

WATERSHED WATCH

SUMMER 2009

'WILDLIFE SANCTUARY' SIGNS STILL AVAILABLE FOR \$10.00 EACH AT THE LISBON OFFICE. CALL FOR MORE INFORMATION.

REFORESTATION A SUCCESS

On April 18th, over 110 volunteers gathered to plant 3,500 hardwood tree seedlings on a section of abandoned strip mine on a new public park owned by the Columbiana County Park District in Madison Township. Of the parks nearly 460 acres, 100 were strip mined, and they now support little vegetation due to the compaction that typically happens when mined land is reclaimed.

After mining removes the vegetation, soil, and rock above a coal seam the coal heads for power plants, and the removed rock and soil is put back onto the site. Part of normal reclamation is for the large mining equipment to compact this rubble, and introduce grass. The resulting land is able to grow some grass and weeds but is incompatible for the normal forest succession that will turn land from field to thicket to forest over the years.

Instead, these highly compacted lands stay in a state of arrested development. The Madison Township site was reclaimed about

40 years ago, and little has changed since then. This lack of normal forest vegetation can cause problems in the watershed. Without vegetation, areas are prone to erosion and provide little benefit to wildlife. Rain does not infiltrate the ground, but quickly runs off carrying silt and sediment into the water. This runoff can sometimes carry with it heavy metals and acidic compounds exposed by mining.

In order to allow trees to grow in this location the soil had to be ripped with a ripping bar sunk four feet into the ground and attached to a 200 horsepower tractor. The tractor ripped the land in an 8x8 foot grid for trees to be planted at the intersections. This loosed soil not only allows trees to be able to grow, but also helps the land store water during rains and prevent runoff.

Once the soil was loose the only thing left to do was plant the trees. Volunteers were instructed by foresters on how to properly handle and plant the trees and planted a mix of hardwood species such as red oak,

Continued on page 2



Volunteers get the trees ready for planting.

Reforestation a Success continued from page 1

chestnut oak, mixed hickories, dogwood, redbud, black locust, and maple. Additionally, 10 rare blight resistant American Chestnuts were planted.

With loosened soil, the only thing left was to plant the trees. Led by local foresters, volunteers planted a mix of hardwood species such as red oak, chestnut oak, mixed hickories, dogwood, redbud, black locust, maple, and 10 rare American chestnut trees bred for blight resistance.

The planting is part of a wider regional effort to encourage scientific forest reclamation organized by the Appalachian Regional Reforestation Initiative (ARRI), a program of the Office of Surface Mining and Reclamation Enforcement. ARRI is working in partnership with the Appalachian Coal Country Watershed Team and the Eastern Coal Regional Roundtable to help watershed groups throughout Appalachia undertake these tree planting efforts. Many thanks to all the volunteers who came out and made our successful day possible!



Above: A group of volunteers from Huntington Bank gather after planting trees.

Below: Planting an American Chestnut



Mike West from the Columbiana County Park District shows a child how to plant a tree.

COMMUNITY GARDEN OPENS

The Little Beaver Creek Land Foundation has begun working with a dedicated group of volunteers to open a Community Garden in Lisbon. We hope our new project will connect our conservation efforts and environmental health with community health and revitalization.

The site of the garden is on land owned by the Village of Lisbon on Caldwell Avenue, just north of McKinley Elementary School. In addition to individual plots, areas have been set aside to grow fruit and nut trees for anyone to use. It is hoped that as the garden becomes established there will be surplus that will be donated to local food pantries. The space will use both annual and perennial crops and be used to demonstrate permaculture gardening options. The space will also be a site for future outdoor learning opportunities such as conservation landscaping workshops and programming with McKinley Elementary School students.

REFORESTATION SITE PICKED FOR OSU RESEARCH.

In addition to planting 3,500 trees, the LBCLF is partnering with Dr. David Ussiri, a soil scientist at Ohio State University to study the effect of reforestation on mine soils. Both before and after ripping, Dr. Ussiri tested the amount of carbon found in the soils to learn how much carbon can be captured by reforestation. Like all plants, trees bring in atmospheric carbon dioxide as they grow, and Dr. Ussiri believes that in addition to carbon captured in the plants, the mine soils will develop complex ecosystems that are able to capture atmospheric carbon. So as our forest grows, Dr. Ussiri will test the soil and compare his results with other mine soils.

Part of Dr. Ussiri's research is also to study the effect of loosening the soil using the ripping technique employed by the LBCLF. Next to the 3,500 trees that our volunteers planted, Dr. Ussiri planted trees without ripping to compare the survival, growth rate, and soil carbon sequestration of his test plot and our forest.

Understanding how reforestation effects mine soils could have a huge impact on this region. With carbon sequestration becoming more profitable, having a model for how much carbon a forest will hold when replanted will further show why this type of reclamation effort is worthwhile.

LBCLF HIRES SUMMER ASSOCIATE

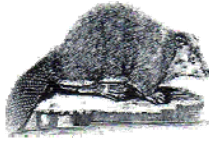
by Debby Ludwig

I'm the new VISTA Summer Associate here at the Little Beaver Creek Land Foundation. My primary responsibilities will be to oversee volunteers and activities at the community garden and monitor water quality at various sites in the county. I have a degree in Horticulture from the University of Wisconsin and am looking forward to learning more about permaculture and sustainable community agriculture. I am currently a certified West Virginia Master Gardener and also volunteer with the Beaver Creek Wildlife Education Center. I love doing all kinds of outdoor activities including backpacking, biking and kayaking. I'm always interested in learning more about natural history, but am especially interested in native plant ID and use.

EXPLORE THE OUTDOORS DAY SCHEDULED

The second annual "Explore the Outdoors with Your Family Because Time Together Counts" event is scheduled for August 8, 2009. The event is being held at Beaver Creek State Park and is put on by the Columbiana County Conservation Partners. The event will run from 10:00am to 4:00pm and will feature many events and speakers such as stream life sampling, nature walks, wildlife exhibits, clogging demonstrations, recycling demonstrations, and crafts. There will also be a free lunch. For more information contact the LBCLF office at 330-420-9507. Hope to see you there!





LITTLE BEAVER CREEK LAND FOUNDATION

130 Maple St
Lisbon, Oh 44432

P.O Box 60
East Liverpool Oh, 43920

Phone: 330-420-9507
Fax: 330-424-0577
E-mail: littlebeavercreek@gmail.com

WE'RE ON THE WEB:
LITTLEBEAVERCREEK.COM

PRESERVATION AND PROTECTION
FOR FUTURE GENERATIONS

EASY GARDENING TIPS

Gardens are a great way to bring wilderness and conservation into your own yard. By replacing your lawn with native flowers, vegetables, and other plants you can create a sanctuary for wildlife and provide healthy food for you and your family.

Here are some easy tips for starting a garden:

- Choose the location based on the light, water, and soils required for the plants you want to grow.
- Use sheet mulch to control weeds. All you need to do is put down a layer of cardboard where you want to plant and either add organic material like leaf compost on top and plant your annual plants in that. Perennials can be planted into the ground through small holes cut in the cardboard



- Use a rain barrel to collect water from your roof to use in your garden. This will save water, money, and reduce runoff.

Invasive Plant Workshop at Raccoon Creek State Park

Our partners at Raccoon Creek State Park in Pennsylvania are holding a workshop on invasive plants commonly found in the area. Identification and proper treatment of these plants will be addressed. Meet at the Park's Wildflower Reserve. For more information call 724-899-3611.