THE CATALYST

SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

THIS MONTH'S MEETING: Thursday 9/11/08 at 7 pm at Jennings Environmental Education Center, pizza and pop provided. August meeting was cancelled for the AMD/AMR Conference.

Making Headlines...

We are happy to share the news of how the restoration efforts of the SRWC have once again been *in* the news! Three publications have recently featured articles about the achievements and environmentally-based restoration innovations in the watershed.

The July 2008 issue of *Technology News and Trends*, a monthly newsletter of the **US Environmental Protection Agency**, highlighted innovative approaches to remediate and reclaim former mining sites impacted by AMD. The article contributed by Scott Roberts, the Deputy Secretary of the Office of Mineral Resources, PA DEP, Margaret Dunn, participant of the SRWC, and Cliff Denholm of Stream Restoration, Inc. is entitled "Passive Systems Treat AMD While Allowing Recovery of Metal Oxides." The article describes the efforts of the SRWC as a public-private partnership having constructed 16 passive treatment systems since 1994, which annually treat over 750 million gallons of AMD. "Before" and "after" chemical parameters and data depict the dramatic improvements in Seaton Creek and its De Sale Restoration Area. The use of native plants in creating wetlands is described, as are the efforts to recover manganese oxide and low-pH iron oxide to be used as pigments for bricks, concrete, and ceramics. Thanks in large part to the PA DEP and its Growing Greener program, the SRWC has been able to develop cost-effective, innovative treatment strategies to optimize cleanup of many former mining sites.

Slippery Rock University's magazine *The Rock* ran an article in the Spring 2008 issue regarding Lois Hamilton's Pottery Dome. The connection to the SRWC? Hamilton was one of the first ceramists to see the potential for using manganese and iron "muck" (the sediment byproduct left behind from the SRWC's work in reclaiming former mine sites) in pottery. Hamilton is a former art teacher who operates her pottery art studio with a commitment to the environment. The Rock's magazine article describes Hamilton's experiences as a teacher and as a partner of the SRWC's in environmental cleanup. Her unique building, a geodesic dome, includes a gallery and a studio. SRWC's Margaret Dunn says the sludge material would be buried or taken to landfills if not for Hamilton's vision of use in ceramics. We admire Hamilton's impact in molding the arts and the environmental restoration movement!

In "Take Back the Woods", an article by Wil Taylor of Jennings Environmental Education Center, the efforts of 50 vol-

unteers are described as they fought hard on April 26th to eradicate the invasive species which had been invading JEEC. This piece ran in The Point North magazine's July 2008 edition. Wil depicts the threats of non-native invasive plant species, which have shrewd strategies for survival and propagation. Established native plants cannot compete with the alien invaders and the consequences can be devastating. Wil estimates there are 1000 invasive plant species impacting over 100 million acres in the US. Invasives can destroy habitat and annihilate the diversity of plants and animals in PA. Jennings strives to prevent the spread of these unwanted invasive plant species within its park borders while increasing awareness of the problem so it can be addressed outside the park. The community was invited to learn about, identify, pull, and EAT invasive species at Jennings' annual "Take Back the Woods" event. The three invasive species of focus this year were garlic mustard, multiflora rose, and Japanese barberry. After cut-



ting and pulling for a few hours, volunteers enjoyed a special catered lunch from North Country Brewing, Inc. which featured locally grown foods and several varieties of invasive plants, some of which they had just pulled from the ground! Everyone who participated also took home a cookbook with information on local invasive plants, how to prevent their spread, and how to prepare them into a number of delicious dishes! To learn more about invasive plants and how to deal with them in your yard, visit www.dcnr.state.pa.us/forestry/invasivetutorial.htm.



Left to Right: Margaret Dunn (SRI), Rich Beam (PADEP), Joel Ponterero (PADEP), Stan Sattinger (MRWA), Dave Hamilton (OSM), Scott Roberts (PADEP), and Mark Fedosik (MRWA) attend the June 25 dedication of the North Fork Montour Run Restoration Facility (see H.O.P.E. article featured on back).

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Ohio River Watershed Celebration and Watershed Awards Update: Register Now!!!

