#### THE CATALYST

#### SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

THIS MONTH'S MEETING: Thursday 5/8/08 at 7 pm at Jennings Environmental Education Center, pizza and pop provided. 4/10/08 meeting attendance: C. Cooper, C. Denholm, M. Dunn, T. Grote, D. Johnson, V. Kefeli, W. Taylor

#### Jennings Hosts Demonstration of a New Approach to Hardwood Reforestation

Re-establishing a productive hardwood forest at abandoned and active mine sites can be a daunting challenge. To showcase a new approach known as the "Appalachian Regional Reforestation Initiative" (ARRI), the US Department of Interior, Office of Surface Mining partnered with the Jennings Environmental Education Center to implement a scale model. David Hamilton and Tom Shope (OSM) gave an overview of the ARRI program, explaining that, in this method, soil/spoil material is placed without (or with minimal) compaction to support reforestation. To celebrate Arbor Day and to "kick-off" this new effort, on 4/25/08, local residents and students had a "hands-on" learning experience by planting about 50 chestnut and oak seedlings with environmental educators, foresters, and representatives from the American Chestnut Foundation (ACF).



For more than 25 years, the ACF has worked to develop a blight-resistant American chestnut to restore this great tree of the eastern woodlands. **Sara Fitzsimmons**, ACF Northern Appalachian Regional Science Coordinator, was on-hand to provide much encouragement and knowledge. Visit their web site **www.acf.org** to learn more.

Also present was **PA Representative Dick Stevenson**, a member of the Environmental Resources and Energy committee, who provided some thought-provoking insights in the restoration activities to an attentive audience. Thank you for joining us at Jennings, Representative Stevenson!

Jennings staff Dave Johnson, Will Taylor, Gary Younkins, Wade Libecco, Jammie Kikel, Andy Desko, Brandy Miller, Stephanie Taylor, Eric Best, and Carol Shirey were expert hosts! The rain held off for the over 50 individuals who were on-hand to lend their green thumbs! Thanks to Andy McAlister (WPCAMR) and Tom Grote (SRI) for tirelessly documenting the event through photos and video on this cloudy, warm day.

Jennings is the **first site in Pennsylvania** to integrate the ARRI initiative with ongoing environmental education programs! For over 20 years, students, professionals, government agencies, and volunteers have worked side-by-side to develop and to evaluate innovative and environmentally-friendly abandoned mine restoration techniques. Of course, the on-going success of many activities at the demonstration site would not be possible without the unwavering support of **John Dawes, Foundation for PA Watersheds,** who was also available to share his personal knowledge about chestnut trees and reforestation!! It will be exciting to monitor the progress of the planted trees, especially the American chestnuts, a tree species, which was almost extinct due to one of the greatest ecological disasters in North America, where from 1900 to 1950 a fungus from Asia killed an estimated 3.5 billion trees!!!!

As all materials and site preparation were donated, a special, special "thank you" is extended to the other volunteers, including the **Quality Aggregates Inc., McClymonds Trucking, and Stream Restoration Inc.** To learn more about the Appalachian Regional Reforestation Initiative, visit http://arri.osmre.gov/ And watch for updates in future issues of the Catalyst to see how the trees are doing!



Attendees of the ARRI doins' help a homeschool group plant a variety of hardwood tree seedlings and nuts including Black Oak, Red Oak, White Oak, and American Chestnut at Jennings Environmental Education Center on April 25, 2008.

0

Т

0

T

Н

M

0

Ν

Т

Н

### **LiDAR Workshop**

A new technology is revolutionizing the way maps are being made today called Light Detection and Ranging (LiDAR). **Shaun Busler**, a SRWC participant, attended a workshop hosted by the South Western Pennsylvania Commission on April 21 at the Regional Enterprise Tower to learn more about LiDAR and the progress of the PAMAP program.

LiDAR is a remote sensing system used to collect elevation data of the surface of the earth. A LiDAR sensor, which consists of a laser and a high precision GPS unit, is mounted on an airplane. The sensor records the time difference between the emission of the laser beam and the return of the reflected laser signal to the airplane. Using special software, the collected data is processed to create geographically registered longitude, latitude, and elevation (x,y,z) positions for every data point.

LiDAR data is being collected throughout the entire state through the PAMAP program spearheaded by the PA Department of Conservation and Natural Resources (PA DCNR). So far, only 21 counties in western Pennsylvania have access to the data through a beta program with Pennsylvania State University. Stream Restoration Inc. has joined the beta program to test the usefulness of the data in designing passive treatment systems and other applications. Preliminary testing has proven this data to be very accurate and reliable.



2' contours generated from LiDAR data overlayed on an aerial photo at the BC16 discharge in the Blacks Creek sub-watershed.

