

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
INFORMATION EXCHANGE FOR MARINE EDUCATORS

JULY 2007

This update is provided with support from NOAA's Office of Education and by the National Marine Protected Areas Center to share information pertinent to the marine educator community. It is intended to encourage exchange of information and programs. We hope that it will also promote collaboration among the different educators addressing similar issues in their programs.

Please share this email with your colleagues and constituents. If you request materials or respond to a request for information, please mention that you learned about it from NOAA's Information Exchange.

The information included here has been compiled from many different sources, including EE-NEWS@NAAEE, EEinGEORGIA, CREEC, the Scout Report, edinfo at FREE, scuttlebutt, NSTA Express, and others. We have verified web addresses, but make no guarantee that they will remain active. The Department of Commerce/NOAA does not necessarily endorse or promote the views or facts presented on these sites.

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Collected archives of the information presented in past newsletters are available at http://mpa.gov/helpful_resources/education_training.html. Contact the editor directly at phyllis.dermer@noaa.gov, or by phone at (865) 932-5074, to discuss further enhancements or to contribute information for future issues.

Notable References

Biodiversity and the Law: Intellectual Property, Biotechnology and Traditional Knowledge

This book offers twenty-eight chapters from dozens of international legal and scientific experts, complete with thorough references. The book examines biodiversity and examines what are we losing, why, and looks at what is to be done; addresses biotechnology and looks at whether it is part of the solution or part of the problem, or perhaps both; examines traditional knowledge, explains what it is and how, if at all, it should be protected; and looks at ethnobotany and bioprospecting and offers practical lessons from the diverse experiences of the contributors.

<http://styluspub.com/books/BookDetail.aspx?productID=151824>

Estuary Condition Reports

The National Estuary Program Coastal Condition Report presents the condition of 28 estuaries covered by National Estuary Program (NEP) based upon data collected as part of EPA's National Coastal Assessment program and data collected by individual NEPs or by NEPs in partnership with interested stakeholders, including state environmental agencies, universities, or volunteer groups. Together, this information paints a picture of the overall condition of the coastal resources of the NEP estuaries. The National Coastal Condition Report series describe the condition of 100% of all estuaries in the contiguous 48 states.

<http://www.epa.gov/owow/oceans/nepccr/index.html>

Valuing the Environment in Small Islands - An Environmental Economics Toolkit

The purpose of this toolkit from the Joint Nature Conservation Committee, the statutory adviser to the government on UK and international nature conservation, is to demonstrate how to estimate the economic value of the benefits that the environment provides to people in small islands, and incorporate these values into decisions. It is designed to be accessible and user-friendly for stakeholders without previous experience in this area. It has been designed primarily for government officials and NGOs, but is also useful for others wanting to estimate the value of ecosystems and ecosystem services.

<http://www.jncc.gov.uk/page-4065>

MESSAGE FROM THE BRIDGE

Visit the Bridge at NMEA

As the NMEA annual conference draws near, July 23-27, 2007 in Portland, Maine, the Bridge educators are preparing some great new resources and activities to present. One presentation to look out for is "Lobster: The Price of Deliciousness," which will walk educators through a brand new Bridge DATA (Data Analysis Teaching Activity) that explores Maine lobster catch data and evaluates fluctuations in price and landings. For those looking for a more physical oceanography-based session, look for "Ocean Observing Systems: What are they and how can I use 'em?" This session will give participants an overview of ocean observing and several strategies for integration into existing curricula. The Bridge will also have an exhibit at the conference, so stop by and pick up some more great Bridge resources.

<http://www.marine-ed.org/bridge>

REQUESTS

Coral Bleaching Forecast Survey

The University of Colorado at Boulder is conducting a survey to help gauge interest and user needs for a planned system of coral bleaching forecasts. This is an initial user needs assessment, and they are hoping for input from a wide range of audiences--scientists, managers, the dive community, fishermen, and others. The survey will take about five to ten minutes to complete; you may skip any questions that you prefer not to answer.

http://cybele.colorado.edu/surveys/coral_products_survey.htm

NOAA Education Website Review - Maryland

Join the Educational Media team from NOAA's National Ocean Service Education, July 31-August 2, 2007 in Silver Spring, Maryland, to review, edit, and plan future directions for the web offerings now on <http://oceanservice.noaa.gov/education/welcome.html>. Up to 8 educators will be selected from classroom science teachers (grades 3-12) and informal educators. A stipend plus travel support may be available.

