

Excellence in Environmental Education from the Mountains to the Sea

Volume: 3

Issue: 3

Date: Summer 2011

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This July, celebrate the signing of the Weeks Act and the founding of the White Mountain National Forest. The event takes place on July 29, 2011 from 9 am to 3 pm at the Mt Washington Auto Road. Music, historic displays, educational activities, storytelling, and more are featured in this family oriented festival. For more information www.weekslegacy.org

Calendar :

- **SAVE THE DATE - 2011 NEEEA CONFERENCE, Navigating New England Environmental Education: Charting a Course to an Environmentally Literate Future, October 21-23, 2011 at Prindle Pond Conference Center in Charlton, MA www.neeea.org**
- Association of Nature Center Administrators 2011 Summit, Great Smokey Mountains Institute, Townsend, TN: **August 18-21 www.natctr.org**
- **NHSTA Fall Science Education Conference, October 23-24, 2011, Church Landing on Lake Winnepesaukee, Meredith, NH www.nhsta.org**
- **40th Annual NAAEE Conference, 2011: October 12-15, Hosted by North Carolina EE , www.naaee.org**
- National Association for Interpretation, National Interpreters Workshop, St. Paul, Minnesota : **November 8-12, 2011 www.interpnet.com**
- **4th Annual GIS Educators Conference, November 13th, Saratoga Springs, NY www.northeastarc.org**

PRESIDENT'S MESSAGE

Greetings NHEE Members,

We hope this message finds you spending quality time away from your offices and enjoying the great outdoors!

We need to thank the many environmental educators that have been working diligently on the drafting of the NH Environmental Literacy Plan. A draft of the plan is almost ready for public comments. Please keep your eyes out for the comment period. We need to hear from you!

Please consider attending some of these exciting fall conferences! From October 21-23 the New England Environmental Education Alliance will be hosting their conference in Charlton, MA with the theme "Navigating New England Environmental Education: *Charting a Course to an Environmentally Literate Future*". For more information visit: www.neeea.org/conference.html

Then from October 23-24th the New Hampshire Science Teachers Association will be hosting their conference at Church Landing in Meredith NH please visit: www.nhsta.net for more information.

The NHEE Board of Directors has started thinking about our spring conference. We are looking for a location and for members to serve on a conference planning committee. If you would like to assist with the planning and organizing of the conference please contact Jessica Morton at 706-0291 or jmorton@metrocast.net.

Enjoy this summer season and stay COOL!!

Audrey Eisenhower and Jessica Morton

NHEE Co-Presidents



Busy Times for the New Hampshire Children in Nature Coalition

By Eric Aldrich

If you've been hearing more about the need to re-connect kids with nature, there's good reason for that. The New Hampshire Children in Nature Coalition has been very active on several fronts to get out the word and find new and interesting ways to get children enjoy nature. Here's a quick look at some of the things the coalition has been doing:

WMUR: We made arrangements with WMUR-TV (Channel 9) to air a series of public service announcements in June and later summer. The PSAs focus on the need to connect kids with the great outdoors and give our message a broad audience.

Screenings: We've hosted some screenings of *Mother Nature's Child*, including panel discussions, in Keene, Concord and Portsmouth. The screenings and advance publicity generated a buzz of excitement. We have two copies of the film available for partners to check out and show in smaller, local venues.

Facebook: Like throngs of others, we're on Facebook, where a handful of dedicated volunteers are posting fun activities, ideas for getting outside and thought-provoking questions. Check out "nhchildreninnature" on Facebook and be sure to "like" us!

Partnerships: We're looking into a variety of partnerships to broaden our audience, strengthen our coalition and get the message out.

Brochures & Magnets: Hot off the press are the coalition's new brochure and magnets. Please help us get these brochures to parents, caregivers and other audiences! To obtain some, contact Marilyn Wyzga: 603-271-1197; info@nhchildreninnature.org.

White Paper: Last year's coalition intern, Antioch master's candidate Jess Gerrior-Baribault, wrote a terrific white paper outlining the case and status of connecting New Hampshire's children with the outdoors. We're putting the finishing touches on that and arranging for publicity.

Sponsorships: The coalition is offering to co-sponsor events with our partners. As an incentive, we'll pitch in a modest amount (\$100 or so) to co-sponsor key events that help spread our message and broaden the coalition's visibility. Want to co-sponsor? Contact Marilyn.

