

714 Lacey Road, Forked River, NJ 08731 Tel (609) 971-7002 Fax (609) 971-3391 www.SoilDistrict.org

2013 Environmental Educators Roundtable 3:00 PM – 7:30 PM

2 Hour Programs

A. EcoTour Trail of the Great Bay Blvd. Peninsula

Presented By: Terry O'Leary of Cedar Hollow and Bob Birdsall of Birdsall Nature Photography

Take a virtual field trip from Tuckerton Seaport to Little Egg Inlet. Along the way, discover the rich history and diverse wildlife habitats of a maritime forest, coastal dune thickets, freshwater pond, salt marshes, and tidal creeks of this 5,000 acre special place.

B. Extinct New Jersey: A Progressive Perspective of our Prehistoric Past

Presented By: Marc Rogoff of the New Jersey Department of Environmental Protection

This program looks at the wildlife of our state that is no longer here. Come examine fossils of native New Jersey residents from twelve thousand to over one billion years ago.

The program will includes a PowerPoint presentation featuring

- * The geographical evolution of our state
- * The effects of extreme climatic changes
- * Dinosaurs, mammoths, and sharks (Oh my!)
- * How and where to go hunting extinct wildlife
- * And more!

A hands-on activity will allow participants to sift through 15 million year old sediments and identify (and keep) the fossils they find. Samples of New Jersey fossils from the presenters' private collection, the State Museum, and the New Jersey Geological Survey will be available for examination.

C. Backyard Composting/Vermicomposting

Presented By: Jayne Kinsell & Ruby Cramer of Ocean County Solid Waste Management/Ocean County Master Composters

The basics of home composting and vermicomposting will be taught. How people can manage their household organic and yard waste and create a valuable soil amendment to utilize in their yards. Teachers can apply the same concepts to creating a composting program at their schools.

D. Dig In to Soil – Assessing soil as an indicator of Ecosystem Health

Chris Smith, Worm Works, LLC & Eileen Miller, Soil Health Specialist, NJ Natural Resource Conservation Service

Soil provides the perfect material for a number of hands-on investigations that are appropriate for students of all ages. A functioning (healthy) soil is a key to a wide variety of ecosystem services and environmental benefits. Join soil experts as they lead you through a series of activities that are applicable to science, mathematics and include measurements and observation and interpretation.

Using the newly released Soil Health Assessment Guide, participants will examine various characteristics of soil to determine its relative health. Participants will also learn how to use a steel rod as an indicator to quickly obtain information as to the relative health of the soil. Participants will then directly measure soil bulk density. The class will be conducted outdoors, weather permitting, and will involve handling soil and kneeling on the ground. Bring gloves, wear older clothes and/or have a kneeling pad as per your needs. Participants will leave with a number of activities and lessons that they can utilize with their students.

E. Discover Jakes Branch Plant Discovery Trail

Presented By: Michelle Von Schmidt and Jason Hoger of Jake's Branch County Park

Educators can get a sneak peek at Jakes Branch Park's newest project currently in the works, their Plant Discovery Trail. This trail hosts a variety of native trees, shrubs and demonstration gardens, designed to promote Barnegat Bay Watershed -Friendly landscaping/gardening practices. This trail can be used as a tool for teachers to incorporate disciplines such as science, social studies and language arts. Educators will be provided with information and activities that will seek to inspire students to create their own projects right in their schools.

F. Volunteer Water Monitoring Training - Collecting Real Data to Protect our Rivers and Streams

Presented By: Joanna Marino of the New Jersey AmeriCorps Watershed Ambassador Program

Attendees will become certified as official NJDEP Volunteer Water Monitors. They will learn how to visually and biologically assess the health of a river or stream. They will sort through a real river sample, learn how to identify common macroinvertebrates, and learn why they are an important indicator of stream health.

