# National Environmental Education Foundation



www.neefusa.org



# Statement of Purpose

We provide knowledge to trusted professionals who, with their credibility, amplify messages to national audiences to solve everyday environmental problems. Together, we generate lasting positive change.



# Reaching the Public

**Primary Audience** Secondary Audiences Trusted Professionals **EE Content** Students Information School Administrators; EE/education Classroom Earth Training Teachers leaders & organizations; parents; local communities Viewers Station manager/news directors; Earth Gauge meteorologist professional organizations; TV Meteorologists meteorologist community; academic institutions Volunteers Public land organizations; Federal, state & **Public Land Managers** Public Lands Program local government agencies; youth natural resource organization **Patients** Families, doctors, nurses, academic **Health Care Providers** lealth & Environment institutions/faculty; public/environmental health communities: underserved communities Employees **Business Managers Business & Environment** Management, families, local communities



# **Audience Reach**



Classroom Earth



Earth Gauge



Public Lands Program



Health & Environment



**Business & Environment** 

More than 220,000 individuals visited the suite of Classroom Earth websites in 2011; many of these visitors are teachers who use Classroom Earth materials to educate dozens of students.

Since Earth Gauge launched in 2005, the program has grown to 215 weathercasters in 2011, with a presence in 117 cities and 46 of the top 50 media markets, covering 230 million viewers.

In September 2011, over 170,000 volunteers participated at nearly 2,100 public land sites spread across the 50 states, Washington, DC and the US territories, providing an estimated \$18 million in contributed services.

The 40 Nature Champions trained in 2010 are each charged with training an additional 40 pediatric health care providers, who will in turn reach tens of thousands of families and children within two years.

20 companies representing four million employees participated in the Business Sustainability Education Roundtable to share best practices on employee engagement in environment and sustainability education.



Advance the environmental and climate knowledge of broadcast meteorologists in order to increase the public's knowledge so they can make environmentally informed decisions.











#### Climate Fact

In North Cascades National Park, the total area covered by glaciers has shrunk by 40 percent since 1850.

Glacial retreat has been particularly noticeable since about 1980.

A National Environmental Education Foundation Program

"The Climate Facts have been a great addition to my science journal online, and I get frequent feedback from viewers about the science I mention."

Meteorologist Dan Satterfield at WHNT-TV in Huntsville, Alabama.





Weather and Health

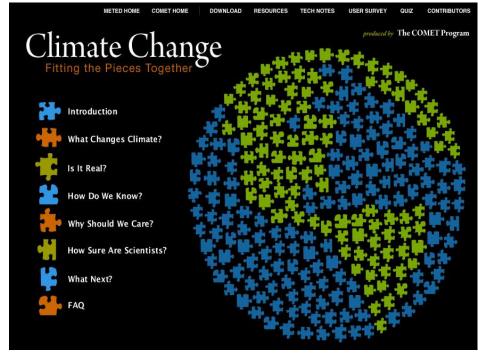


# **Online Courses**











Increase the capacity of public lands stewards to engage local communities to help care for our public lands.



# The nation's largest volunteer effort to improve America's public lands

















# Every Day Grant Winners Announced Twenty-two friends groups received Every Day Grants of up to 55,000. Learn more about these great organizations.

### **Every Day Capacity Building Grants**



The Every Day Grants provide "Friends Groups" with grant funds of up to \$5,000 to help the Friends Group build their capacity to serve public lands.

Friends groups are invaluable to the public lands they serve. While dedicated and passionate, they are often underfunded and understaffed. The <u>National Environmental Education Foundation</u> (<u>NEEF</u>) wants to unleash their potential and help strengthen these organizations to enable them to do more to connect their communities to the land.

The latest Every Day Grant cycle closed on January 31, 2011. <u>Learn more about the application</u> and eligibility requirements.

#### 2011 Grant Winners

Branch Brook Park Alliance

Newark, N.J.

Carson Valley Trails Association

Minden, Nev.

Discover Your Northwest

Seattle, Wash.

## Public Lands Every Day







Advance environmental knowledge among health professionals to improve the public's health with a special emphasis on children and underserved populations.



Mil herarini grownio y obsoryugard is are ton euto centerarty

en eller de la semana \_\_

Firms del Proveestor de Curdado Médio

# Health & Environment

### Prescribing Nature



Visite-un refugio naponar se vista silvestre.

un orașteră nacional de peses, un perture, un pado de recres, si un centro de naturalecia

Dé un paseo por el secindario Ande en biolosta (june un cabolif, abserve (as avec o simplemente explore



 NEEP is building capacity among pediatric health care providers by creating Rature Champions who bean

prescribing mature.
The health care previders refer

other health care providers about

Immilies to parks or nature content in their commandes where ROPE parties provide active radium programmes.

MIDDE's nature parties include:

U.S. Fish and MIDDE's service

National Androin Society

U.S. Department of Aprichate Forest

Middle Society

MIDDE Society Society

MIDDE Society Children and Nature Initiative Pilot Sites









Advance the ability of K-12 teachers to work across disciplines, equipping students to contribute to environmental solutions.



### Classroom Earth is...

### National Environmental Education Week

#### **Planet Connect**



Planet Connect project grantee Lisa Junta of Springfield, VA displays her school's new reusable lunch trays.

Students participating in a Florida Oceanographic Society program investigate estuary wildlife during EE Week.

