

THE CATALYST

SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

NEXT MEETING: 7 pm on 5/11/17 at Jennings Environmental Education Center, pizza and pop provided.
4/13/17 meeting attendance: H. Bloom, C. Denholm, B. Kuban, S. Smith, W. Taylor, F. VanAtta, S. Van Der Wal

BioMost Inc. and Stream Restoration Incorporated Provide Passive Treatment Workshop at ASMR

On April 9th, SRWC participants **Tim Danehy**, **Buck Neely**, and **Cliff Denholm** were invited to provide a workshop at the annual American Society of Mining and Reclamation conference. This year's conference, which was held in conjunction with the West Virginia Mine Drainage Task Force and the Appalachian Regional Reforestation Initiative, took place April 9-13 in Morgantown, West Virginia. Cliff started things off by providing an overview of water monitoring, chemistry, and acid mine drainage characterization. Buck then discussed all the types of passive treatment and how to design a treatment system. Finally, Tim talked about project implementation, costing, and operation and maintenance. Many of the examples, photos, and experiences discussed during the workshop were about our very own passive treatment systems located in the Slippery Rock watershed.

Also attending the conference representing Stream Restoration Incorporated and the SRWC were **Shaun Busler** and **Vickey Michaels**, who sold **Clean Creek Pottery**. Many conference attendees were interested in learning about how the metals recovered from our treatment systems are used as pigment in many beautiful one-of-a-kind pieces of pottery, made locally and hand thrown. If you'd like to see for yourself, check out the amazing collection of "products with a purpose" at www.cleancreek.org. Online purchasing is easy, with a wide variety of items for sale, including plates, bowls, mugs, vases, bird houses, jewelry, outdoor-themed trinkets, holiday ornaments, and more. The raw materials (iron oxide and manganese oxide) are also available to purchase.

Many interesting workshops, field trips, presentations, and social gatherings filled four days of conference time, with plenty of chances to network and reconnect with old friends, as well as meet new folks with a shared passion for reclaiming land and water impacted by mining. And we were all excited by the great honor of **Tim Danehy** winning the **Reclamationist of the Year award!** Congratulations, Tim!

BioMost Inc. Provides Treatment System Tour with Friends of the Cheat

In addition to the workshop mentioned in the above article, **Tim Danehy** and **Buck Neely** also provided a tour of treatment systems for the American Society of Mining and Reclamation conference. The tour was held on April 11th, but because the conference was in West Virginia and only a half day long, the BioMost team utilized projects they had completed working with the Friends of the Cheat watershed organization. The tour focused on two very different projects. At the Pase Active Treatment system, BioMost provided services to improve upon an existing tipping-bucket lime doser. Improvements included the use of patented MixWell and A-Mixer (a trompe powered air-lift mixer) as part of a multi-stage mixing process to improve lime utilization, decrease lime usage, and reduce sludge generation. The second stop of the tour was at the North Fork Greens Run Railroad Refuse Passive Treatment System. The system was designed by BioMost and built by Solid Rock Excavating, Inc. It was at this site, many years ago, that our friend Tiff Hilton first observed significant low pH iron removal occurring in a channel that led us to including these natural processes in some of our treatment systems in the Slippery Rock Watershed such as De Sale Phase 1 and McIntire.



Tim Danehy and Buck Neely describe how a trompe works to the tour group at the Pase Active Treatment system.

Slippery Rock University Students Sample Wolf Creek

SRWC participant **Cliff Denholm** of Stream Restoration Incorporated always enjoys working with college students. On April 4, 2017, Cliff had another opportunity to do so by providing his assistance to Slippery Rock University professor **Dr. Becky Thomas's** field ecology class during their aquatic ecology lab at Wolf Creek. While Dr. Thomas taught the students how to sample and identify macroinvertebrates (those “waterbugs” we can see with our naked eye, such as mayflies, stoneflies, caddisflies, dragonflies, water striders, mussels, crayfish , etc.) Cliff worked with the students on conducting water testing in the field and explained what the results mean in terms of water quality. By including both water chemistry and aquatic insect sampling, the students got to observe first-hand how good water quality and biodiversity are related. Of course Cliff did not miss the opportunity to discuss the Slippery Rock Watershed Coalition, acid mine drainage, and passive treatment!

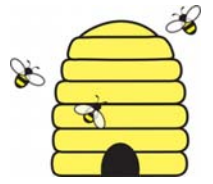


Class is always more fun when you get to go outside and play in a stream! SRU field ecology students got in some great hands-on learning on April 4.