Contact Peg Steffen at Peg.Steffen@noaa.gov or Bruce Moravchik at Bruce.Moravchik@noaa.gov

Request for Public Comment - NOAA's Coral Reef Conservation Program

NOAA's Coral Reef Conservation Program is undertaking a comprehensive external review of the program. The purpose of the review is to evaluate the success of the program and provide recommendations for improvement. Comments are requested by July 19, 2007.

<http://www.coralreef.noaa.gov/review.html>

Trail Accessibility Guidelines Open to Public Comment

The Access Board in Washington, DC has released for public comment new accessibility guidelines for Federal parks and recreation areas. As proposed, the guidelines address access to new or altered trails, beaches, and picnic and camping areas on sites managed by the Federal government. Achieving accessibility in outdoor environments has long been a source of inquiry due to challenges and constraints posed by terrain, the degree of development, construction practices and materials, and other factors. In developing these guidelines, the board seeks to clarify how, and to what extent, accessibility criteria can be applied to outdoor developed areas. The deadline for comment is October 18, 2007.

<http://www.americantrails.org/resources/accessible/NPRMnews6-07.html>

GRANTS AND OPPORTUNITIES

Coastal Steward Stories Contest

The California Coastal Commission is inviting the public to submit personal stories of coastal stewardship for posting on their website, in conjunction with their Coastal Stewardship Pledge. If you have taken part in something, small or large, to care for the coast and ocean, please share your story and/or pictures in order to inspire others to take action in their daily lives. The deadline for submission is August 1, 2007.

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

Coral Reef Research Fellowships

The International Society for Reef Studies and The Ocean Conservancy offer a fellowship for two students in coral reef research emphasizing ecosystem approaches to human and natural processes shaping coral reefs. The intent of the fellowship is to help students develop skills to address problems related to relevant applications of coral reef ecosystem research and management. The fellowship can be used to support salary, travel, fieldwork, and laboratory analyses. The student can work entirely at the host institution, or can split time between developed and developing country institutions. The deadline for application is July 31, 2007.

<http://www.fit.edu/isrs/>

Do Something Grants for Youth

Do Something awards and grants are offered weekly and yearly, depending on the grant students apply for. The Plum Grant is offered yearly. Students may apply online for weekly Do Something grants. Grants will be given to young change-makers and potential community leaders who identify problems in their communities, and then create game plans to do something to change their world. Young people can apply on their own behalves, or on behalf of a group or team. Check out the Grants or BR!CK Awards links on the website.

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

Environmental Excellence Awards

The SeaWorld/Busch Gardens/Fujifilm Environmental Excellence Awards recognize the outstanding efforts of K-12 students and teachers who are working at the grassroots level to protect and preserve the environment. Eight projects will be selected. The deadline for application is November 30, 2007.

<http://www.swbg-animals.org/conservation-matters/eea/index.htm>

Ernest F. Hollings Ocean Awareness Trust Fund

The National Marine Sanctuary Foundation seeks proposals for the Ernest F. Hollings Ocean Awareness Trust Fund to increase ocean awareness, particularly focused on how humans and the oceans are interconnected. The foundation is interested in proposals to engage the public in ocean stewardship issues and highlight areas where both humans and the marine environment can benefit from effective and focused actions. The deadline for submission is August 17, 2007.

<http://www.nmsfocean.org/grants.asp>

Imagining Tomorrow Writing and Video Contest

Imagining Tomorrow: Alternate Energy Futures is a creative writing and video contest on clean energy and global climate. All entries are required to have energy issues, polices, or technologies as the basis of their work, and students entering were required to include an afterword that explained the starting point for their idea and what they learned in the course of the project. The website includes background information and winning stories for the national contest. The regional deadlines are August 31, 2007.