**George Baumer**, Penn State professor, demonstrated software developed by the US Forest Service to manipulate the raw data collected by the sensor called LAS files. These files allow you to visualize and analyze all the data points collected by the LiDAR sensor. Using this software, you can not only see the surface elevations of the earth, but you can also see buildings, trees, and even transmission line wires!

Thanks to the **Southwestern Pennsylvania Commission (SPC)** for hosting this wonderful event! The SPC is the cooperative forum for regional collaboration, planning, and public decision-making. The Commission develops plans and programs for public investments; fulfills federal and state requirements for transportation, economic development, and local government assistance programs; and operates with public involvement and trust. The SPC is a 60+-member governing body comprised of representatives from all 10 counties in southwestern PA, the City of Pittsburgh, the Governor's Office, and other state and federal agencies. Check out the official SPC web site for more information: **www.spcregion.org** 



# The KIDS Catalyst SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY

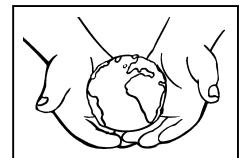


### Earth Day Bookmarks

Earth Day 2008 was celebrated on April 22 by millions of people all across the globe! It was a time to learn more about our planet and how to take care of it. Everyone can do their part to make Earth cleaner and greener. Here are 7 simple ideas for you kids to try—and remind your parents to do these, too!

- 1. Turn off the light when you leave a room (save electricity)
- 2. Choose products that are not over-packaged (reduce waste)
- 3. Walk or ride a bike instead of traveling by car (save gas, reduce air pollution)
- 4. Shut off the water while brushing your teeth and take shorter showers (save water)
- 5. Collect kitchen scraps and make your own compost (reduce waste)
- 6. Recycle plastic, glass, paper, etc. (reduce waste)
- 7. Use canvas or other re-usable bags for shopping instead of plastic (reduce waste)

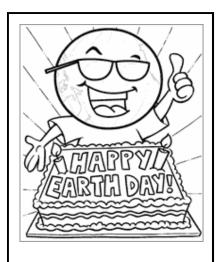
We'd love to hear how you or your family makes an effort to help our planet! Write to us and share your work! And have fun cutting out and coloring the Earth Day bookmarks below. May they be a reminder all year long how important it is to help our planet be healthy!



Take care of the Earth!



Help keep our Earth SUPER

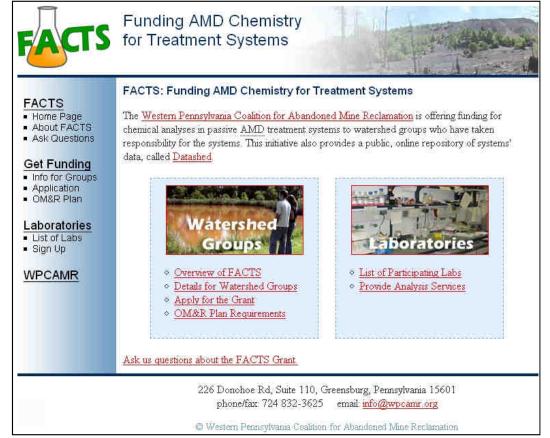


NONPROFIT ORGANIZATION U.S. POSTAGE PAID PERMIT NO. 434 CRANBERRY, PA

Thanks to The William & Frances Aloe Charitable Foundation, Environmentally Innovative Solutions, LLC, Dominion Peoples, Amerikohl Mining, Inc., Quality Aggregates Inc., Drs. Ron & Kathy Falk Family, BioMost, Inc., Allegheny Mineral Corporation and PA DEP for their support. For more information contact: Slippery Rock Watershed Coalition, c/o Stream Restoration Incorporated (PA non-profit), 3016 Unionville Road, Cranberry Twp., PA 16066, (724)776-0161, fax (724)776-0166, <u>sri@streamrestorationinc.org</u>, <u>www.srwc.org</u>. May distribution: 1355

## **Need Funds For Monitoring Your Passive System?**

Does your watershed group have a passive treatment system? Do you need financial assistance to conduct water monitoring? If you do, help is available. The Western Pennsylvania Coalition for Aban-Mine Reclamation doned (WPCAMR) has partnered with the PA DEP, 241 Computers, BioMost Inc., and Stream Restoration Incorporated to offer the "Funding AMD Chemistry for Treatment Systems (FACTS) Program". The proggram, which was funded by the PA DEP, uses an on-line, data management system called Datashed as a central point of contact for all participating laboratories and watershed groups. Funding is available to cover the cost of laboratory water analyses as well as water monitoring field kits. To be eligible,



you need to be a watershed group or conservation district that is maintaining a passive system on an abandoned mine site located in Pennsylvania and have an Operation and Maintenance Plan. For more information check out the FACTS informational website at <a href="https://www.wpcamr.org/facts/">www.wpcamr.org/facts/</a> or contact Cliff Denholm by phone at 724-776-0161 or by email at <a href="mailto:streamrestorationinc.org">streamrestorationinc.org</a>