The 7th Ohio River Watershed Celebration (ORWC), to be held on 9/25/08, will focus on the positive efforts and impacts of <u>small local organizations</u> on their watershed. These groups, with dedicated volunteers addressing local issues, are a very important "cog" in the overall restoration of the Ohio River Watershed. As many groups have the proverbial "shoe string" budget, the ORWC wishes to celebrate and honor them with **four \$500.00 awards and four \$250.00 awards**.

How can your group be a recipient of an award? Register yourself at www.streamrestorationinc.org/rsvp and also check the appropriate box on the registration form indicating that you are bringing a poster display. Your display will be voted on by a panel of judges. Each category will receive a \$500.00 and \$250.00 award. The results will be announced during the cruise and checks awarded at that time.

The award categories are: Community Outreach and Education; Most Innovative and Cutting-Edge Projects; Best Overall Display; Best Example of Partnership Group.

Eligibility Requirements: Organizations (Previous winners are eligible) must: Be from the Ohio River Watershed; Work on a local watershed issue; Be a formal or informal association, alliance, conservancy, hunting or fishing club, school group, environmental group, FFA, 4H, or other like-minded group; Not be a local, state or federal agency or private consulting firm.

We hope to see you at the ORWC! This year's event is sure to be another fun and exciting time for all who come. Some exciting new changes will be taking place this year which will guarantee enjoyment for all. We will be having two boats this year: the "Networker Cruise" on the Majestic and the "Imagination Cruise" on the Empress. "The Networker Cruise" is for adults 18 and older who are interested in networking with other professionals including Watershed Groups, Government Agency Personnel, Business and Industry Leaders, Educators, and Interested Citizens. This cruise will depart Station Square at 1:00 PM on the Gateway Clipper Fleet's Majestic sailing down the Ohio River through the Emsworth Lock and Dam and back to the Point during the three-hour cruise. The theme for this year's event is "Innovative Energy for a Green World". Innovative energy topics will be presented throughout the cruise. Many points of interest, current and historical, will be highlighted with a very informative narration provided by Celebration Committee members. The history of Neville Island, water wells, and river ecology are a few of the topics that will be addressed. Over fifty (50) watershed related displays will on the Majestic providing you the opportunity to meet and discuss with organization representatives. The ORWC schedule offers opportunities for everyone to learn about and celebrate the recovery of our rivers and watersheds in a very relaxing and fun event! For more information and to register, please go online at www.streamrestorationinc.org/rsvp.

"The Imagination Cruise", specifically designed for children grades K-12, parents and teachers, will feature 25 interactive activity stations aboard the Gateway Clipper's "Empress" boat. <u>Please note the Imagination Cruise has reached</u> <u>full capacity and we can no longer accept new registrants.</u>



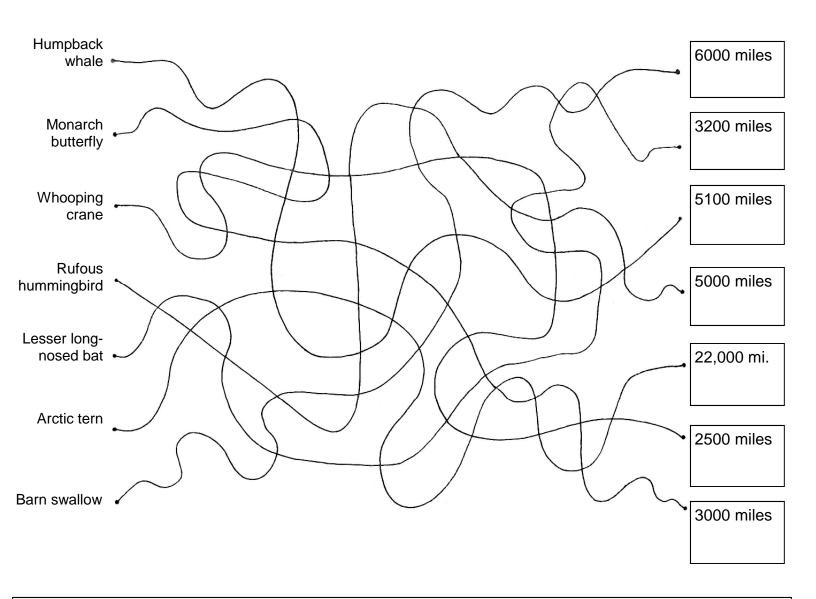
The KIDS Catalyst slippery rock watershed coalition fun activity



Miles of Migration!