<http://www.itomorrow.theforesightproject.org/>

International Coral Reef Symposium Funds

The International Society for Reef Studies and the Local Organizing Committee announce the availability of stipends to attend the 11th International Coral Reef Symposium, July 7-11, 2008 in Ft. Lauderdale, Florida. Restrictions require that eighty percent will be awarded to people from Mexico, the Western Pacific, Asia, and the Indian Ocean and 20% to people from other regions. The deadline for application is December 1, 2007.

<http://www.reefbase.org/rss/rss.aspx>

Kenton R. Miller Award

The purpose of the Kenton R. Miller Award for Innovation in Protected Areas Sustainability is to distinguish individuals who have made significant and demonstrable contributions which enhance the sustainability of protected areas. Detailed criteria for the award and nomination forms can be found on the WCPA Website; categories include communications and learning and capacity building. The deadline for nominations is July 15, 2007.

<http://www.iucn.org/themes/wcpa/wcpa/kenton/prospectus.html>

My Estuary Photography Contest – Chesapeake Bay

The photography contest categories include flora, fauna, or habitat photographed in the Chesapeake Bay estuary with both a junior and open division in each of the three categories. Prints in color, black and white, or of unaltered digital photos are eligible. The deadline for entry is September 1, 2007.

<http://www.vims.edu/cbnerr/>

NSTA New Science Teacher Academy Fellowships

NSTA fellowships offer 6-12th grade teachers in their first through third years of teaching a year-long immersion in a host of science-related activities and professional development opportunities. The deadline for application is September 30, 2007.

<http://www.nsta.org/academy>

CONFERENCES, WORKSHOPS, AND PROFESSIONAL DEVELOPMENT

Caribbean Islands Water Resources Congress

The Seventh Caribbean Islands Water Resources Congress, October 25-26, 2007 in Saint Croix, Virgin Islands, will offer sessions on wide range of topics that are relevant to the continually growing needs of the islands. The program will provide an exchange of ideas and information for water resources investigators, educators, consultants, and management professionals; an update on the current water resources situation in the tropics and the Caribbean; and promote sharing and transfer of data, technology, and management practices. The deadline for abstracts has been extended to July 20, 2007.

<http://prwreri.uprm.edu/7CIWRC/>

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>

Midwest Environmental Education Conference - Wisconsin

The 2007 Midwest Environmental Education Conference, *No Child Left Inside*, October 18-20, 2007 in Stevens Point, Wisconsin, will provide attendees with the methods and tools to engage youth in outdoor educational and recreational adventures.

<http://www.uwsp.edu/cnr/waee/Events/fall07.htm>

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

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 broaden their knowledge of marine food webs, energy flow in marine ecosystems, and the effects of human activities on the ocean environment. All presentations will be integrated into hands-on classroom and Seattle Aquarium activities, as well as field investigations at the beach. Participants will focus on activities, lesson planning, and investigations that support Washington State learning standards and grade level expectations in elementary science. Teachers will receive a stipend for attending the full, four-day workshop and course credit will be offered through Seattle University.

<http://www.sanctuaries.noaa.gov/education/teachers>

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). Middle School teachers, grades 6-8, will receive first priority, but any interested Massachusetts teacher is welcome to apply. Participants will learn about the physical environment of the Lynn waterfront, the living organisms and the human activity in and around the waterfront, and the relationships among the three. Participants will work with educators and faculty from the New England Aquarium, Northeastern University, Boston Harbor Islands National Park, and Massachusetts Marine Educators, conducting field and hands-on classroom investigations at sites along the waterfront.

http://www.neaq.org/scilearn/ed_progs/subpage.php?id=31

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. Participants will learn skills in planning, preparing, delivering, and evaluating oral presentation. 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>

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>

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.eeingorgia.com/net/calendar/details.aspx?c=32773&s=53032.0.68.4863>

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. Science experts will share current research on life-threatening weather, long range predictions, and the physics of the atmosphere. Teachers will learn how meteorologists use information from NOAA and NASA to help them determine their weather forecasts, and will be shown how to get involved with NASA in the data collection process, all while addressing state and national science education standards.

http://teachscience.psu.edu/weather_prediction.html

Shoals Marine Laboratory Summer Courses - Maine

Shoals Marine Laboratory still has openings in six college credit courses that will be taught on Appledore Island, Maine, later this 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

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. Teachers can participate in the first day only, or both days of the workshop.

