

8th Annual BEEN Educators' Conference

Workshop Descriptions:

Session 1:

A. Science Inquiry - Wondering and questioning

Presented by: Patty Melville 1st grade, Muddy Brook Elementary

Appropriate for: Elementary Schools

This three part workshop will include modeling questioning techniques used to introduce a new science unit, a presentation by Project Native on the work they can do with schools, and will conclude with a hands on project where participants will discover what a scientist does and then make a "Wonder Wheel" with paint and yarn.

B. Waste Stream Management as the Context for Environmental Education

Presented by: Craig Westcott, Director, Samson Environmental Center, Darrow School

Appropriate for: Elementary, Middle and High Schools

Learn about how modern humans are harnessing the idea of biomimicry in ecological design, and how some schools are using as the context for an ecologically-conscious education. case studies and hands-on workshop ideas present participants with curricula and activities immediately applicable to all levels of instruction in all types of schools.

C. Growing Our Numbers with Math in the Garden

Presented by: Judy Boschetti, Youth Educator, Berkshire Botanical Garden

Appropriate for: Elementary and Middle Schools

The workshop will show how horticulture and gardening can provide an engaging context in which math concepts can be taught and practiced. The emphasis will be on using authentic materials and supplies and real-life scenarios for problem solving with upper elementary/middle school students.

D. Water Quality Primer

Presented by: Alison Dixon, Berkshire Outreach Manager, Housatonic Valley Association

Appropriate for: Middle and High Schools

The Housatonic Valley Association collected water quality data from multiple sites along the Housatonic River for several years. The samples were tested for nitrates, phosphorous, and bacteria. Temperature, pH and dissolved oxygen levels were measured. This raw data is available for you to use in your classroom. This workshop will give you an opportunity to analyze and interpret the data, gain an understanding of the Massachusetts Water Quality Standards and an appreciation for how land use affects the health of the river. Participants will leave with a CD of HVA's Water Quality Data.

E. Garlic Mustard: an edible invasive

Presented by: Aimee Gelinias, Tamarack Hollow

Appropriate for: Elementary, Middle and High Schools

Garlic mustard is an invasive plant that has rooted itself in our ecosystem crowding out native plants. Learn how to identify and remove it while creating a hands on workday for students that concludes with an edible garlic mustard pesto! Handouts provided, video/photos presented.

Session 1 workshops continued on next page

F. Rock & Roll: Earth Science for Upper Elementary Teachers

Presented by: Dale Abrams, Flying Cloud Institute

Appropriate for: Elementary Schools

How does the Earth surface change over time? What forces build mountains and cause earth quakes and tsunamis? What are the building blocks of the earth crust and soil and how are these elements continually recycled and transformed over eons of time? Participants will learn ways to bring visual clarity and hands-on experiences into the classroom, while addressing earth science standards.

G. Bringing Research Techniques Into the Classroom

Presented by: Artemis Roehrig, Flying Cloud Institute

Appropriate for: Elementary and Middle Schools

Integrate hands-on environmental science research techniques and field studies into curriculum. Set up indoor and outdoor research projects to teach students data collection, measurement, and representation, as well as quantitative and qualitative science narrative.

H. Energize your Classroom

Presented by: Cynthia Grippaldi, Education Coordinator, Center for EcoTechnology

Appropriate for: Elementary, Middle and High Schools

An overview of energy use, forms and sources, renewable and non-renewable options, efficiency and climate change. Lesson plans and hands-on activities are applicable to classroom and/or community use.

Session 2

A. Water Quality Testing

Presented by: Asha Von Ruden, 7th & 8th grade science, Mt. Everett High School

Appropriate for: Elementary and Middle Schools

The health, type and abundance of aquatic organisms depends on the health of the water they live in. Many factors affect the health of a body of water, and there are fun and easy ways that teachers and students can determine how suitable their local river or pond is for living creatures. In this workshop, teachers will learn ways that they can test water quality - by testing the chemistry of the water itself, and by catching, identifying and classifying the organisms that are living there.