When an animal migrates, it moves to a different place. Animals migrate for many different reasons. Some animals migrate to find better sources of food, water, or shelter. Other animals migrate to visit particular breeding grounds, rear their young, or find warmer climates. The frequency of animals' migrations also differs. Some animals migrate seasonally, others migrate once in a lifetime or only to breed, and others are nomadic and migrate wherever the best resources and environments are at that time.

Some animals migrate huge distances, while others migrate very short distances. Certain animals take breaks along the way, while others travel nonstop. Animals may bulk up before their big trek, or they may stop and eat along the way. 7 animals that migrate are shown on the left of this paper. The distances that they travel round-trip every year during migration times are shown on the right. Follow the path to discover which animal travels the most miles! You can write the animals' names in the correct boxes that match their migration miles. If you mail us your completed paper, we will send you a free gift certificate!



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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), 434 Spring Street Ext., Mars, PA 16046 (724)776-0161, fax (724)776-0166, sri@streamrestorationinc.org, www.srwc.org. Sept. distribution: 1355 copies

Highlighting Other Partnership Efforts (HOPE!)

Partnerships in the Montour Run Watershed

On June 25, Margaret Dunn, Tim Danehy, and intern Kelly Wacker of the SRWC were pleased and excited to travel to Findlay Township in Allegheny County to take part in the Montour Run Watershed Assocation's (MRWA) dedication of the North Fork Montour Run Restoration Facility (see *Photo of the Month*)! Invited speakers included **Deputy Secretary for Mineral Resources Management J. Scott Roberts of the Department of Environmental Protection; David Hamilton, Clean Streams Coordinator for the U.S. Department of Interior's Office of Surface Mining; David Sheridan, Construction Engineering Manager for the Pennsylvania Turnpike Commission (TPC); Chairman of Findlay Supervisors Tom Gallant; and other officials of state and federal agencies involved in the project.**

This new passive treatment system is completed and is now successfully treating water impacted by AMD. It is the third of four major mine drainage treatment facilities funded in the watershed. This remediation system will improve the health of nearly two miles of the North Fork of Montour Run. The North Fork Montour Run project includes the siting, design, permitting, and construction of an eight-acre passive treatment system. The facility includes a collection system with alkaline drain, three oxidation ponds, two vertical flow ponds and a one-third acre aerobic wetland. Wetland plantings will be completed with the help of MRWA volunteers to complete re-vegetation of the site and will help to enhance the treatment system. An estimated 25 tons of acid and 22 tons of iron compounds entering Montour Run each year from this site alone will be eliminated. The resultant improvement in water quality will go far toward improved survival of fish and the aquatic life forms that support them in the main trunk of Montour Run. In addition, the wetlands habitat has been expanded and enhanced, increasing the potential for wildlife utilization.

Construction of the North Fork Montour Run Restoration Facility is an outgrowth of the Montour Run Watershed Assessment and Cleanup Plan Project performed under MRWA sponsorship and funded by the Growing Greener grant program of the **Department of Environmental Protection**. The discharges along Route 30 between Imperial and Clinton, PA ranked high in the list and were cited as major sources of pollution of the North Fork of Montour Run due to significant levels of acid, iron, and other dissolved metals. The cost of the North Fork Montour Run project has been funded with money from the DEP's Growing Greener program and funding from the Watershed Cooperative Agreement Program of the OSM. In addition, in-kind services for the construction of an anoxic limestone drain, two sediment ponds, and associated piping were provided by the TPC and Mashuda Construction in conjunction with the building of the Southern Beltway's Findlay Connector. Also, matching cash, goods, and services have been provided by the prime contractor, BioMost, Inc., and its partners Quality Aggregates Inc., Stream Restoration Incorporated, and **G&C Coal Analysis Lab.** "What is tremendously exciting is the positive environmental impact this partnership effort has made," said Tim Danehy, BioMost's system designer. "The untreated water has very high levels of iron, over 180 mg/l, and the concentration of acid is even higher. This is a testament to the positive impacts a dedicated group can have." The Allegheny County Airport Authority, another partner with the MRWA, has shown its dedication in helping to improve the environment and local water quality. To learn more about MRWA, visit their web site at www.mrwa.info/.