<http://www.vims.edu/cbnerr/education/index.htm#WaterQuality>

Waves of Change

The thirty-second Pacem in Maribus conference, *Waves of Change: Women, Youth and the Sea - Partnering for the Protection of the Marine Environment*, November 5-8, 2007 in Malta, aims to empower women and youth to promote the peaceful and sustainable use of marine resources and sound ocean governance. The conference will bring together key and influential stakeholders including representatives from government, NGOs, and educational institutions to develop new approaches, effective solutions, and actionable outcomes aimed at overcoming ocean threats. The conference aims to promote women and youth leadership in maritime affairs; to promote the interests of women and youth in meeting the objectives of the UN Decade of Education for Sustainable Development; to explore new and innovative approaches for the management of ocean space and sustainable ocean governance; build constituencies and partnerships; and to build public awareness of the ocean's value and importance to our lives and future, especially among women and youth. The deadline for submission of abstracts is July 16, 2007.

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

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. Participants will receive certificates for Wonders of Wetlands and National Park Service environmental education training; optional Chemical Certification is available on July 20, 2007.

<http://eeingeorgia.org/net/calendar/details.aspx?c=32860&s=53239.0.68.4863>

EDUCATIONAL RESOURCES

Birdcinema.com

Birdcinema.com is a website for people to post bird videos, dedicated to the sharing of birding videos, pictures, and resources. They seek both amateurs and professionals willing to share their bird videos and a little about the bird, the video, or whatever else they feel is relevant. The channels section allows for grouping of videos such as inland water birds, education, and more. Education offers background and other information.

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

EARTH Lesson Plans

One of the Monterey Bay Aquarium Research Institute (MBARI)/Monterey Bay Aquarium joint projects, Education and Research: Testing Hypotheses (EARTH), provides teachers with means for integrating real-time data with existing educational standards and tested curriculum in an interactive and engaging way. 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. The website offers lesson plans, links to data, standards rubrics, and more.

<http://www.mbari.org/earth>

Expedition to the Deep Slope 2007

The 2007 Expedition to the Deep Slope expedition, June 4-July 6, 2007, continues the exploration and study of hydrocarbon seep communities deeper than 1000 meters in the

Gulf of Mexico. Funded by the Minerals Management Service, a leader in supporting the scientific characterization of seep communities in the Gulf of Mexico, and the NOAA Ocean Exploration program, a diverse team of scientists will be using the ROV Jason II and the NOAA ship *Ronald Brown*. The team includes scientists from the U.S., Germany, France and Austria.

<http://www.oceanexplorer.noaa.gov/explorations/07mexico/welcome.html>

Hawaii Coral Reef Initiative YouTube Channel

The Hawaii Coral Reef Initiative has established a YouTube channel of their scientific presentations from project progress and final reports and workshops. Feel free to engage in a dialogue via the YouTube comments.

<http://www.youtube.com/hcirip>

International Geosphere-Biosphere Programme

The International Geosphere-Biosphere Programme is a research program that studies the phenomenon of global change. The program offers scientific knowledge to improve the sustainability of the living Earth, studying the interactions between biological, chemical, and physical processes and interactions with human systems and collaborating with other programs to develop and impart the understanding necessary to respond to global change. The research goals of the program are to analyze the interactive physical, chemical, and biological processes that define earth system dynamics; research the changes that are occurring in these dynamics; and research the role of human activities on these changes. The website hosts reports which features science highlights, including Greenland ice sheet during the last interglacial period, Palaeofires, A decade of iron-enrichment experiments, the need for integrated climate/human behavior models, and more.

<http://www.igbp.net/>

Maggie's Earth Adventures

Maggie's Earth Adventures is an educational website offered in both English and Spanish. Animated stories address environmental issues such as over-fishing, invasive species, animal habitats, and more. Online interactive games and downloadable standards-based activities in four subject areas are available. Teachers can sign up for a free weekly activity packet with self-directed lesson plans at the emergent reader, primary, and upper elementary level.

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

Maritime History of Massachusetts

The National Park Service's National Register of Historic Places and Maritime Heritage Program created this guide to the maritime history of the Bay State. Visitors can explore the sites through a series of interactive maps and then read essays that deal with maritime commerce, shipbuilding, the U.S. Navy, and lighthouses and lifesaving stations. The website offers a brief history of each destination.

