

THE CATALYST

SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

THIS MONTH'S MEETING: Thursday 8/13/09 at Jennings Environmental Education Center, pizza and pop provided. 7/9/09 attendance: B. Busler, C. Busler, I. Busler, M. Busler, S. Busler, D. Carney, S. Carney, C. Denholm, M. Dunn, D. Johnson, V. Kefeli

2009 Pennsylvania Statewide Conference on Abandoned Mine Reclamation and Coal Mining Heritage

July 13-16 marked the 11th annual PA Statewide Conference on Abandoned Mine Reclamation and Coal Mining Heritage. Over **150** attendees made the trip to Johnstown and the Living and Learning Center at the University of Pitt-Johnstown campus!!! With this year's conference theme of "Challenges and Opportunities in Interesting Times", many speakers shared their expertise on their own unique experiences in researching and remediating AMD. The SRWC's **Shaun Busler** and **Cliff Denholm** were two such speakers. Shaun presented a Power-Point talk all about Datashed, while Cliff teamed up with intern **Doug Buehring** (see *back page*) to present new and exciting information on manganese oxide recovery. Both presentations were very well received, leaving Shaun, Cliff, and Doug encouraged by the very positive feedback from many conference-goers! Also in attendance at the conference was SRI's **Tom Grote**, who served as a Moderator and was also a valuable member of the Planning Committee.

This year's conference included the topics of renewable energy and its ties to abandoned mine lands and mine drainage; brownfields, grayfields and mine-scarred lands redevelopment; the implementation of SMCRA Title 4 and 30% Set-Aside Program; mine pool water reuse; policy dealing with abandoned mine lands and mine drainage; how to prevent an AMD remediation project from being "railroaded" quickly; Pennsylvania coal mining history; and much more, including some great field outings to visit local AMD treatment sites that many conference attendees participated in!

The AMD Treatment site tour was an optional all day tour of at various treatment sites on the Stonycreek watershed located in Cambria and Somerset Counties. The first stop on the tour was at Stonycreek Whitewater Park in Conemaugh Township, which showcased how the river had been cleaned up and turned into a park for kayaking and canoeing. Following the park stop, the next two stops were at Oven Run site B and D, where tour members got to see the local passive treatment systems. Two mine drainage discharges were included on the tour, one at the Hinemyer Discharge and the other at the Reitz #4 discharge in Central City.

The tour also included visits to the Flight 93 temporary memorial in Shanksville, PA and the Windber Coal Heritage Center in Windber, PA. At the Flight 93 memorial, tour members got to see the area where the plane went down from afar, listen to the story about the flight and the passengers, and look around the temporary memorial. The Windber coal museum tour provided a history of coal mining in Windber and the contained a large section to the Quecreek mine rescue in 2002. Afterwards, tour members had the option to go back to the UPJ Living and Learning Center or eat at the newly refurbished Windber Hotel.





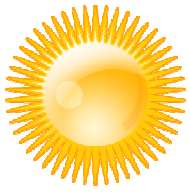
Here is Bryan Page fishing for rocks out of an 18-inch pipe flowing at 800 gallons per minute at Fox Run Phase II. The rocks were presumably placed there by bored adolescents and the rocks needed to be removed. As you can see high-tech equipment was needed for the removal of the obstructions, a shovel, waders and a fine straw hat.

A Tale of Two Interns...

Hello everyone! My name is **Bryan Page** (see *Photo of the Month*), and I am one of the lowly interns **Stream Restoration Incorporated** has hired for the summer. First and foremost I would like to thank everyone at SRI for this awesome internship and experience. The activities I have been a part of this summer have taken me everywhere and doing just about anything. I have been planting seeds, live stakes and saplings at many different locations, installing weirs, building miniature vertical flow ponds, and fighting a cantankerous lawn mower - just to mention a few things. Before I get into what I have been and will be doing around the office, I would like to give some of my history that has brought me to this internship. I was born in Meadville, PA, in 1985 and remained there until I left for college. During my junior year, while pursuing my chemistry degree at **Slippery Rock University**, I discovered the Environmental Geoscience degree and the Geography, Geology and the Environment Department. After a brief, but exhilarating, talk with **Dr. Patrick Burkhart**, I was sold and switched my major from chemistry to environmental geoscience. In the GGE department I was given opportunities that not many other college students have. I have traveled to the Finger Lakes in New York, Seneca Rocks in West Virginia, the coast of Rhode Island, camped on the shores of Lake Erie, made countless trips around Western PA, and, my personal favorite, I camped in the Badlands of South Dakota for 8 days where, when the sun rose, there were bison in camp. Also, I have attended conferences in Denver, Colorado, and Philadelphia. Another great opportunity was to have the ability to do research with Dr. Burkhart. Working with him proved to be the greatest opportunity I had at SRU. I have done two poster presentations at two different Northeastern Geological Society of America Conferences and have been published in a peer reviewed field guide. I would also like to extend a thank you to Dr. Burkhart for his generosity, guidance, and friendship throughout my last years in school. This internship is the final step for me to receive my degree in Environmental Geoscience, and I will also graduate with a degree in Environmental Chemistry.