Natural Leaders: We're lining up this summer's roster for this program aimed at building skills and confidence for our young environmental advocates. This year's program will be based at Barry Conservation Camp in Berlin. For more information, contact Judy Silverberg: 603-271-3211, judith.k.silverberg@wildlife.nh.gov.

Conference Save the Date: "Where the Children Play: Discovering, Creating and Using Outdoor Spaces" is the theme of the coalition's 2011 conference, which will be held in October 5th. You can find details on the coalition's website: www.nhchildreninnature.org.

NHEE Focus: An Interview with Esther Cowles

By Alicia Carlson, NHDES/NHEE Board

On one recent evening, I had the opportunity to sit down with Esther Cowles, former Executive Director of NH Project Learning Tree. Esther left NH Project Learning Tree in March 2011 after 14 years with the non-profit organization. She has since started a landscape design business (NativeScapes Designs). She also works at a garden center and as a contractor with the national Project Learning Tree office.

Over a glass of wine and a brownie, Esther and I reflected on her career with NH Project Learning Tree, who and what have inspired her over the years, and her future aspirations. Following is a summary of our conversation.

I started by asking Esther how she decided to begin a career in education. She told me that she has a Bachelors degree in economics from the University of New Hampshire. She worked for about five years in planning and policy of land use and natural resources. Education was a critical component of her position. She had the experience of helping people understand the environment and make informed decisions, including general forestry experiences. Esther understood the economics and social science perspectives of environmental issues, but she became tired of the lobbying and policy aspects of the job. Esther thought that she might want to be a classroom teacher.

She enrolled at Plymouth State College, as it was then known, in a Masters in Education program. Part of the program involved extensive classroom time. Through this process, she realized she wasn't suited to be a classroom teacher. She felt that she still wanted to be in a non-profit environment. Within six months of graduating from Plymouth State, the Executive Director position at NH Project Learning Tree was available. She began there in January 1997.

Next, I asked Esther who had inspired her the most in her career. She paused for a moment and then said something along the lines of, "This is one of those things you don't want to get wrong." Then she said that one name came immediately to mind: Denise Maslakowski, who was Esther's advisor at Plymouth State. She was an inspiration in terms of encouraging Esther to think creatively about how to work within an educational system, and not to perceive barriers as barriers but as something to merely move around. Ms. Maslakowski has since passed away.

A moment later, Esther said that she has also been very inspired by Susan Cox of the U.S. Forest Service's Conservation Education program. Esther first met Susan when she was on the board for NH Project Learning Tree. Esther sees that Susan stays current, interested and engaged in the field of environmental education. She represents lifelong learning and has been an inspiration in terms of finding the meaning in the work that we do.

We talked about some of the more memorable high and low points during Esther's time with NH Project Learning Tree. She shared three high points. First, Esther was very honored to serve as the state coordinator representative to the national Project Learning Tree education committee. Through this role, she helped begin the model program initiative, which is a set of minimum standards for state Project Learning Tree programs. It includes a set of defined best management practices, in the form of a self-assessment tool. This initiative helped states understand what it means to have a fully functioning Project Learning Tree program.

Second was receiving the Non-formal Environmental Educator of the Year award from the NH Environmental Educators in 2004. And, similarly, Esther's third high point was when she received the Gold Star award from the national Project Learning Tree for outstanding leadership.

Esther shared two low points. First was experiencing financial difficulties, especially during the economic downturn of 2008-09. As the Executive Director of a non-profit organization, this was really difficult for her to go through, especially having to make the decision to reduce staffing because of it.

The second low point for her occurred when science testing no longer counted after the implementation of No Child Left Behind. Not only was it a low point for Esther, but also a low point for the field.

After this all-too-serious part of our conversation, we lightened up a bit by talking about what she has been up to recently. She has had a great couple of months in her "new life." Esther values the contract work she has been doing with the national Project Learning Tree office, which keeps her in the field and in contact with people she cares about. One of the things she most enjoys is spending more time outdoors doing work that's physically demanding and creative.

Esther also loves having an office at home. She told me it makes her feel like she is "part of the changing season." She is much more aware of the weather and the impact that it will have on her day.

