors: Ocean Literacy Through the Eyes of Albatross, June 26-27, 2013 in Oakland, California. Winged Ambassadors is a set of five lessons that use data from current research tracking albatross migrations and ocean plastic pollution. The lessons use inquiry-based science instruction aligned to standards for grades 6-8, with extensions for grades 9-12. A stipend may be available.
https://www.surveymonkey.com/s/Winged_Ambassadors

Winter Ocean Literacy Webinar Series - Online
The NMEA Ocean Literacy Committee is hosting a free three-part webinar series, beginning January 17, 2017. Each webinar will cover a different topic and topics will build on the one prior. Topics include Ocean Literacy Scope and Sequence, Alignment of the Ocean Literacy Framework with NGSS, and Organizing for Ocean Literacy.
http://www.marine-ed.org/blogpost/1067768/262768/Guest-Blog-by-the-Ocean-Literacy-Committee-Join-our-winter-ocean-literacy-webinar-series

Wonders of Water - National Park Service Environmental Education Training Course
This multi-certification course, July 26-30, 2004, Chattahoochee River Environmental Education Center, Alpharetta, Georgia, provides participants with certificates for Project

WET, Wonders of Wetlands, EPD Adopt-A Stream, and National Park Service environmental education training. Participants receive the Project WET Curriculum and Activity Guide with 89 activities, Wow! the Wonders of Wetlands: An Educator's Guide with over 40 activities, and other lesson plans and resources.
http://www.nps.gov/chat/educational_techniques.htm .

Wonders of Wetlands: Learning Techniques and Strategies - Georgia
Join the National Park Service, July 11-12, 2007 or July 18-19, 2007 in Alpharetta, Georgia, for hands-on instruction in environmental education activities for upper elementary through high school. These workshops will include techniques and strategies for interdisciplinary learning utilizing the wetlands of the Chattahoochee River Corridor. This is a certification workshop. Chemical Certification is available on July 20, 2007.
http://eeingeorgia.org/net/calendar/details.aspx?c=32860&s=53239.0.68.4863

Working Across Agency Lines - Online
The MPA Center and partners offer the free webinar, Working Across Agency Lines to Improve Visitor Use Management on United States Public Lands and Waters, November 13, 2014. It will describe the work of the Interagency Visitor Use Management Council which is developing implementation tools for assessing, planning, and managing visitor use and visitor capacity for a consistent approach to visitor use management, offering seamless connections between lands and waters managed by different federal agencies
https://attendee.gotowebinar.com/register/5563172956938416129

Working Effectively with Tribal Governments - Online
The online training course for federal employees, *Working Effectively with Tribal Governments,* is available to the public free of charge until April 30, 2008. While the one-hour training is geared towards federal employees, others who might benefit from the training are encouraged to register.
http://www.golearn.gov/MaestroC/

Working in Teams – Online
The University of Queensland, Australia offers this free, self-paced MOOC starting January 23, 2017. The course is an introduction to teamwork skills for all disciplines that will help participants improve their own performance and that of their team.
https://www.edx.org/course/working-teams-practical-guide-uqx-teams101x-0

Workshop on the Beach in the Florida Keys
During this workshop, hosted by the Institute for Biomedical Philosophy, July 10-16, 2004, Marathon Key, Florida, educators will explore national standards-based biology and ecology concepts using hands-on marine biology models. The program is open to middle and high school teachers, pre-service teachers, informal educators, and science education faculty.
http://www.biophi.org/pages/1/index.htm

Workshops on Estuaries and Watersheds - Mississippi
The Mississippi Department of Marine Resources and partners will sponsor two Teacher Professional Development Workshops. The partners offer open registration for Mississippi science teachers along with free room and board if required, field based experiential learning activities, classroom resources, and much more. The workshop space is limited to 18 participants.