#### **Be Water Wise**

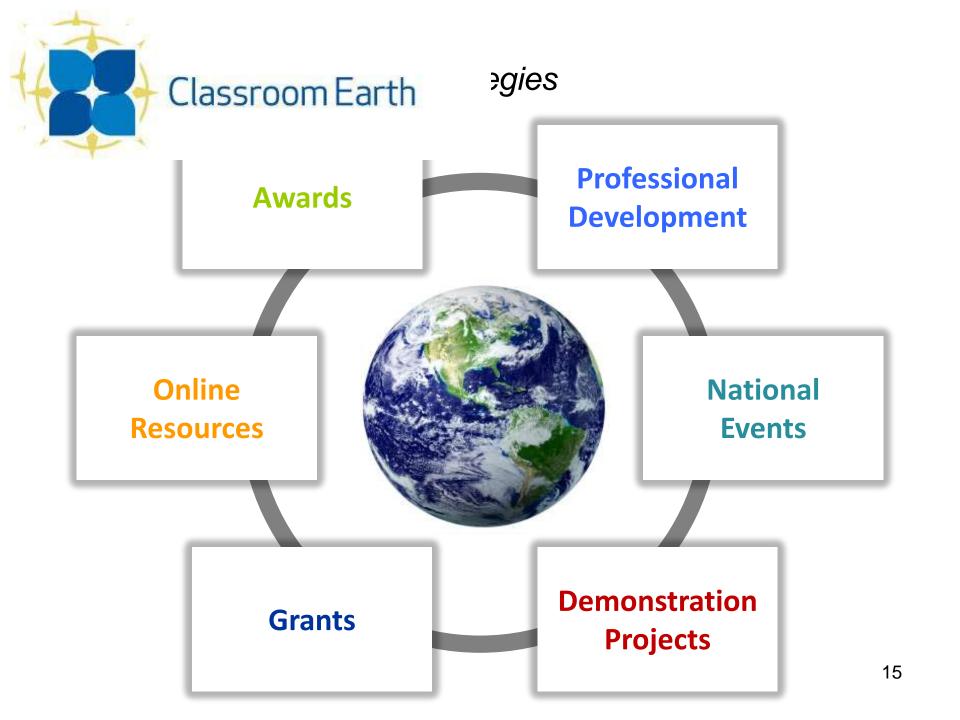


A Be Water Wise student shows her flow meter bag measurement.

# Richard C. Bartlett Award



Outstanding environmental educator John Schmied of Bothell, WA received the 2011 Bartlett Award.





### Classroom Earth











Login or Join (Hadia Center | Contact | About

Our Programs

Q-

**Home Page** 

**Teaching About the Environment** 

**Professional Development** 

Success Stories

#### Welcome to Classroom Earth!



Classroom Earth is an online resource designed to help high school teachers include environmental content in their daily lesson plans. Useful resources on the site include:

read more ....

#### HOWER RESOURCES BY BUILDER

- Foreign Languages
- Language Arts
- Mathematics
- Science
- Social Studies
- . The Arts

Archive

#### Hundreds feel sting of jellyfish on Florida's east. coast

ST. PETERSBURG, Fla. Thousands of jellylish. washed up on Florida's east coast over the Memorial holiday weekend, stinging swimmers and thwarting beathgoers.





#### GREEN TV



#### SUCCESS STORIES John Schmied, 2011 Bartlett Award Winner

"I would like to thank the National Environmental Education Foundation for naming me as the 2011 Richard C. Bartlett. Environmental Education Award winner.

#### Wildlife Conservation Resources



Check out Classroom Earth's wildlife conservation resources, including lesson plans, curricula, professional development opportunities, news, fact sheets, funding opportunities, videos and more!

read more ...



#### TEACHING ABOUT THE ENVIRONMENT Learn how to teach high achool students

about the environment.

#### JOIN THE CLASSROOM EARTH COMMUNITY

By becoming a member of Classroom Earth you become part of a nationwide community of high school educators teaching about the environment, Join Nov.

#### **FUNDING OPPORTUNITIES**

Connect Grants for Culturally Diverse Communities

August 1, 2011

President's Environmental Youth Awards

December 31, 2011

Schoolyard Habitat Program

December 31, 2011

View All Grants



#### FOLLOW US













### Classroom Earth Resources

#### Resource Library

#### **Analyzing Tree Rings**

in Subject: Environmental Science, Biology, Algebra T Key Term: Correlated to Standards, Forests, Botany Level: General

Resource Type: Activities/Lesson Plans Topic: Biodiversity, Water, Climate.



In this lesson plan students become dendrochronologists - tree ring scientists. The lesson introduces Methuselah, an ancient bristlecone pine that has lived more than 4,600 years.

Access the Lesson Plan

Add new comment Read more

#### Mountain of Ice and its History

in Subject: Environmental Science, Earth Science, Chemistry, Statistics, Algebra 1 Key Term: Correlated to Standards, Oceanography

Level: General

Resource Type: Activities/Lesson Plans

Topic: Water, Climate, Geography



In this lesson, students analyze the chemical concentrations in ice core field data from the U.S.

View the Lesson Plan

Add new comment Read more

#### Continuously Changing Plant Growth

in Subject: Algebra I Key Term: Correlated to Standards, Botany Level: General Resource Type: Activities/Lesson Plans

Topic: Agriculture

Plant growth rates are influenced by many factors including rainfall, climate, soil nutrients, and others. In this activity, students will develop a mathematical model for a growing plant.

This activity is correlated to National Mathematics content standards.