This internship is another example of a great opportunity not many others get - the people I work with are tremendous, I get to work both outdoors and inside (mostly outdoors), and I truly believe that Stream Restoration Incorporated is doing good for the community and the environment. One of the first jobs that I worked was one of the "plantings" where I would go to various sites and plant seeds, live stakes, or saplings, which was interesting to me because I had never worked with a "dibble bar" (a tool for planting saplings). The dibble bar is fun to say and to use. After doing a couple of plantings I was sent on to build weirs. A weir is basically a dam in a stream that can measure the discharge of the stream. For me that means I get to do carpentry in the woods. One of my favorite jobs so far was building a miniature Vertical Flow Pond (VFP) at a site in Luzerne County. When I was given the task of building the VFP, I decided that due to the amount of work and the distance from my house that I could camp at the site. I spent two days outside working in the woods by myself and got paid! That deal does not get much sweeter for myself. Except for my battles with SRI's lawn mower, the work I have done with them has been exactly what I wished my years of scholastics would bring. I look forward to our next big project: building an aerator at Fox Run Phase II, which should prove to be the most arduous task yet.

Please see back page for the story of another great intern!!



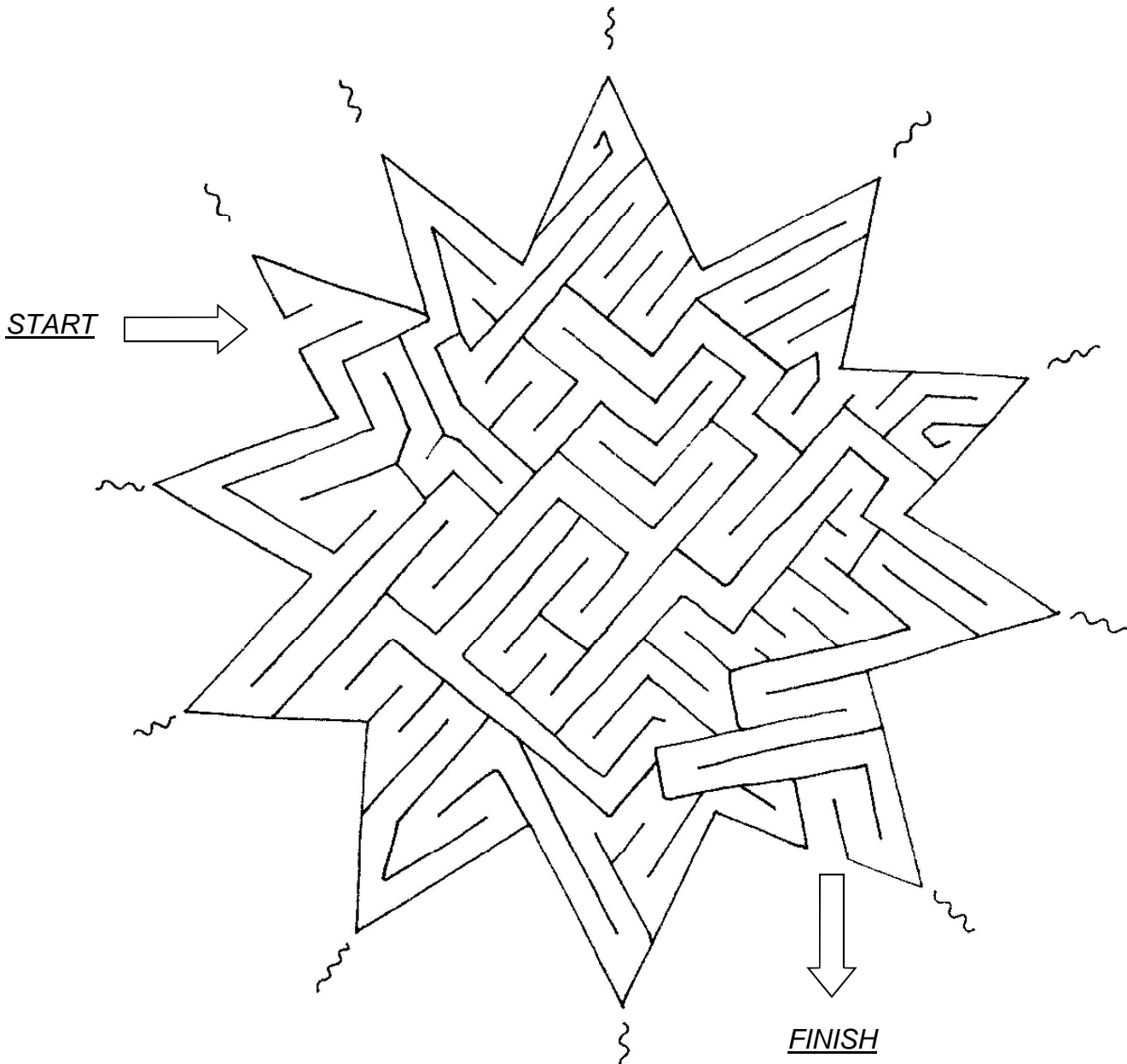
The KIDS Catalyst

SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



Sunny Days, Sunny Maze!

The highest recorded temperature in the history of Pennsylvania was 111 degrees Fahrenheit in the year 1930! While it has been a cool summer for the state so far, no doubt we'll be seeing some hot and sunny days this August, one of the hottest months of the year! Don't think about complaining about the heat, because winter will be here soon enough. If you were wondering, the coldest PA temperature was 42 degrees below zero! Think about that the next time you're outside sweating in the warm summer sun! Try to navigate your way through the sunshine maze below. If you can do it, and if you send us your completed paper, we'll mail you a free gift certificate!



Name _____ Age _____

Address _____



Slippery Rock Watershed Coalition c/o Stream Restoration Incorporated
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...Two Interns Tell Their Tales (cont'd from page 2)