<http://www.cr.nps.gov/nr/travel/maritime/>

NASA International Polar Year Website

This website offers a one-stop shop for the latest NASA images and videos on polar exploration combined with a searchable storehouse of related information.

<http://ipy.nasa.gov/>

National Marine Sanctuary Program YouTube Channel

Discover the marine life and extraordinary habitats that make up your nation's 13 marine sanctuaries and one marine national monument. Find out more about our continuing efforts to conserve these ocean and coastal treasures. Check out videos about Sanctuary Sam, whale disentanglement, turtles, sharks, and more.

<http://www.youtube.com/sanctuaries>

Project SeaCAMEL

Project SeaCAMEL (Classroom Aquarius Marine Education Live) is planned as the first in a series of "sea to shore" education missions planned by the Living Oceans Foundation. This underwater classroom project will take place at NOAA's Aquarius Underwater Laboratory off Key Largo, Florida from November 12-14, 2007. During the mission, the project will employ the Fetch 1 Autonomous Underwater Vehicle, a robotic mobile sensor, and include intensive coral reef studies. The project is designed to inspire young marine scientists by providing an opportunity for actual and virtual participation in underwater coral reef science classes. An underwater video crew from project partner Media Arts, Inc. will document the action in and around Aquarius, while project partner Immersion Presents will direct-link the SeaCAMEL mission ashore via satellite and the Internet, and will produce a multimedia science education and outreach program. A dedicated website will be available.

<http://www.livingoceansfoundation.org>

Science Buddies

Science Buddies offers free science fair project ideas, answers, and tools for students and teachers. The project includes science and technology professionals interacting directly and indirectly with the students, making science real and helps lead students to projects that are more challenging and have greater science content than projects they might choose on their own. They offer three main types of resources for students and teachers: how-to information that explains the scientific method and the process of creating a science research project; field-specific information that introduces students to various fields of science and provides ideas for research projects; and, Internet-based mentoring programs. The project guides offers online guides to doing science research and science fair projects with step-by-step guidance, actual sample assignments, photos of science fair projects, tips for success, and self-grading guides for students. The Teacher Resources section includes a planning guide and printable copies of the how-to information. The project ideas section is categorized by scientific area and includes earth and environmental science. Ask an Expert is staff-monitored online forum staffed by volunteer scientists and talented science students who help students anywhere, on a drop-in basis, with their project questions.

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

Sea Floor Mapping

NOAA's Ocean Service Communications and Education Division, in cooperation with NOAA's Office of Coast Survey, launched this new educational offering, Sea Floor Mapping. Designed for students in grades 3-5, the activity teaches young people about mapping the sea floor and why it is important. The website includes the online activity, movies and pictures, background information, and more.

http://oceanservice.noaa.gov/education_new/seafloor-mapping

Stabilization Wedges Game

The Carbon Mitigation Initiative is a joint project of Princeton University, BP, and Ford Motor Company to find solutions to the greenhouse gas problem. To emphasize the need for early action, they have created the concept of stabilization wedges – 25 billion ton “wedges” that need to be cut out of predicted future carbon emissions in the next 50 years to avoid a doubling of atmospheric carbon dioxide over pre-industrial levels. This idea is the basis for a new game that can be played by students, teachers, scientists, and others. The website includes background information, descriptions of currently available mitigation tools that have the capacity to reduce future emissions, and materials and instructions for carrying out the game.

<http://www.princeton.edu/~cmi/resources/stabwedge.htm>

State of the Salmon

The State of the Salmon is an international consortium that is dedicated to improving understanding of salmon status and trends across the North Pacific—and building a knowledge network that can inform salmon conservation and management decisions in the future. Information is available in Russian, English, and Chinese. The materials on the site include monitoring, data and maps, a glossary, and more. The Data & Maps area features interactive maps that document existing salmon populations and their movements.