View the Lesson Plan

Add new comment

### Classroomearth.org

- Highly searchable database of resources;
- Search terms include:
  - Type of resource (ex: video, curricula, or lesson plan)
  - Topic (ex: Energy)
  - Subject (ex: Math)
  - Course (ex: Algebra)
  - Level (ex: AP)



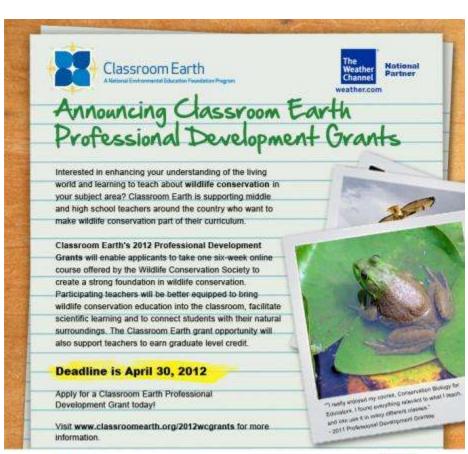
# Teacher Wildlife Conservation Professional Development Grants

#### **Synopsis:**

- Grant courses available for middle and high school teachers
- Courses provided by the Wildlife Conservation Society
- Graduate level credits available via Adams State College
- Courses available: Conservation Biology for Educators, Habitat Ecology for Educators
- Access to Classroom Earth's online wildlife conservation resources

"I really enjoyed my course, *Conservation Biology for Educators*. I found everything relevant to what I teach, and can use it in many different classes."

Currently accepting applications until April 30, 2012: http://ClassroomEarth.org/2012wcgrants







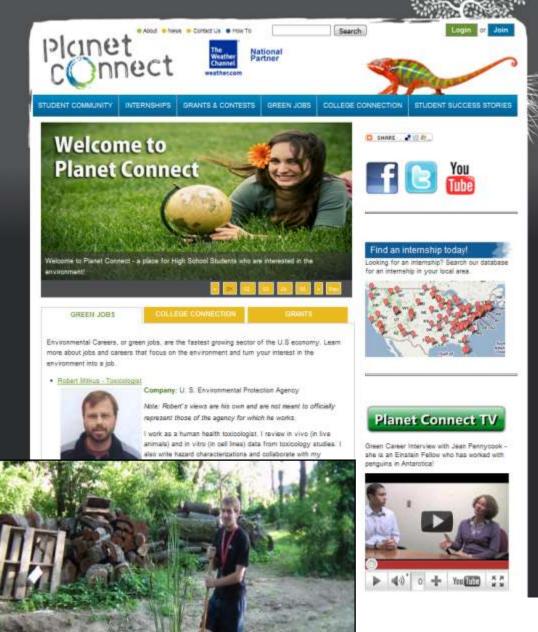


# Planet Connect

RECYCLE
REUSE
AND
CONTRIBUTE !!







# Be water wise

Engages public, private and nonprofit sectors to raise awareness of local water issues and improve water conservation in school buildings and grounds.









Be Water Wise students in Miami and Atlanta conduct school water audits (far left), and later, present their water conservation plans to city officials, including Miami Mayor Manny Diaz and Superintendent Alberto Carvalho (upper left), as well as Atlanta City Council Chair Ceasar Mitchell (above).





# Announcing the 2012 Richard C. Bartlett Environmental Education Award

Do you know a teacher who stands out among the rest? Someone who takes their passion for the environment and brings it into the classroom, inspiring students to learn and engage in environmental issues? Consider nominating an outstanding teacher for the 2012 Richard C. Bartlett Environmental Education Award.

The 2012 Richard C. Bartlett Environmental Education Award will go to an outstanding high school teacher (grades 9-12) who successfully integrates environmental education into the curriculum and engages students in interdisciplinary solutions to environmental challenges. The award is given to an educator who can serve as an inspiration and model for others.

The winner of the Richard C. Bartlett Environmental Education Award will receive \$5,000 to support their work in environmental education. The award and merit winners will be announced in August 2012.

The application deadline for the Richard C. Bartlett Environmental Education Award is June 8, 2012. Nominate yourself or a teacher you know today!

To learn more, visit: http://neefusa.org/bartlettaward.htm

The Richard C. Bartlett Environmental Education Award is made possible through the generous support of Baxter Healthcare Corporation.







# Hands on the Land (HOL) is supported by a collaboration of:

- Partners in Resource Education (PRE), a collaboration of seven Federal agencies
- The National Environmental Education Foundation (NEEF)
- The Keystone Center (TKC) and Keystone Science School (KSS)











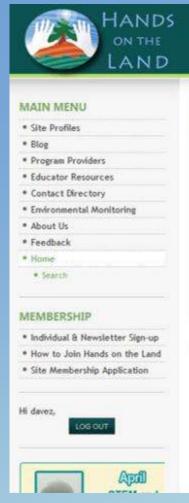
























#### Welcome to Hands on the Land



Let's give our newest member site a warm welcome: Fort Ord of Hollister, CA.