My name is **Doug Buehring** and I am an intern at **BioMost, Inc.** this summer. I am currently a senior at **Penn State University** studying Environmental Systems Engineering and minoring in Meteorology. I was born in Bethel Park, PA, in 1987, where I have lived my entire life. In 2006, I graduated from Bethel Park Senior High School and went to school at Penn State Main Campus that fall. Originally I started in Meteorology since it was a topic that I have been interested in my entire life. I switched my major to Environmental Systems Engineering my sophomore year of college based on a recommendation from my advisor. I still enjoy Meteorology, so I decided to minor in the subject instead. When I'm not at school studying my life away, I enjoy sports and traveling. Last summer, I studied abroad at the University of Sussex in Brighton, England. After my course ended, my friend and I backpacked through Italy, Switzerland, and Germany for 10 days. Last winter break, a couple of my friends and I decided to drive across the country from Tennessee, where my roommate lives, to Los Angeles and San Diego, CA. I learned a great deal about different cultures and life in general from my travels. This summer, I wanted to have a first hand experience dealing with the major that I am pursuing, which led me to obtain an internship position this summer with BioMost, Inc.

So far this summer at BioMost, Inc., I have been developing a market for the iron and manganese oxide that BioMost recovers in their passive treatment systems. Currently, I have looked into the possibility of putting the oxides into building products (concrete, tile, bricks, etc) and fertilizer. I have done some testing with them by adding the metals to the concrete as a colorant. The results were somewhat discouraging since it took a large amount of manganese to significantly change the color. I am currently in the process of determining if the manganese adds any strength to the concrete.

Also, I added some manganese to the soil to determine how the plants respond to different levels of manganese. In June, I attended a conference on Green Building Products and found out that when our products are mixed into building products, they can be used to obtain LEED points.

Another aspect of my internship is trying to see if any companies want to test our metals in their products. With the oxides being a recovered material, many companies that use recycled materials in their products have expressed great interest. Currently, I have sent samples to 5 companies. They have yet to test the samples, but a couple of them have expressed long-term interest. Hopefully, in the upcoming weeks, I will find more companies that are interested in the materials and maybe even get a commitment from one of them long term.

