

## **Rooting for Environmental Education at the Forest Resource Education Center-Green Side Up!**

**John Benton<sup>1</sup>**

Benton, J. 1996. Rooting for Environmental Education at the Forest Resource Education Center-Green Side Up!. In: Landis, T.D.; South, D. B., tech. coords. National Proceedings, Forest and Conservation Nursery Associations. Gen. Tech. Rep. PNW-GTR-389. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 99-101. Available at: <http://www.fcnet.org/proceedings/1996/benton.pdf>

Where else in New Jersey can people go to float acorns, bundle tree seedlings, nurture seeds, grow tublings, use a cross cut saw, make resource management decisions and have fun learning about New Jersey's forest resources? These activities and much more are a growing part of the "Seeds to Trees" environmental education programs offered year-round to students of all ages at the New Jersey Forest Resource Education Center (FREC) which is located on Route 527 in Jackson, New Jersey.

The Bureau of Forest Management, which is under the Division of Parks and Forestry, New Jersey Department of Environmental Protection, has a healthy, green and growing environmental education facility that uniquely uses hands-on interactive opportunities to learn about trees, seeds and forests. The FREC has over 420 acres of forests, one greenhouse, and thousands of seedlings that will one day be part of the future forests of our state.

"The Center is an outdoor classroom that provides hands-on experiences," explains John Benton, DEP Regional Forester. "It is a place where people of all ages can enjoy learning by doing, as well as gain skills and experience the excitement of connecting to our natural world." The FREC promotes the ideal that everyone can make a world of difference and can take the "green" ideas home and try them in their own communities.

Each program at the FREC is designed especially for the specific groups' needs or interests. The staff is trained to use the natural environment as a learning tool, especially in helping teachers feel comfortable and confident to make the outdoors a classroom across curricular boundaries. Visiting groups of students, scouts, youth groups, families and individuals are all welcome to visit the FREC, participate in its' programs and experience the wonder of the forest.

Several multi-faceted programs are conducted through the FREC, such as the famous Today's Acorns=Tomorrow's Trees. People are encouraged to collect acorns during the autumn months and bring them to be used to grow oak seedlings at the FREC. Another program that visitors enjoy is Volunteer Conservation Day. Held annually in the spring, groups of volunteers work along with the forestry staff to explore and learn about how trees grow, tree identification, benefits of trees, conservation and stewardship, nonrenewable and renewable resources, natural cycles and systems, wildlife habitat and much more. During every tour and activity, groups actively participate and gain experience to expand their foundation of knowledge in the natural world.

All visitors are encouraged to participate, look, smell and touch. You might be surprised that some tree roots smell like rootbeer, some seeds have wings, and some pine cones need fire to open and release their seeds. You might also imagine that you've become a tree and experience life as a conifer or a deciduous tree, such as our state tree, the Red Oak. You can feel the chill of a winter day in a cooler which keeps you dormant until ready for planting or feel the heat of a greenhouse to keep you growing year-round. "We make a great effort here to explore the processes in nature," said John enthusiastically.

John also stated the purpose of the center's activities in a matter of fact way. "The power of a seed means a lot to the kids and to the visitors .... It's stimulating to watch a seed grow into something, even in your own yard. Visitors get excited here to be able to participate in "greening" New Jersey. These seeds and trees not only have places to go to in terms of being planted, they also maintain environmental quality and are essential to what we, as people, need to live, survive and grow." Seeds of trees and ideas grow equally well here!

Why is the FREC mission so important? About 42% of the state's total land area is occupied by forests, with about 75% of this being privately owned. Though much "green" seems to cover the state's surface, increased rural development and the rate at which open space is disappearing intensifies the need for wise conservation and management practices. Maintaining healthy habitat and water quality and preventing soil erosion are just some of the conservation and stewardship issues that must be effectively communicated to current and future land owners, in order to better protect and preserve the state's diverse forest ecosystems.

As the FREC manager, John Benton has many ideas of how FREC programming will "branch out and take root" in the future. "I want this center to serve as a place where all types of information can be obtained regarding land use, trees, forestry, habitat, forest education and classroom projects. The activities and information shared by our staff are specific to New Jersey, informative for all ages, and easy to do, such as planting seeds at home. Because FREC is centrally located in the state and because its facilities are unique, I would like this site to become a training center for educators and other professionals, a classroom for all ages.

And what about FREC visitors who will one day be able to walk across the entire state in a matter of seconds? FREC recently received grant funds to construct a tree deck in the shape of New Jersey that will provide a platform to connect people to the natural resources of the state. Visitors will be able to easily experience and learn about the state's waterways, forests, and physiographic regions.

Benton would even like his staff to go into the local classrooms to conduct lessons and programs on school property. "Using leaves, acorns and natural systems as fun ways to teach math, science and a connection to the natural world. We need to team up with teachers and help to bring nature into the classroom." John's preferred creative, team-building, problem-solving classroom resource is called Project Learning Tree, PLT. Sponsored by the DEP, this classroom supplement for grades K- 12, has, since the mid-1980's, served as a popular and effective "window to the natural world" that successfully explores the interactions between

nature and people.

John Benton's one wish as a forester is simple. "What if every resident planted just one tree each year ... think about it! Seedlings cost as little as \$0.25 each and can grow and produce benefits for a lifetime. Trees are beautiful ... they help conserve energy and water, they create oxygen, they retain soil, they provide homes for wildlife .... They are a renewable natural resource, a "living" resource. What if every resident planted one tree each year?"

Volunteers and visitors alike are welcome to the FREC to learn about, enjoy and contribute to its activities that are already "branching out" and "taking root." For information about FREC tours, Project Learning Tree, seedling packets, special events and other information, call (908) 928-0029.

**Tree Facts:**

Trees can serve as wind and snow fences. If strategically placed they reduce winds and hold snow away from roadways, thereby reducing winter maintenance costs.

Trees provide: nutmeats (walnuts, pecans, hickory); fruit (plums, peaches, apples, pears); berries for jams and jellies, and sap for maple syrup.

Properly placed and maintained trees and shrubs significantly increase residential and commercial property values and conserve energy throughout the state.

Trees store carbon and clean the atmosphere. In 50 years, one tree generates \$30,000 in oxygen, recycles \$35,000 of water and removes \$60,000 of air pollution.

Trees help recharge ground water and sustain streamflow. Those planted along rivers, streams and lakes reduce water temperature and prevent or reduce bank erosion and silt. Keeping our forests healthy, green and growing keeps our watersheds clean.

Trees are renewable resources we use every day of our lives. What if every New Jersey resident planted one tree each year? We would have over 7 million trees planted annually.

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**FREC Events:**

*Trees to Seeds*---all year

*Fall Forestry Festival*---October 5, 1996

*Conservation Volunteer Day*---April 1, 1997

*Green 'n New Jersey*---April 22, 1997 (Earth Day Celebration)

*Arbor Day*---last Friday in April , April 28, 1997

*Project Learning Tree Workshops*---all year

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*"In the end we will conserve only what we love, we will love only what we understand, we will understand only what we are taught. -BABA DIOUM*

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