The mission at Fort Ord is to work with partners to protect rare plants and animals on this former

Army...Read more

#### Highlights

#### **Hot Topics**

What's important to federal land managers? Classroom materials are now available on wildland fire, invasives, forests, watersheds, polinators, climate, oceans and habitat...Read more

#### Children and Nature

\* Take a look at what federal agencies and their



Carina 2012 Namelakkan





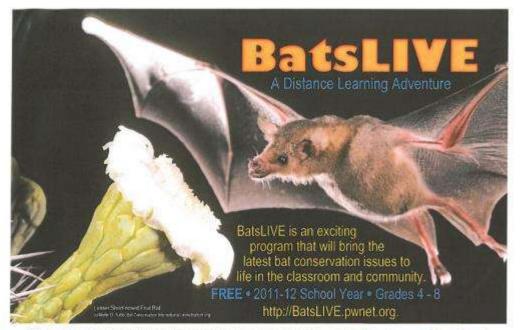












Bats are vital to healthy of ecosystems and human economies worldwide. As primary predators of night-flying insects, bats consume enormous quantities of agricultural and forest pasts reducing the need for chemical pesticides. Some bats are critical polinators and seed dispersers for plants.

Yet these wonderfully diverse and beneficial creatures are among the least studied and most misunderstood of animals. Bats are threatened worldwide, and their colonies and habitats are destroyed – both intentionally and inadvertently – because of myths, misinformation, and tack of scientific knowledge and understanding.

Bat populations are declining almost everywhere, especially due to the devastating White-nose Syndrome disease. Losing bats has far-reaching consequences for natural acceystems and human economies. Knowledge is the key to their survival and protection.

#### Join us for BatsLIVE:

- · FREE to all schools.
- Log on for a LIVE WEBCAST on May 17, 2012.
- . Join us for in-depth WEB SEMINARS about bats.
- Participate in CITIZEN SCIENCE activities.
- Find LESSON PLANS about bats for the classroom.
- Connect with bat conservation ORGANIZATIONS worldwide.



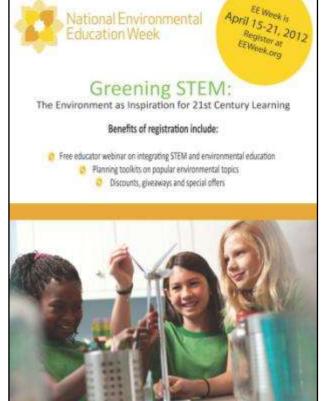


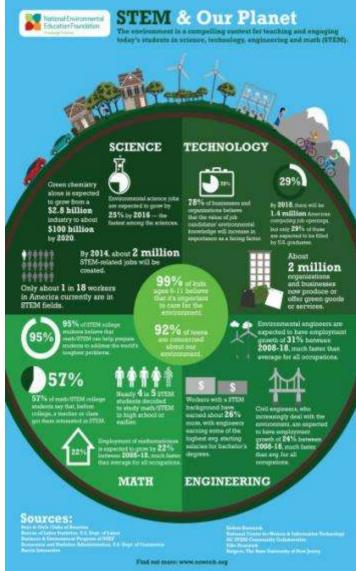
#### Supporting Partners:

USDA Forest Service • Partners in Resource Education • US Fish and Wildlife Service Bat Conservation International • National Environmental Education Foundation Organization for Bat Conservation • National Wildlife Federation • UN Year of the Bat Lubee Bat Conservancy • Virginia Department of Conservation & Resources National Cave and Karst Resources Institute • Prince William County Public Schools Check out the resource web site at http://BatsLIVE.pwnet.org For more information: 800-809-2680 Induced by



# National Environmental Education Week







#### 10 Ways to Participate in EE Week

- 1. Incorporate environmental themes into daily lesson plans.
- 2. Help students identify and investigate their watershed.
- watershed.

  3. Use GPS technology to enable students to map.

and inventory invasive plant species.

- 4. Set up a nature scavenger hunt on your school grounds.
- Organize a field trip to a local aquarium or zoo.
- 6. Partner with a business or community group to host a clean-up or water quality monitoring event.
- 7. Construct a wildlife habitat, schoolyard garden or outdoor classroom on your campus.
- 8. Help students launch a school recycling campaign.
- 9. Encourage students to research and propose ways to green their school building with water and energy conservation technology.
- 10. Help students develop a service-learning project around improving the environment in their community.





National Environmental Education Week (EE Week), the nation's largest environmental education event held each year the week before Earth Day, inspires environmental learning and stewardship among K-12 students. EE Week connects educators with environmental resources to promote K-12 students' understanding of the environment. EE Week is a program of the National Environmental Education Foundation.

- Spread the Word About EE Week
- Promotional Toolkit
- Subscribe to EE Week News

Enter Email Address

Subscribe

Resources

**Success Stories** 

**Curricula Library** 

**Nature Center Map** 

**Photo Blog Contest** 





Search here

Go



#### Resources

- » Children & Nature
- ➤ Climate Change
- » Corricula Library
- » Energy
- . Grants and Awards
- Green Reading
- > Health Care Providers
- Oceans
- · Olf Splft
- » Professional Development
- Quizzos
- . Service-Learning
- > Water
- Water-Energy Connection
- Webiners

#### **Environmental Education Curricula Library**

Using environmental topics in the classroom provides an opportunity for students to learn math, science, social studies, tanguage ants and more white exploring interesting issues and sharpening critical thinking skills. The curricula listed in EE Week's Curricula Library are correlated to state, national or NAAEE education standards and have been evaluated for their quality and objectivity. Clock on a topic below to view lesson plans.