<http://www.stateofthesalmon.org>

Sylvan Dell Books

Sylvan Dell Publishing is on a mission to create picture books that excite children’s imaginations, are artistically spectacular, and have educational value. Every Sylvan Dell book contains a “For Creative Minds” educational section, with the website offering extensive book previews and teaching activities. *Ocean Seasons* provides a look at the differences between undersea seasons. Explore a world of blue crabs, terrapin turtles, river otters, dolphins, oysters and periwinkle snails through *A Day in the Salt Marsh*. Additional books cover turtles, the rain forest, octopus, and much more.

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

INITIATIVES and MORE

Coast Day - Delaware

The University of Delaware’s Coast Day, October 7, 2007 in Lewes, Delaware, introduces thousands of people each year to the wonders of the sea and the importance of Delaware’s marine and coastal resources. Visitors enjoy hands-on exhibits, lectures on popular science topics, ship and laboratory tours, a crab cake cook-off, seafood cooking demonstrations, and more. Kids have special opportunities to speak with marine scientists and learn firsthand about their discoveries. They can also explore the many fascinating careers available in environmental science fields.

<http://www.ocean.udel.edu/coastday/>

COASTWEEKS - California

COASTWEEKS, September 15-October 7, 2007, is a celebration of coastal and water resources. In California, COASTWEEKS is coordinated by the California Coastal Commission. The Commission will feature the events of participating organizations in a special section of their website; submit your event by July 27, 2007.

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

Cooperative Conservation

Started as an initiative by the United States government, Cooperative Conservation describes the efforts of landowners, communities, conservation groups, industry, and governmental agencies who join together to conserve our environment. The website provides details about programs which range from professional training opportunities to an online library of documents related to the creation of this initiative. Descriptions of programs include Hawaii Coral Reef and Native Algae Restoration; Wetlands, Birds, and Bears - A Louisiana Happening; Northwest Straits Marine Conservation Initiative; and more.

<http://cooperativeconservation.gov/>

Encyclopedia of Life

The Encyclopedia of Life is a global effort to document all 1.8 million named species of animals, plants, and other forms of life on Earth. The encyclopedia will be a multimedia Wikipedia-style website offering downloadable information on each species. The Field Museum, Harvard University, the Marine Biological Laboratory at Woods Hole, the Smithsonian Institution, and the Biodiversity Heritage Library partnered to launch the project. Scanning and digitization of the biodiversity literature is now underway in London, Boston, and Washington DC. Development of encyclopedia web pages will begin later this year, with hopes to make key components of the encyclopedia available to the general public starting some time in 2008.

<http://www.eol.org>

Mobile Manatees

Dauphin Island Sea Lab has established Mobile Manatees, a program that encourages the public to report their sightings of these animals in Alabama waters, particularly in Mobile Bay. The project, funded by the U.S. Fish and Wildlife Service, is a collaboration between Dauphin Island Sea Lab and researchers at Wildlife Trust in Florida. By calling the toll-free number or visiting the website to e-mail sightings, the public can help scientists find, study, and protect these vulnerable creatures. The program is part of a larger study that will include aerial and ground surveys of manatees in Mobile Bay and research to determine what manatees eat while in the Bay.

<http://manatee.disl.org>

Reef Fest

Reef Fest is billed as a whole lot of music festivals throughout Florida and the Caribbean raising support for music education and coral reef conservation. The concept is founded on the principle that everybody loves music, and this offers a chance to find enjoyment in actually doing something people can identify with in the service of the threatened coral reefs that surround, protect, and bring income to their Caribbean country and way of life. At the moment, the initiative starts at the shores of southeast Florida and stretches throughout the Caribbean, and is only designed to last from now through 2008, the International Year of the Reef.

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

San Diego Bay: A Story of Exploitation and Restoration

The book, San Diego Bay: A Story of Exploitation and Restoration, features a synthesis of artistry and information in describing a complex urban marine environment - the historic and present uses of San Diego Bay. The book was researched, written, and designed by a class of 64 high school students at High Tech High in San Diego. The

stories revolve around progress in the region related to local geography and the utilization of resources. The book includes oral histories and first-hand descriptions of coastal habitats and wildlife from over 30 interviews, and is complemented with historic and current photos, most of which have never been seen by the public.

<http://anrcatalog.ucdavis.edu/InOrder/Shop/ItemDetails.asp?ItemNo=SG022>