12th Annual Barnegat Bay Environmental Educators Roundtable – April 29, 2009 Doors Open at 2:30 for Open House, FREE Resource Sharing & FOOD First Program begins at 4:00 PM – Concludes by 8:00 PM

Two Hour Sessions

A. <u>Jake's Branch County Park Nature Center – Michele Urban & OC Parks Staff</u>

You are invited to visit Ocean County Department of Parks and Recreation's newest nature center located in Jakes Branch County Park, in Beachwood. You will receive a tour of the facility with an explanation of the exhibits, including the live animals, followed by a demonstration of one of their featured school programs "Get the *Dirt* on Pinelands Soil."

B. Seasons of the Pines -

A Photographic Tour of the New Jersey Pine Barrens Bob & Jean Birdsall, Terry O'Leary & Elizabeth Faircloth

Based on the highly acclaimed book, <u>Seasons of the Pines</u>, a new curriculum guide and interactive CD will be featured. <u>Seasons of the Pines</u> contains breathtaking photographic images of the flora, fauna and vistas that is the Pine Barrens. Participants will have the option to purchase the Curriculum kit, which includes the curriculum, CD, and autographed copy of the book. (\$40)

C. GeoCaching -

George Morgan, Bonnie Putney, and Seth Putney Friends of Forsythe National Wildlife Refuge

Geocaching is a "treasure hunt" using a GPS unit, You are given coordinates and locate the "treasure". Use photos, hand-held GPS units, and bring a keen mind for treasure hunting. Come experience a fun and unique way to incorporate technology and nature study into lessons on mapping, directions and GPS. For the first hour of this program, we will discuss the Barnegat Bay and its watershed. We will also briefly discuss photography methods and the use of the GPS units. For the second hour, we will do a photo-geocaching activity outdoors. Bring your own cameras (digital is not a requirement), binoculars, and your GPS if you wish. We have 10 GPS units for people to use. Dress accordingly and wear sturdy footwear.

D. <u>Cedar Bridge Tavern and the Revolutionary War – a Bridge to the Past</u> Tim Hart, OC Historical and Cultural Commission

Get a personal glimpse into our county's colorful past and visit this newest County acquisition! Ocean County Parks and Recreation has acquired the Cedar Bridge Tavern (1741), the last remaining building of one of the "forgotten" towns of the NJ Pine Barrens, and the likely site of the last documented land engagement of the American Revolution. You will receive a 45 minute power point presentation and a guided tour of the tavern and the surrounding pinelands. Learn how this key transportation crossroads was bypassed by 20th century roads and protected from over 250 years of pinelands forest fires. Experience how you can show your students the "place based" learning experience of national history on a local level within the environmental constraints and opportunities of pinelands ecology.

1 Hour Sessions – Must Choose Two – One from Each 1 Hour Time Frame

E. <u>Landscapes for Learning –</u> Rich Mohr, Rutgers Cooperative Extension

From Seed to Fruit; the George Washington Carver Story; Mendel's Mysterious Bean Genes; Living Upstream; and many more: explore powerful opportunities to experience science and history first-hand by creating indoor and outdoor Landscapes for Learning in your classroom and on your school campus. This indoor/outdoor hour of soil, ecosystem, and environmental stewardship basics will refresh your core content knowledge while connecting you to the deep and broad resources of Rutgers Cooperative Extension to support conducting real science on your K-12 school grounds.

F. <u>Citizen Water Monitoring: Bacteria –</u> Cara Muscio, Rutgers Cooperative Extension

Measure it, analyze it, collect it!

Water quality sampling can be time consuming, expensive, confusing, and difficult. Once you get results, how do you know what to make of them? In this class we will use new extension materials to examine how monitoring for E.Coli bacteria can be a quick lesson in pollution and water quality. The method used is easy, cheap, and can be done on just about any water source....if your school has no water nearby, how about installing a rain barrel on one of the gutters and monitoring that for bacteria growth? We will go over everything you need to get started, and how you can take this method to the next level.

G. <u>Hidden Pond Explorations –</u> <u>John Wnek, MATES Academy,</u> <u>Eric Somershoe, Mullica River Watershed Ambassador &</u> John Ciser, Barnegat Bay Watershed Ambassador

A freshwater pond, a mini watershed, a secret oasis – all a short walk from the parking lot at the Lighthouse Center. Join this exploration of this special place and learn about fresh water biological monitoring and hands-on pond study. Curriculum will be provided for this activity. The Hidden Pond is one of 8 Learning Stations developed on the Lighthouse Center property. Each Learning Station has a curriculum guide to accompany it. The Learning Stations are available as educational programs for visiting classes.

H. What's "hop-en-ing" in your Backyard? – Danni Logue, Jenkinson's Aquarium

Frogs and toads often receive a bad rap. They are frequently considered ugly and are avoided because many people believe the myth that toads can transmit warts. Fairy tales are no exception either, as princes are cursed to live as toads, only to be saved by a fair maiden's kiss. The reality however, is that they cannot give you warts, and that they are your insect-eating knight-in-shining-armor (no kiss required!). Join Danni Logue from Jenkinson's Aquarium and learn how to make toad abodes. You will also learn how to create an amphibian-friendly environment that is prime amphibian real estate!

I. <u>Jellyfish, the Bay, and Curriculum –</u> Brian Vernachio, Toms River High School North

Use real world environmental issues such as "Sea nettle increase in Barnegat Bay" to allow students to explore curricular concepts. Considering and investigating locally significant environmental and ecological issues, provides the opportunity for students to relate directly to global issues. Having topics that are connected to real life can help leave a lasting impression and lead to student stewardship and action.

J. Outrageous Owl Pellets – Pat Korotky, Cattus Island County Park, Cooper Environmental Center Cathy O'Leary, Stafford Intermediate School

Owls, the silent predators of the night, leave clues to their diet of small mammals in the form of pellets. Pellets consist of hair and bones that owls regurgitate following a meal. Since owls do not have teeth, the bones cannot be ground into small pieces. Pellets provide a unique forensic look into the habitats and habits of owls. The activities that will be presented can be easily incorporated into existing curricula and can satisfy necessary objectives and core standards. Leading to performing an actual owl dissection, we'll look for signs of owls, visit an owl nesting site, and follow an ecology curriculum plan for conducting an actual field research investigation including graphing and creative writing. Join this traditional nature study activity with some new twists.

Key Note Presentation(s) – Student Stewards

The students at Berkeley Elementary School have become true stewards of Barnegat Bay through a number of innovative projects. The students will present and highlight their experiences with "Trout in the Classroom", a unique program where students raise trout from eggs in special "chilled" tanks and release them in late spring. OCSCD has sponsored four schools with "Trout in the Classroom" tanks and materials. In addition, the Potter Creek Crusaders is an extra-curricular, after school club that has hosted numerous guest speakers and presentations, explored the Potter Creek watershed, and developed some innovative projects along the way. The creativity and enthusiasm demonstrated by the Berkeley Elementary School students will surely inspire more teachers to initiate similar projects with their students, thereby nurturing a growing army of Student Stewards.

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