#### Air Quality

Amphibians and Reptiles

#### Birds

#### Climate Change

. Access the EE Week Carbon Footprint Calculator

#### **Endangered Species**

#### Energy

**Environmental Health** 

Forests and Trees





**Cur Programs** 

Go



#### Resources

- > Children & Nature
- Climate Change
- » Curricula Library
- > Energy
- . Grants and Awards
- . Green Reading
- . Health Care Providers
- » Oceans
- . Oil Spill
- » Professional Development
- Quizzes
- ▶ Service-Learning
- » Water
- > Water-Energy Connection
- > Webinars

#### Water Resources

Visit the <u>Curricula Library</u> for lesson plans on water and the <u>Water Quality Testing</u> page for resources on conducting water quality tests with your students.

National Environmental

Education Foundation

#### Bay Backpack

Bay Backpack is an online resource for teachers and environmental educators to engage students in hands-on tearning about the Chesapeake Bay and its local waterways. The site also houses resources on forests, farming, development and many other environmental topics that affect the Bay, Bay Backpack resources include books, multimedia tools, cumbulum guides and individual lesson plans. In addition, visitors can search for professional development and funding opportunities on the Web site. The goal of Bay Backpack is to provide educators with the necessary resources to give their students a Meaningful Watershed Educational Experience (MWEE) — extensive projects that allow students to gain a deep understanding of environmental issues in the Chesapeake Bay and its local streams and rivers.

#### California Center for the Book

The California Center for the Book, in partnership with the Water Education Foundation, supplies resources to help public libraries host programming about water. Resources are available online and include a Water Issues Guide, a Water Book List, web resources, and more.

#### Climate Change and Water, Perspectives from the Forest Service

Climate Change and Water. Perspectives from the Forest Service is a summary of a forthcoming report by the Forest. Service and U.S. Department of Agriculture which will detail the likely impacts of climate change on the Nation's forested watersheds and highlight the importance of managing forests to provide clean, abundant water.





Our Programs

Search here.

Go

Home About Get Involved Partners Media Center Resources Register

#### Resources

- . Children & Nature
- → Climate Change
- . Curricula Library
- . Energy
- . Grants and Awards
- Green Reading
- > Health Care Providers
- Oceans
- . Oil Spill
- . Professional Development
- · Quizzes
- · Service-Learning
- Water
- → Water-Energy Connection
- » Webinars

#### EE Week Educator Webinars

The mission of National Environmental Education Week (EE Week) is to connect educators with environmental resources to promote K-12 students' understanding of the environment. One way that we support educators is by providing professional development opportunities, including weblinars.

Learn more about our webinars by following the links below.

#### **Upcoming Webinars**

EPA Environmental Education in Action webspars - the EPA's Office of Environmental Education (OEE) will host three
webinars for educators during EE Week 2012. The webinars will kick off a new initiative called Environmental Education
in Action that will showcase environmental education programs and resources. The webinar Greening STEM:
Environmental Resources and Tooks for Inspiring 21st Century Learning on April 19 at 4:00 p.m. EDT will showcase

#### Webinar Archive

. Field investigations and STEM, live broadcast March 28, 2012

EE Week and other NEEF programs. Register for the webinar.

- Technology Goes Wild: New Tools for Connecting Classrooms with Nature, 6ve by
- Teaching Govern Connections: Watersheds to Reefs, live broadcast March 30, 201
- Teaching About the Guff Oil Spill live broadcast February 23, 2011
- Teaching the Water Energy Connection, live broadcast March 31, 2010.

#### Resources

- · Children & Nature
- → Climate Change
- Curricula Library
- » Energy
- . Grants and Awards
- → Green Reading
- . Health Care Providers
- . Oceans
- → 00.5pill
- · Professional Development
- · Quizzus
- → Service-Learning
- Water
- . Water Energy Connection
- Webinars

#### More About EE Week

- EE Week 2012
- ► Be Water Wise
- → Photo Blog
- → Newsletter Archives
- Success Stories

#### Register for EE Week 2012

Join a national network of educators and

#### EE Week Educator Webinar: Field Investigations and STEM

Original broadcast on March 28, 2012

#### Back to all webinars

On March 28, 2012. Et Week partnered with the Association of Fish 6. Whitting Agencies (AFWA) and the Pacific Education Institute (PEI) to explore how the schoolyard or local public land can provide students with the opportunity to be scientists using the skills and knowledge of inquiry to collect real world data.

Webinar participants had the opportunity to hear from Margaret Tudor and Pot Otto at PEI about information and tools educators can use to engage students in STEM learning outside, utilizing nature as a laboratory by planning, conducting, and evaluating a field investigation.

PEI provides professional development for achool districts to get teachers and students in the field doing real-world science.

Recently PEI worked with AFWA to provide guides on best practices in conservation education for the AFWA Conservation Education Toollet. <u>Download the Field investigations guide.</u>

Individuals who registered for EE Week 2012 and participatef in this and/or our March 14 webinar -Technology Goes Wild - have been entered into a drawing to win a Samsung Gafaxy Tab 10.1 16 GB.\*

This purchase necessary. All registrants eligible for the drawing must be at least 18 years old, residents of the U.S., and meet all other eligibility requirements. Void where prohibited. For the complete Rules see <u>enweet erginablinars</u> (weblinar, drawing, rules.)

#### Webinar Archive

The entire webthar (1 hour 10 minutes) is svalistile for streaming. Both audio and visual of the live broadcast are available here. Materials referenced during the webbar may be downloaded from the links below. You will need <u>Adobe Reader</u> to view the PDF files.