I asked Esther if she thought she would still make connections to the environmental education community in her new career. She said, "Yes, absolutely." As part of her new move, she is accredited as an organic land care professional. She takes seriously the commitment to teach landowners about the use of native plants and organic materials. And, she would like to find a way to work with schools or other educational settings to better use their grounds for learning.

When asked if she has any advice for environmental educators, she quickly responded, "I will quote Edward Abbey: 'Don't let the bastards get you down.'" To her, this quote means to "fight the fight, do your best, and take time to keep yourself inspired and invigorated."

(Esther Cowles continued)

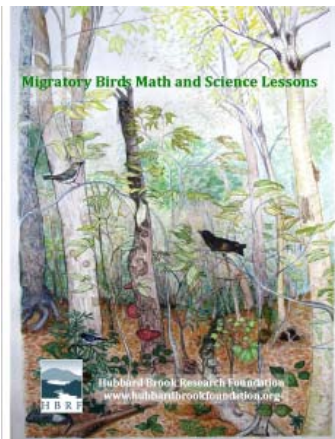
Finally, I asked what Esther thinks the future holds for her. She said, “I don’t know. I’m on a journey and I’m excited to see where it takes me.” She also said that what’s most important to her is not what she is doing, but it’s more about how she wants the quality of her life to be.

Migratory Birds Math and Science Lessons now available from the Hubbard Brook Research Foundation- free of charge!

By Jackie Wilson, HBRF

Hubbard Brook scientists have been studying birds continuously at the Hubbard Brook Experimental Forest since 1969, compiling one of the most detailed studies of Neotropical migratory birds in North America. This represents two significant resources for educators: first, a large body of knowledge detailing the population ecology and life histories of many migratory bird species, and second, a variety of examples of how researchers ask questions and the methods used to pursue the answers.

The nine math and science lessons included in the set are geared for middle- and high school-aged students, and combine information about local migratory bird species gleaned from research at the Hubbard Brook Experimental Forest with the methods scientists use to study them. Also included are slide shows that explore Neotropical migratory birds and the methods used to study them as well as additional resources for teachers, students, and parents. Some lessons are introductory while others deal with specific data and studies from Hubbard Brook. It is our hope that this lesson set will both generate interest in ecology and support student development in solid inquiry skills.



When you have a moment, we invite you to take a look:

<http://hubbardbrookfoundation.org/>

Click on the Education and Outreach tab on the top menu bar, then

→ Middle and High School

→ Classroom Resources

→ Migratory Birds

You will be asked to register first, but it’s a quick and easy process. For more information, please contact Jackie Wilson (jwilson@hbresearchfoundation.org).

This resource is available free of charge thanks to the generous support of the USDA-Forest Service and the National Science Foundation’s Schoolyard Long-term Ecological Research Program.

NEEEA Update

By Ruth Smith, NEEEA Representative for NHEE

SAVE THE DATE!

NEEEA ANNUAL CONFERENCE 2011
*Navigating New England Environmental
Education: Charting a Course to an
Environmentally Literate Future*

October 21-23, 2011 at Prindle Pond
Conference Center in Charlton, MA

For more conference information visit the
NEEEA website at www.neeea.org

If you have never attended a NEEEA
conference and would like to know more about
them, feel free to contact your NH NEEEA
representatives: Ruth Smith,
ruthnaturally@myfairpoint.net or Marilyn
Wyzga, Marilyn.Wyzga@wildlife.nh.gov



Hope to see you at the conference and don't forget to stop by the NHEE hosted New Hampshire state reception while you are there!

EE Professional Development, Grant, Program Opportunities

URGENT: The NH Department of Education is preparing to conduct an independent alignment study that will seek to compare the newly developed Alternate Learning Progressions in Science (used to assess students with the most severe cognitive impairments), with the existing NH Curriculum Frameworks for Science.

Details are still being worked out, but we need 8-10 people to come to Concord (location to be determined) for a full single day of work (8 – 4:30 pm) during the week of August 15-18. The specific day will be sorted out soon and will be based, in part, on panelist availability.

We will provide lunch, Participation Certificates, and pay you \$100.00 for this day's work.

If you are interested, please contact me at this email address and let me know how I can reach you to discuss the details. **I need to hear from you by July 22 if you are interested.** Some of you may be quite surprised to see the material we've developed. I hope you'll consider this. We need your experience and content knowledge!