- Estuaries 101, September 27-28, 2012 with Grand Bay National Estuarine Research Reserve in Moss Point, Mississippi
- Watersheds, October 11-12, 2012 with University of Southern Mississippi Johnson Science Tower in Hattiesburg, Mississippi

http://cimage.rc.usf.edu/node/3393

World Water Monitoring Challenge Workshop – South Carolina
Join the staff of EarthEcho International and Patriots Point staff for a professional learning workshop for elementary, middle, and informal educators on April 16, 2016, in Mt. Pleasant, South Carolina. A stipend may be available.
http://www.patriotspointblendedlearning.com/upcoming-teacher-events--check-them-out.html

Writing for Environmental Professionals - Online
The Duke Environmental Leadership program offers the online course, Writing for Environmental Professionals, June 2 - July 11, 2014. Scholarships may be available through the Coca-Cola Advancement in Teaching in the Environment Scholarship (CATES).
http://nicholas.duke.edu/del/writing-environmental-professionals

Why Do We Explore? – South Carolina
Hosted by the South Carolina Aquarium, NOAA's Office of Ocean Exploration and Research offers this new, free, professional development workshop for educators of Grades 5-12, December 11, 2010 in Charleston, South Carolina. The NOAA Ship *Okeanos Explorer* is America's first Federal ship dedicated to ocean exploration. Join NOAA education staff as they introduce Why Do We Explore?, the first in a series of three professional development programs in the Okeanos Explorer Collection.
Contact Jaime Thom at jthom@scaquarium.org

Young Artists Project, Water and Whales - Washington
Centrum, in partnership with Fort Worden State Park, is a gathering place for artists, students, and others seeking cultural enrichment. Two programs that might be of interest to this group are Water World for grades 5-6 (May 2-7, 2010), and Whale Camp for ages 9-13 (July 11-17, 2010) in Port Townsend, Washington. Camp activities take place in the field, laboratories, performance studios, aquarium and a natural history exhibit. Scholarships may be available.
http://www.centrum.org/youth/

Youth Summit on the Environment – Washington, D.C.
George Mason University hosts the annual Washington Youth Summit on the Environment, June 24-29, 2012 in Washington, D.C., a leadership opportunity for promising youth in the areas of environmental science, conservation, and sustainability. Teachers nominate current sophomores and juniors who get special access to the Smithsonian National Zoo, National Geographic Society, and George Mason facility and researchers.
http://wyse.gmu.edu/

Youth Ocean Conservation Summit - Georgia
Georgia's first annual Youth Ocean Conservation Summit will be held February 28, 2015 on Skidaway Island, Georgia. 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.
https://docs.google.com/a/noaa.gov/forms/d/1Zvf8QvkYTqDZv3OOjBB71Nc0LMqEahDDH8eEk-BoSms/viewform

Your Ocean and Your Health – South Carolina and Online
Hidden Threats and Exciting Opportunities in Products from the Sea, September 10, 2007 in Charleston, South Carolina, is the final seminar in a four-part series, *Your Ocean, Your Health*. Hosted by the Hollings Marine Lab, each free seminar has featured two speakers, a panel discussion, and a question/answer period. South Carolina Sea Grant, a co-sponsor, has posted materials available for downloading from their website.
http://www.scseagrant.org/Content/?cid=144

Zoo Math and Science - Minnesota
The Minnesota Zoo is hosting an education workshop for informal educators, April 25-27, 2016 in Apple Valley, Minnesota. Educators will receive training to implement the ZooMS (Zoo Math and Science) STEM program model in their institution. Be sure to check out the other resources on the website, including curriculum, teacher workshops, and much more.
http://mnzoo.org/education/schools-teachers/stem-programs/

ZWPA InterpNET Conference – Online
The Zoo, Wildlife Parks, and Aquaria section of the National Association for Interpretation is hosting its annual InterpNET Conference, Interpretation In The Age Of Tech, September 24, 2014. This virtual conference will explore ways in which informal learning institutions utilize technology with communities, guests, staffs, and volunteers.
http://www.interpnet.com/Core/Events/eventdetails.aspx?iKey=ZWPA-92414&TemplateType=A