- Watch the webinar streaming please allow a few minutes for buffering
- Q&A Sheet

#### Webinar Materials

#### Topics

- > Children & Nature
- » Climate Change
- > Energy
- . Oceans
- · OU Spill
- » Water
- . Water-Energy Connection

#### **Educational Materials**

- Curricula Library
- . Green Reading
- » Nature Center Map
- . Nature Journaling Blog
- » Quitzes
- Service-Learning

#### Register for EE Week 2012

Join a national network of educators and organizations dedicated to increasing the environmental knowledge of K-12 students.

Register Now

#### Subscribe Now

Subscribe to our monthly EE Week newsletter

Enter Email Address

Subscribe

#### Environmental Education Success Stories

Educators around the country are engaging students in interesting and exciting activities to promote understanding of the environment. These are just a few of their stories. We'd love to hear your story. Send it to us at <a href="Exceeding-organizations">Exceeding-organizations</a>.

#### Calvert County Public Schools, Prince Frederick, Md.

Seventh grade students Calvert County Public Schools are collecting data on reptile and amphibian distribution as part of the Maryland Amphibian and Reptile Atlas (MARA) project Continue reading...



#### The Aldo Leopold Nature Center, Monona, Wis-

The Aldo Leopold Nature Center connects children, their families and feachers with the wonders of the natural world through hands-on, guided experiences, Continue reading...



#### The Peggy Notebaert Museum, Chicago, III.

The Peggy Notebaert Museum educates the general public on local Great Lakes ecosystems and their connection to the ocean by hosting a workshop to cetebreate EE Week 2011's Ocean Connections. <u>Continue reading...</u>



#### Montgomery School, Chester Springs, Pa.

David Kline, a 4fth-8th grade science teacher at Nontgomery School, is engaging students in his environmental education curriculum, Programs for Environmental Awareness and Sustainability (PEAS). Coolings (sadding...



#### About EE Week

- . EE Week 2012
- » Be Water Wise
- > Partners
- Success Stories
- > Contact Us
- » FAQs
- Benefits

#### Topics

- . Children & Nature
- Climate Change
- > Energy
- » Oceans
- » Oil Spill
- » Water
- » Water-Energy Connection



National Environmental

Education Foundation

Our Programs

#### Maryland Students Use Science and Technology to Inventory Local Frogs

Calvert County Public Schools located in southern Maryland is faunching a new seventh grade STEM initiative in each of the middle schools. Students will be collecting data on reptile and amphibian distribution as a part of the Maryland Amphibian and Reptile Atlas (MARA) project. Students will use tools like Google Earth to identify the specific location of the animals that they observe and will collect recordings of trog and tood vocalizations using the SM2 Automated Recording Unit (more commonly known as a FrogLogger) manufactured by Wildlife Acoustics.

The loggers will collect one minute sound samples throughout the night and are available as .wav files for student analysis and to share with MARA scientists for species verification. Student data will be used to help document the distribution of reptiles and

amphibians across the state. Additionally, students will contribute to the Caivert FrogBlog, a site that will include photos, video clips, news stories, and other relevant information. Project teachers have already uploaded some initial observations to www.caivertfroeblog.blogspot.com.

Listen to an audio recording of Spring Peepers.



# **EE Week Photo Blog Contest**

Opportunity for schools and organizations to share their stories for the chance to win prizes.

Entries are judged on the quality of the photo and blog text, visual appeal and the student learning that took place as a result of the environmental education efforts depicted in the blog.

First, second and third place winners will receive a digital camera and be featured on EEWeek.org.

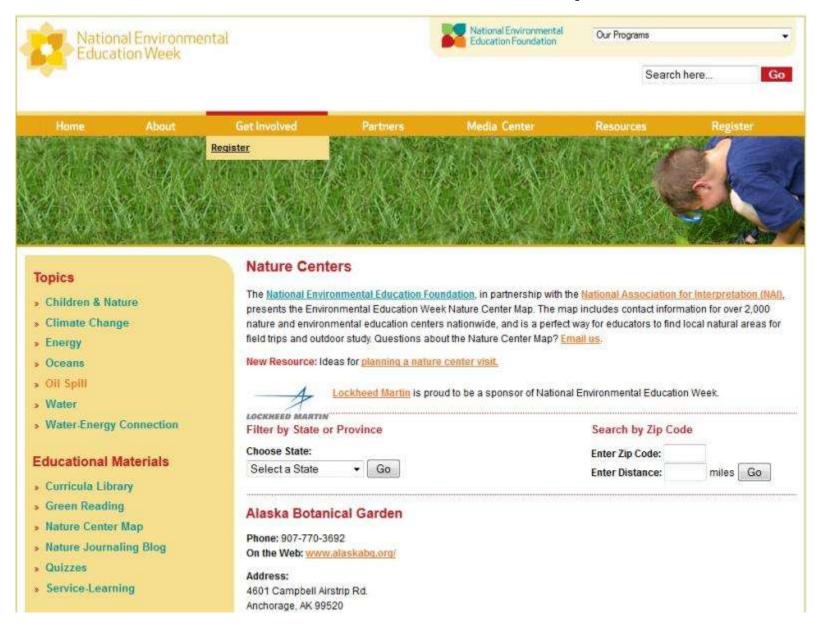
**Contest runs through May 31** 





www.eeweek.org/photoblog

# Nature Center Map





### Greening STEM: The Environment as Inspiration for 21st Century Learning



#### About EE Week

- » EE Week 2012
- Be Water Wise
- » Partners
- Success Stories
- Contact Us
- » FAQs
- Benefits

#### Topics

- Children & Nature
- Climate Change
- Energy
- Oceans
- » Oil Spill
- Water
- Water-Energy Connection

#### **Educational Materials**

- Curricula Library
- » Green Reading
- » Nature Center Map
- » Nature Journaling Blog
- Quizzes

#### Greening STEM: The Environment as Inspiration for 21st Century Learning

#### National Environmental Education Week

#### April 15-21, 2012

Increasing STEM (Science, Technology, Engineering and Math) knowledge and expanding STEM education and career opportunities for students is a national priority. Student achievement in STEM is key to fostering a new wave of innovators who can creatively address complex 21st century challenges.