Gaye V. Fedorchak, Director of Alternate Assessments & Access Services, NH Department of Education, 101 Pleasant Street, Concord, NH 03301, gfedorchak@ed.state.nh.us



Farm to School High School Educators Workshop:

Integrating Sustainable Agriculture into High School/Biology and Environmental Science Curriculum

Monday, August 1 – Thursday August 4, 2011/ 9:00 am – 4:00 pm

Dartmouth Organic Farm in Hanover, NH

Course Description: Scott Stokoe, Director of the Dartmouth Organic Farm at Dartmouth College and Jeannie Kornfeld, Chemistry and AP Environmental Science teacher at Hanover High School in Hanover NH invite you to attend a four day field intensive program on sustainable agriculture at the

(Professional Development continued)

Dartmouth Organic Farm. This program is designed for local high school educators who teach biology and/or environmental science and are interested in integrating food and fiber systems into their curriculum. These systems include tillage agriculture, grassland, woody perennial, and aquaculture.

Topics such as soils science, botany, plant reproduction and nutrient cycling will be studied in the context of sustainable agriculture. The program will be informal and provide opportunity for teachers to work on curriculum development, share activities and teaching strategies, and learn how to better

communicate to students through classroom activities, the importance of sustainable systems and what they really look like.

If you are interested in this workshop please email Jeannie Kornfeld at jeannie.kornfeld@dresden.us. The cost for the program is \$50.

August 3, Great Bay National Estuarine Research Reserve (GBNERR) will host Eric Eckl as he presents his **Superior Water Words That Work** and **Combat Communications for Conservationists** workshops. If you work with citizens and want to increase your effectiveness these workshops are for you! The workshop is \$15 which covers lunch, snacks and coffee/tea. Pre-registration is required and space is limited. Contact Annie Cox at acox@wellsnerr.org or call (207) 646-1555 (x157) to register.

August 4, Wells National Estuarine Research Reserve will host Eric Eckl in two different workshops, **More Than A Message** and **Take Aim at Target Audiences**. These workshops will take place at the Wells NERR. The workshop fee is \$15. Pre-registration is required and space is limited. Contact Annie Cox at acox@wellsnerr.org or call (207) 646-1555 (x157) to register.

On the Waterfront: Integrating Science Standards through Classroom and Field Investigations

Link: www.neaq.org/teachers

Now in its 11th year! Join Aquarium educators and guest speakers for six exciting days of learning about our local marine habitats. Participants will conduct field and in classroom investigations, apply inquiry skills and learn content knowledge through hands-on investigations. Boston Harbor will be used as an example to teach concepts such as linking science and literacy, marine biodiversity, adaptations, ecosystems, properties of water, as well as much more! Participants will also learn about the local conservation and stewardship efforts taking place in the area. Each person will receive a cd with activities and resources to take back and use in their classroom. All activities will be linked to the MA science frameworks.

When: August 8th 13, 2011, plus 1 callback December 3, 2011

Time: 8:30 a.m. - 3:30 p.m.

Cost: \$250, additional cost for 4 graduate credits

For: Teachers Grade 3-8 (other grades welcome)

(Professional Development, Grant, Program Opportunities continued)

Location: New England Aquarium

PDPs and graduate credit available

To register call the TRC at 617.973.6590 or by e-mail at trc@neaq.org

Visit us on the web at www.neaq.org/teachers

Inquiry Through Field Investigations with Project Learning Tree and Project WET

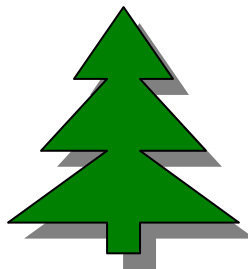
For Grade K-8 Educators and Non-formal Educators

To be held at The Conservation Center, 54 Portsmouth St., Concord, NH on Saturday August 13th from 8 am to 4 pm. Cost: \$100 and includes all guides and materials.

Pre-register at <http://www.nhplt.org/index.php/calendar/event/28/> by **August 10th**

At the workshop, you will receive the following:

- PLT's PreK-8 Environmental Education Activity Guide
- Project WET's K-12 Curriculum Activity Guide
- Field Investigations: Using Outdoor Environments to Foster Learning of Scientific Processes Guide
- Supplemental materials specific to the natural resources of New Hampshire, to support each of the guides
- Staff development credit for in-service educators
- Great posters and much more



GLOBE Carbon Cycle Workshop

Opportunities for middle and high school teachers to learn about and incorporate carbon cycle research into the classroom.

