

# THE CATALYST

## SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

**THIS MONTH'S MEETING:** Thursday 4/13/06 at 7 pm at Jennings Environmental Education Center, pizza and pop provided. 3/9/06 Meeting Attendance: C. Barkley, S. Busler, C. Cooper, T. Danehy, C. Denholm, M. Dudich, M. Dunn, K. Durrett, D. Johnson, V. Kefeli, W. Taylor, K. Williams

### Join the SRWC for the Harrisville Community Days Festival!!!

A parade, craft and food vendors, trade show, non-profit booths, bingo, bands, air rides, special programs, spectacular fireworks show and more are just some of what makes the **July 4 Harrisville Community Days** celebration so much fun! An event that can draw up to 10,000 people, Harrisville Community Days is held at Harrisville Community Park on Route 8, located just a few miles east of Grove City. And this year, the **Slippery Rock Watershed Coalition** is pleased to be joining the excitement of the day! SRWC participant **Will Taylor** from the Jennings Environmental Education Center attended a March 8 Harrisville Community Days Meeting to learn more about how the SRWC could help with Community Days. Will reported back to the SRWC that those attending the meeting, including president **Brenda Bole** and secretary **Heather Krenn**, were very excited about the potential to work together and that they welcomed the SRWC's support. Will explained the SRWC to meeting attendees and provided them with handouts and copies of "Accepting the Challenge", the watershed primer authored by several SRWC participants (mainly Will!) explaining the history, causes, problems, and solutions for abandoned mine drainage in western PA.

We hope you will make the journey to Harrisville to join us for a fun time this Independence Day!! Though details are still being worked out, a 5K race is another possible activity which may be scheduled for the day. PA State Representative **Dick Stevenson** will be speaking, and could possibly be joined by a "Super" speaker (still a work in progress)! SRWC participants will be there manning booths and running programs, and will offer several hands-on activities for folks of all ages. We'd be happy to meet and talk with you, and answer any questions you might have regarding the Slippery Rock Watershed, the Coalition, acid mine drainage, etc.

Help is needed and greatly appreciated!!! If you are interested in helping, several areas of need include:

- Chinese Auction (donated items or contacts to businesses willing to make donations)
- Parking
- Set up and tear down
- Selling raffle tickets (during the day)
- Copying and stapling the program
- Advertising

Please contact **Will Taylor** at **724-794-6011** or email **wilbutaylo@state.pa.us** with any questions or to volunteer/help in any way! Hope to see you in Harrisville this 4th of July!!!



Previous participants having fun posing in front of an SRWC display at a past Harrisville Community Days celebration.



Dave Johnson, park manager at Jennings Environmental Education Center, presents his carving of the *Gokstad* dragon. Dave made use of AMD treatment by-products iron and manganese oxides from passive treatment systems as stains and paint (see article below).

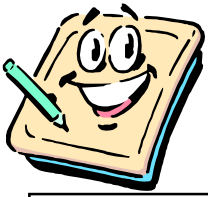
### AMD and the Viking Connection

Archaeology has proved to be one of the best and most extensive resources of information on the Vikings. One of the most interesting discoveries was made in 1880, when the nearly intact *Gokstad* ship was excavated. This amazing ship, built circa 890 AD, stood 76 feet long, 17 feet abeam, and was constructed of oak. It was found around the Oslo Fjord in Norway, one of three enormous earthen mounds which were excavated to reveal whole ships inside. The ships, called the *Tune*, *Oseberg*, and *Gokstad*, were buried in blue clay. This wet clay soil created a sealed environment which kept the wood from disintegrating, ideal for preservation.

**Slippery Rock Watershed Coalition** participant **Dave Johnson**, who is park manager at **Jennings Environmental Education Center**, recently built a wood carving of a Dragon canopy piece from the *Gokstad* longship (see photo at Left) out of yellow pine as a winter project. Dave says he has always liked the Viking/Celtic art forms and admired the original ship's style and design. While working on the carving he discovered that the original was "painted" using iron and manganese oxides as the color base—the same products that Jennings' passive treatment systems remove as pollutants! Dave thought it would be a fun connection to use AMD treatment by-products as stain/paint on his *Gokstad* Dragon carving. Iron oxide with various treatments can produce rich reds, oranges, yellows and earth browns. Manganese with various treatments can produce rich blacks, grays and umbers (browns). Manganese treatment with heat, to produce the oxides, is very dangerous and should be done with caution. These basic "Earth pigments" are very stable and have been used since cave man days. Dave made a test palette of about 25 colors and shades, converted some to paints and some to stains, and used about 9 on the carving.

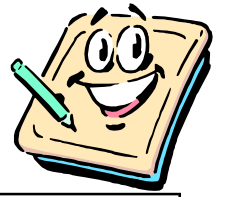


Metals are commonly leached out of AMD and may be visible by the color of the deposits left behind. The rusty red/orange color often seen in streams receiving AMD is actually a stain on the rocks called "Yellow-Boy," or ferrous hydroxide, indicating oxidized iron. White indicates high levels of dissolved aluminum, whereas black indicates manganese when it appears as a dark stain on creek rocks. Dave obtained the iron used in his stain from a passive treatment system at JEEC, and used manganese from De Sale Phase II, a passive treatment system maintained by **Stream Restoration Inc.** **How exciting to see a liability turned into an asset!** Iron oxide is used as a pigment in a number of products, including concrete, cement block and paving stone, mortar, roofing shingles, paint, wood stain, mulch, and plastics. Iron oxide is typically preferred in these products because it yields rich earth tone colors and is nontoxic, nonbleeding, and weather-resistant. Folks have also tie-dyed t-shirts with it and even painted cars! It will be interesting to follow the progress of innovative new uses for AMD precipitates like iron oxide as water treatment technology changes and improves in the not-so-distant future!



# The KIDS Catalyst

SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



## Easter Egg Coloring

How would you decorate this bunny's Easter egg? We'd love to see! If you mail us your picture, we'll send you a free gift certificate! Here is a fun Easter egg trivia fact: Americans buy more than 60 million chocolate bunnies each Easter! How many chocolate eggs could YOU eat?!



Name \_\_\_\_\_ Age \_\_\_\_\_  
 Address \_\_\_\_\_



Slippery Rock Watershed Coalition c/o Stream Restoration Incorporated  
 A PA Non-Profit Organization  
 3016 Unionville Road  
 Cranberry Twp., PA 16066

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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, [sri@streamrestorationinc.org](mailto:sri@streamrestorationinc.org), [www.srwc.org](http://www.srwc.org). April distribution: 1280

## Spring is in the Air with Maple Sugaring at Jennings

In March, **Jennings Environmental Education Center** celebrated the end of winter with the seasonal tradition of maple sugaring. The program, open to school groups, scout troops, and public audiences, displayed parts of a tree and demonstrated the art of maple sugaring from past to present. With approximately 200 visitors in attendance on Sunday alone, staff performed magically in transforming the forest into a real working sugar bush.

The presentation began indoors revealing the mystery of how a tree works. From there visitors traveled outdoors where they learned to identify tree species. After properly distinguishing a maple, participants tried their hand at drilling holes for taps. The program continued with a journey back in time to the discovery and early production of syrup. Since maple sugaring is the oldest continuous industry in North America, additional stations kept visitors well intrigued despite such chilly weather. The program concluded with a visit to a working evaporator and a taste of real maple syrup. A sure promise that spring is on its way!



Thanks to Jennings volunteer Emily Pritchard for contributing this article