1 Hour Programs

G. Lessons from a Storm: Post Sandy Activities in the Classroom

Presented By: John Wnek and students from the Marine Academy of Technology and Environmental Science

Post-tropical cyclone Sandy has affected so many lives across the region that this event will live on in the memories of all residents in this area. Of the residents, our students learned a great deal about the power of a storm and how it could impact lives and also impact the environment around them. Join us as we introduce activities that will show ecological impacts from Sandy and how these activities fit into your classroom. We will look at the storm's impacts from an ecological point of view and how these impacts can be measured in the classroom.

H. Understanding Sea Level Rise and How It Will Affect New Jersey's Shorelines Presented By: Diana Burich and Claire Antonucci of New Jersey Sea Grant Consortium

During this session, participants will explore the topic of sea level rise through demonstrations and activities designed to help students understand the connection between climate change and rising seas. Scientific principles dealing with the properties of ice, water, displacement, pressure and density will be incorporated into this series of activities designed to be easily recreated in the classroom.

I. Pinelands Overview: A Synopsis of New Jersey's Pinelands

Presented By: Joel Mott of the Pinelands Commission

This lively presentation includes sights and sounds while taking the audience on an insightful walk in the woods familiarizing them with the Pinelands. Conversation will also be focused on the importance of water to the area while highlighting the cultural, historic, and natural resources of the region. The goal of this program is to raise awareness, appreciation and further stewardship of the Pinelands by revealing this unique but fragile treasure.

J. Be Dr. Dolittle

Presented By: McDuffy Barrow, Natural Resource Education Foundation of NJ

In this interactive program, the instructor and the participants will be encountering decoys and/or plush toys which represent various common birds and mammals of our area. Participants will use hand operated calls or will learn to make animal sounds using their mouths and hands. The leader will occasionally use mouth operated calls to simulate some of the animals. The group will be moving through different "habitats" and encountering the animals which inhabit those particular niches.

K. Easy Classroom Amphibian Habitats

Presented By: John Knyff of Cattus Island County Park

An amphibian habitat in the classroom offers unique opportunities for teaching natural science, observational skills and student responsibility. We will discuss species appropriate for the classroom and how to get things up and running on a tight budget.

L. Liquid Gold: Cedar Creek at Double Trouble Village

Presented By: Andrew Anderson of Double Trouble State Park

Cedar Creek was the lifeblood of two Pinelands industries that emerged at Double Trouble Village. Through old photographs and stories you'll see how the lumber mill and cranberry bogs shaped the landscape while using fresh waters from this clear brook. We'll also look at the efforts to protect Cedar Creek that have lead to it being dubbed one of the most pristine rivers in the state.

M. Shells on the Shore of Island Beach State Park

Presented By: Becky Laboy, Island Beach State Park

Island Beach State Park is host to 10 miles of undeveloped beach and shoreline. Shells wash ashore every day, waiting to be collected and adored. What are shells? Where did they come from? How are they made? Explore, investigate and discover shells, the creatures who made them, and the creatures who borrow them, from the shores of Island Beach State Park!

N. Sample of Curriculum Offered by NJ Project WET

Presented By: Kevin Kopp of New Jersey Project WET

Project WET New Jersey offers three unique, nationally recognized, hands-on curricula; Project WET; Healthy Water, Healthy People and Wonders of Wetlands. Participate in a sample of activities from these curricula and learn how to participate or schedule a full workshop at your organization or school.

Key Note Presentation

Presented By: Pola Galie, Operations Manager, Lighthouse Center for Natural Resource Education, Natural Resource Education Foundation of NJ

This presentation will showcase the Lighthouse Center for Natural Resource Education and provide information about cost effective services, support, and programming, while highlighting educational opportunities for both teachers and students. Learn about the rich history, culture and mission of the Lighthouse Center. This presentation will mention how the Center also offers groups like the Girl and Boy Scouts, 4-H and other curricular and extra-curricular activities including community service opportunities as well as retreat, conference and intern/externships. Find out more about the Lighthouse Center and the activities at www.experiencebarnegatbay.org.