B. Middle Grades Math and Weather Connections

Presented by: Mark Hanok, Litchfield Hills Weather Center

Appropriate for: Middle Schools

Even middle grades students who are failing in math, can learn key math concepts including ratios and proportions, converting decimals to fractions and percentages, functions and probability. Through hands-on activities that feature building actual weathervanes and barometers, using these instruments to predict the weather, and reading the landscape of the southern Berkshires, these students can become successful math learners and enjoy math.

Session 2 workshops continued on next page

C. Sustaining Common Grounds: The Necessity of Shared Work on Campus

Presented by: Craig Westcott, Director, Samson Environmental Center, Darrow School

Appropriate for: Elementary, Middle and High Schools

Necessary work has a transparent purpose, answering to actual need, not merely to duty, external standard, fashion, or buzzword. Sharing necessary work creates campus environments where meaning and connection to a place are developed as students, teachers, and staff bond, interact, and find personal importance in relationships to resources.

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E. Explore Watershed dynamics in clay

Presented by: Meredyth Babcock, Marmalade Productions

Appropriate for: Elementary Schools

Get your hands on a Watershed and your mind around the value of a wetland. See the effect first hand of a forested area on a steep slope. This workshop is playful and dynamic like the watershed itself. It is for those who don't mind getting a little messy for water will be sprinkled, sprayed, dumped and followed on its amazing journey through the watershed.

F. A Housatonic River Mural

Presented by: Karen Lyness LeBlanc, Education and Outreach Coordinator, Project Native

Appropriate for: Elementary and Middle Schools

Workshop will emphasize the local history of the Housatonic River and human impact on the river. Participants will learn about the riparian ecosystem and local history through the creation of a temporary mural. This fun and creative activity combines art, history and ecology, while providing an opportunity for individuals to work in small groups and develop cooperative working skills.

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H. State of the Birds

Presented by: Gayle Tardif-Raser, Mass Audubon/Berkshires

Appropriate for: Elementary, Middle and High Schools

Mass Audubon recently released the results of its long term study "State of the Birds". Some of the declines are startling, and the species that are increasing tell us much about the nature of Massachusetts. We'll explore the use of data and discuss classroom applications in response to this study, and workshop participants will leave with a classroom action plan to help the declining bird species of Massachusetts.

Session 2 workshops continued on next page

I. Bringing Research Techniques Into the Classroom

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Integrate hands-on environmental science research techniques and field studies into curriculum. Set up indoor and outdoor research projects to teach students data collection, measurement, and representation, as well as quantitative and qualitative science narrative.

J. How to Take Kids Outdoors

Presented by: Rene Wendell, Conservation Ranger, The Trustees of Reservations, Bartholomew's Cobble

Appropriate for: Elementary, Middle and High Schools

For some the thought of taking a group of children outside is a scary one. But, it need not be! Children love the woods and, in fact, do a great deal of learning in the natural world. Richard Louve coined the term Nature Deficit Disorder for those kids deprived of the outdoors. Come find out the tricks and joys of taking children outside from an outdoorsman and experienced outdoor educator. Dress warmly as we will be going outside!

Session 3

A. Science Inquiry - Wondering and questioning

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G. Mentoring Young Learners in Nature

Presented by: Tammis Coffin, Community, Land & Story

Appropriate for: Elementary Schools

Outdoors, we will walk through simple activities that heighten curiosity and creativity with young learners outdoors. We will integrate the sciences with arts and language and we will draw on improvisational games and mindfulness practices. No special equipment or training is required, just a willingness to share in a joyous experience of discovery and delight. You will leave with concrete ideas for inspiring self-directed discovery among your students and for empowering them to claim the natural world as their own. Your leader draws on her decades of work with young people at nature centers, parks and museums. Please arrive dressed for the weather.

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J. Integrating Science into Language Arts

Presented by: Artemis Roehrig, Flying Cloud Institute

Appropriate for: Elementary School

Incorporate science, including research projects, observation techniques, and classroom animals/insects, into language arts curriculum.