The environment is a compelling context for teaching STEM as it provides teachers with a diverse range of real-world challenges that engage students in meaningful hands-on opportunities to apply and reinforce STEM concepts across multiple subject areas.

Recognizing the role of the environment as a portal for STEM learning, EE Week's 2012 theme is **Greening STEM**: The Environment as Inspiration for 21<sup>st</sup> Century Learning.



#### **Greening STEM Resources**

- » EE Week Greening STEM Planning Toolkits
- Webinar: Technology Goes Wild: New Tools for Connecting Classrooms with Nature, March 14 at 7:00 p.m. EDT
- » Webinar: Field Investigations and STEM, March 28 at 7:00 p.m. EDT
- » <u>Planet Connect Get Green Video Contest; Green Your City</u>, student-created videos explaining ways they can green their city or town using STEM. View the winning videos.
- » Earth Gauge Meterologist Videos meteorologists from across the country explain the role that STEM plays in their work.

# **Greening STEM Planning Toolkits**

- » Energy
- \* Oceans
- \* Oil Spill
- » Water
- » Water-Energy Connection

#### **Educational Materials**

- » Curricula Library
- » Green Reading
- » Nature Center Map
- » Nature Journaling Blog
- » Quizzes
- » Service-Learning

#### Register for EE Week 2012

Join a national network of educators and organizations dedicated to increasing the environmental knowledge of K-12 students.

Register Now

#### Subscribe Now

Subscribe to our monthly EE Week newsletter

Enter Email Address

Subscribe

#### Featured Toolkit: Schoolvard Bioblitz Planning Toolkit

On March 14, EE Week partnered with <u>National Geographic Education</u> and <u>Project Noah</u> to offer educators <u>Technology Goes Wild: New Tools for Connecting Classrooms with Nature</u>. In the webinar, participants learned how to engage students in STEM learning by taking technology outside and conducting a bioblitz in the schoolyard or local nature area.

EE Week and National Geographic Education continued to work together to develop a toolkit, equipping educators with activities and resources to conduct a schoolyard or local bioblitz with their students.



#### Gardens & Schoolyards



#### Energy Efficiency



#### Geography Connections



#### Water Resources



#### **Toolkit Key**

Materials in the toolkits are labeled with the STEM components and teaching strategies they include.

#### STEM Components:

Sel-Science

Tech-Technology

Eng-Engineering

Math-Mathematics

#### Other Components:

SE-Service-Learning

PBL-Project-Based Learning

CS-Citizen Science

#### Climate & Weather



#### About EE Week

- » EE Week 2012
- » Be Water Wise
- » Partners
- Success Stories
- Contact Us
- » FAQs
- » Benefits

#### Topics

- » Children & Nature
- » Climate Change
- » Energy
- » Oceans
- » Oil Spill
- » Water
- » Water-Energy Connection

#### **Educational Materials**

- » Curricula Library
- » Green Reading
- » Nature Center Map
- Nature Journaling Blog
- Quizzes
- » Service-Learning

#### Register for EE Week 2012

Join a national network of educators and organizations dedicated to increasing the environmental knowledge of K-12 students.

Register Now

#### Subscribe Now

Subscribe to our monthly EE Week

#### EE Week 2012 Greening STEM Planning Toolkit:

#### Gardens & Schoolyards

Back to all toolkits

There are many educational benefits to school gardens and green schoolyards. These spaces serve as living laboratories that provide a real-world context for lessons across subject areas. They also engage students in hands-on, project-based learning activities.

The opportunities to learn and apply STEM (Science, Technology, Engineering and Math) concepts in school gardens and green schoolyards abound. From analyzing soil samples, plotting plant growth and graphing rainfall to designing greenhouses, STEM activities in the schoolyard garden or habitat empower students of all grade levels to improve their community and take pride in their school environment.

Below, we outline projects and activities organized by grade-level as well as resources that engage students in STEM learning in the school garden or schoolyard.



Students work on their monarch butterfly waystation at Brier Creek Elementary School in Raleigh, N.C.



#### Featured Partner

KidsGardening offers resources around plant-based education and school gardens, as well as an array of awards programs and products that engage kids in active learning and exploration in the garden.

#### Toolkit Menu

- » Projects & Activities: All Grades | K-4 | 5-8 | 9-12
- » Resources: Websites | Books | Games & Apps

#### Projects & Activities

All Grades

#### Growing UP (and around, and down...)

Sci, Math

In this project from KidsGardening.org, students build garden structures, giving them a chance to track and experiment with plant tropisms (responses to various environmental stimuli). The three types of garden structures featured in the activity can be adapted to fit budget and climate and include ideas for connecting the project to the curricular focus of the classroom.