Dates: August 15-17, 2011

University of New Hampshire, Durham, NH

Registration: \$50

Provided: Breakfast, Lunch & 1 Dinner, Lodging if travelling greater than 1 hour

Take Home: Carbon Cycle Classroom Materials, Field Measurement Tools

The GLOBE Carbon Cycle project is focused on bringing cutting edge research and research techniques in the field of terrestrial ecosystem carbon cycling into the classroom. Students collect data about their school field site to determine carbon storage and participate in classroom activities to understand carbon cycling. These activities include plant-a-plant experiments, How do scientists measure trees?, an introduction to modeling, and analysis of collected data. In addition, students have the opportunity to integrate their data with emerging and expanding technologies, including global and local carbon cycle computer models and online map resources. This program design allows students to explore research questions from local to global scales under both present and future environmental conditions.

Materials have been developed by teams of scientists and science educators at the University of New Hampshire (UNH) and Charles University in Prague, Czech Republic. Activities have been locally tested by middle and high school teachers and students.

Each day the workshop will run from 8:30-4:30.

Day 1: An introduction to systems thinking and the global carbon cycle.

Day 2: Learn the in class and field activities that will allow students to make carbon storage assessments of the schoolyard.

Day 3: Use computer modeling to understand how carbon storage changes over space and time.

*For more information about the GLOBE program in general visit: www.globe.gov

Register at: https://www.events.unh.edu/RegistrationForm.pm?event_id=8795

For more information contact: sarah.silverberg@unh.edu



Forest Ecology Research in the Schoolyard: Summer Institute for Teachers

August 17th and 18th, The Harvard Forest

Contact Pamela Snow at psnow@fas.harvard.edu for registration information

Nature Explore Workshops-Devoted to Reconnecting Children with Nature; August 19, Peter Woodbury School, 180 County Road, Bedford, NH. Hosted by The Arbor Day Foundation and Dimensions Educational Research Foundation, in collaboration with the Peter Woodbury School. Registration fee: \$100 early registration or \$130 general registration. Registration closes August 15. Contact info@dimensionsfoundation.org or call Tara Hild at Dimensions (402) 467- 6112 for more information.

Summer Wild Edibles Workshop

The Little Nature Museum, 656 Gould Hill Road, Contoocook will offer a "**Summer Wild Edibles**" workshop on **August 27 (raindate, August 28) from 11 AM - Noon** with outdoor expert, Rudy Bourget. Join us for a walk around the orchard and through the woods. Learn how to identify common wild edible plants and prepare them. Learn safety rules for plant collecting as well as environmental and conservation issues related to this fun hobby. **Preregistration is required; enrollment is limited to 15. Minimum age is 11; with an adult, the minimum age is 9.** Cost is \$7 for museum members; \$10 for nonmembers. **Call 603-746-6121 to register.** For more information, www.littlenaturemuseum.org. The Museum will be open for viewing following the workshop.

Rudy Bourget has taught survival skills at the Museum for the past four seasons and he has studied primitive outdoor and wilderness survival skills for over 40 years.



(photo courtesy of The Little Nature Museum)

Save the Date:

NH Children in Nature Conference

***Where the Children Play:
Discovering, Creating and Using Outdoor Spaces***

October 5, 2011
at the Cody Outdoor and Conference Center on Ossipee Lake

Join us to explore the many ways we can reconnect children, youth and families with nature, whether by discovering new ways to use our backyards, city parks and other existing outdoor spaces; creating new outdoor spaces in schoolyards and neighborhoods; or conserving community land and providing access to community spaces. For updates and additional info, see www.nhchildreninnature.org/events.

Grant Opportunity: Apply for a PLT GreenWorks Grant! Deadline is September 30th. Grants are available for up to \$1000. Grant application is online at www.greenworks.org

Recommended web resources:

Check out the EPA's Global Climate Change website for students at <http://www.epa.gov/climatechange/students/>

Discover the Forest website <http://www.discovertheforest.org/>



Visit us on the web at <http://www.nhee.org>

If you have questions or comments contact the Newsletter Editor at acerno@earthlink.net

Sign up for the NHEE list-serve to stay updated with EE professional development, grant and program opportunities at nhee-l@maillist2.nh.gov