#### Building Soil Nature's Way

Sci. Math

This classroom project is an exploration of building life-giving humus. Students explore soil health by building a lasagna garden. By marking off a garden area and adding layer after layer of compost, organic matter and high-nitrogen materials students explore the process of decomposition and learn the importance of nutrient-rich soil as a base for a successful garden.

## EE Week 2012 Educator Webinars



Announcing a Free EE Week Educator Webinar:

Technology Goes Wild:

New Tools for Connecting Classrooms with Nature

Wednesday, March 14, 2012 at 7:00 p.m. EST

National Environmental Education Week (EE Week) is partnering with <u>National Geographic Education</u> and <u>Project Noah</u> to bring educators the information and tools they need to take technology outside, engaging students in STEM (science, technology, engineering and math) learning in their own schoolyard or local public land.

Webinar participants will learn about National Geographic Education resources, including how to conduct a local BioBlitz—an activity where students and teachers work together to take a snapshot of an area's biodiversity.

Project Noah, a rapidly growing global citizen science effort, will showcase an innovative new tool that can help educators inspire students to explore and document wildlife using easily accessible technology.

> REGISTER for an EE WEEK WEBINAR today and become eligible to win a SAMSUNG GALAXY TAB 10.1 16GB.\*

\*Pro-purchase necessory: All registrants eligible for the drawing must be at least 18 years old, residents of the U.S., and meet all other eligibility requirements. Void where prohibited. For the complete rules see <u>reweek.org/brebings/sycbings/displays/graies</u>.









#### Announcing a Free EE Week Educator Webinar:

#### Field Investigations and STEM

Wednesday, March 28, 2012 at 7:00 p.m. EDT

National Environmental Education Week (EE Week) is partnering with the <u>Association of Fish & Wildlife</u> <u>Agencies</u> (AFWA) and the <u>Pacific Education Institute</u> (PEI) to explore how the schoolyard or local public land can provide students with the opportunity to be scientists using the skills and knowledge of inquiry to collect real-world data.

Margaret Tudor and Pat Otto from PEI will provide teachers with information and tools to engage students in STEM learning outside, utilizing nature as a laboratory, by planning, conducting, and evaluating a field investigation.

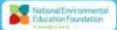
PEI provides professional development for school districts to get teachers and students in the field doing real-world science. Recently, PEI worked with AFWA to provide guides on best practices in conservation education for the AFWA Conservation Education Toolkit.

> REGISTER for an EE WEEK WEBINAR today and become eligible to win a SAMSUNG GALAXY TAB 10.1 16GB.\*

\*To purchase necessary. All registrants eligible for the drowing must be at least 18 years old, residents of the U.S., and meet all ather eligibility requirements. Vaid where prohibited, For the complete rules see vewerk org/verbinars/inetvinar drowing rules.







#### **STEM & Our Planet**

The environment is a compelling centext for teaching and engaging today's students in science, technology, engineering and math (STEM).



#### SCIENCE

Green chemistry alone is expected to grow from a \$2.8 billion industry to about \$100 billion by 2020.



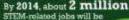
Environmental science jobs are expected to grow by 25% by 2016 - the fastest among the sciences.



TECHNOLOGY

78% of businesses and organisations believe that the value of job candidates' emisionmental knowledge will increase in importance as a hiring factor

By 2018, there will be 1.4 million American computing job openings. surcesy 29% of those are expected to be filled by U.E. gradueton.



created.

Only about 1 in 18 workers in America currently are in STEM fields.



95% of STEM college students believe that studems believe that math/SYEM can help prepare studems to address the world's toughost problems. 99% of kids ages 6-11 believe that it is important to care for the

92% of teems are concerned about our



### About 2 million organizations and businesses now produce or offer green goods or services.

🏫 🇥 Environmental engineers are

expected to have employment growth of 31% between 2008-18, much faster than average for all occupations.



57%

57% of math/STEM college students say that, before college, a teacher or class got them interested in STEM.



Nearly 4 in 5 STEM to study math/STEM in high school or earlier.



Workers with a STEM background have earned about 26% more, with engineers earning some of the highest avg. starting Employment of mathematicians is expected to grow by 22% between 2008–18, much faster than everage for all occupations. salames for bachelor's



Civil engineers, who increasingly deal with the environment, are expected to have employment growth of 24% between 2008-18, much feater than eve for all occupations.



MATH

ENGINEERING

#### Sources:

Soys & Clork Chick of Reservice

Forces of Science Passifices, C.S. Dopt, of Labor

Resilience & Environment Proposes of RESE

Environments and Passificial Mandatrication, C.E. Dopt, of Continuous

Receive Software-Hills

Calling Research
Sational Crisics for Memory & Information Includings
NC SYRIS Countriesing Collectionsities Hargers, The Blues Halossully of How Jessey.

Find out more: www.oeweek.org



# **Green STEM Innovators**











http://www.eeweek.org/greening\_stem/innovators





# Weather Connections to STEM



As part of National Environmental Education Week's 2012 theme, Greening STEM: The Environment as Inspiration for 21st Century Learning, broadcast meteorologists from across the United States that participate in Earth Gauge will contribute videos explaining the role STEM plays in their day-to-day work.



# **Connect With Us**

Jennifer Tabola, Senior Director, Education, jtabola@neefusa.org Sarah Kozicki, Education Program Coordinator, skozicki@neefusa.org









Classroom Earth: www.classroomearth.org

**EE Week: www.eeweek.org** 

**Planet Connect:** www.planetconnect.org