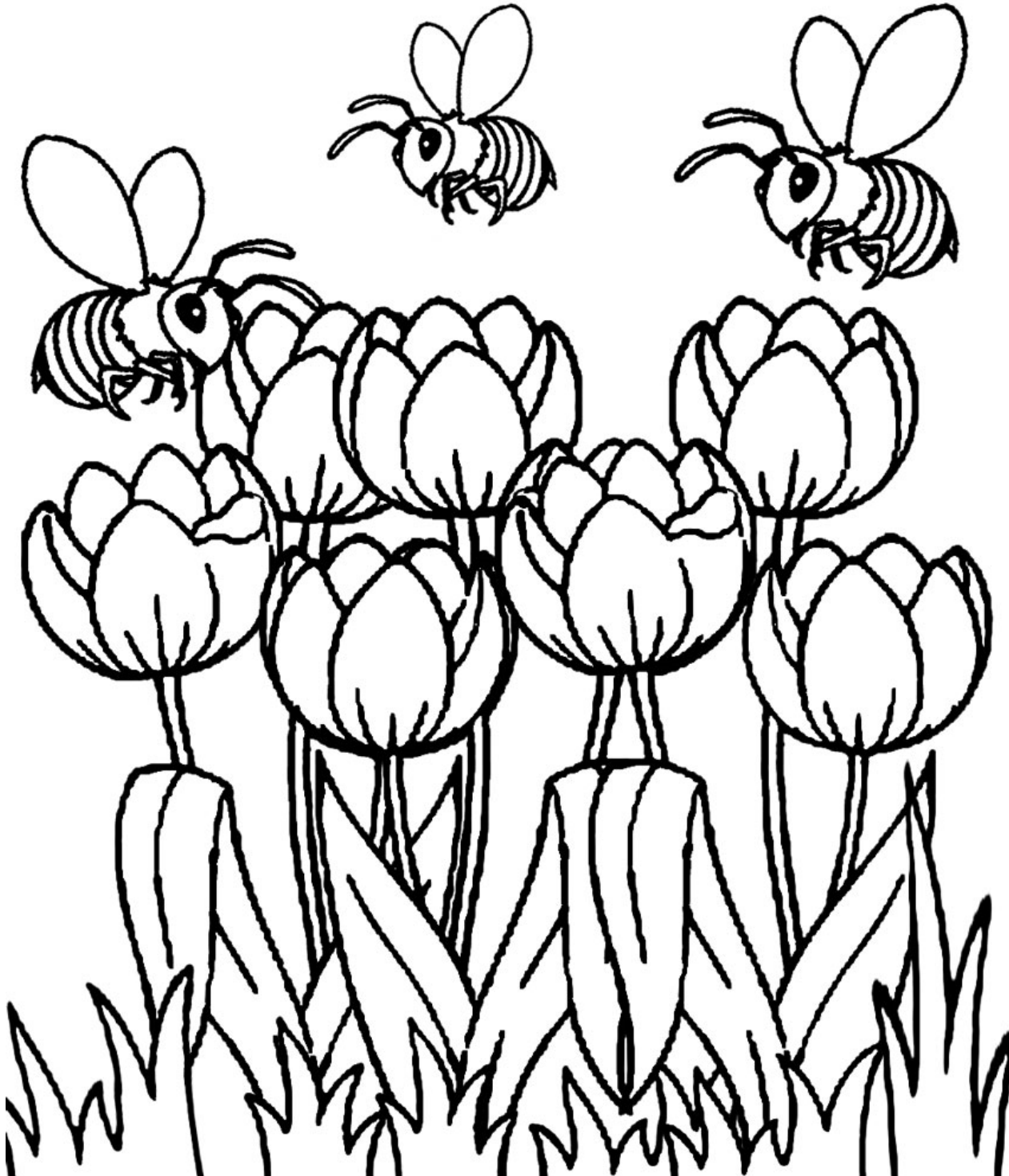
The KIDS Catalyst

SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



"Bee" Kind to Pollinators

Honeybees are important pollinators of plants of many fruits, nuts, and vegetables that we enjoy. Dozens of food crops are partially or totally dependent on honeybee pollination. They are crucial to our nation's food sources. And these bees are in trouble. In 2013, the average beekeeper lost 45% of bee colonies during the winter. 30% losses are still common now. Pesticides and the varroa mite are two likely culprits. We can all do our part to help honeybee populations by not using pesticides and by planting flowers. And remember... male honeybees don't have stingers. Worker honeybees have barbed stingers but will die if they sting someone. Remember bees are more interested in going about their business of finding pollen and nectar than they are in stinging you. If you don't bother a bee, the bee won't bother you. Have fun coloring the bees and tulips picture below! If you mail us your coloring, we'll send you a \$1 credit to spend at Amazon. You can save your credits up to buy something extra special!



Name _____ Age _____ Parent email _____

Address _____



Slippery Rock Watershed Coalition c/o Stream Restoration Incorporated
A PA Non-Profit Organization
434 Spring Street Ext.
Mars, PA 16046

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. May distribution: 321 copies

Butler County Household Hazardous Waste and Electronics Collection Dates

If you are unsure of what to do with your leftover paint, pesticides, televisions, computers, batteries, chemicals, etc., we may just have an answer for you! The **Board of Butler County Commissioners**, with grant funding from the **PA DEP**, continues to provide a program for you to get rid of these unwanted items. There is a collection site at the corner of Ash Stop Road and Route 68 in Evans City (across from the Forward Township Building), where unwanted, hazardous waste can be dropped off for a nominal fee. You must pre-register by calling contractor ECS&R at **1-866-815-0016** to schedule a drop-off appointment.

Summer collection dates are as follows:

May 20, June 3, June 24, July 15, and August 19.

Items accepted include:

Cleaning Products, Pesticides, Batteries, Automotive Products, Flammable Products, Fluorescent Bulbs & CFL's, Lawn & Garden products, Pool Chemicals, Aerosols, Chemicals, Mercury Thermostats, Propane Cylinders, Paint & Paint Products, Televisions, Stereos, Tape Players, Laptop Computers, Computers, Printers & Phone Systems, VHS & Cassette Tapes, Mobile Phones, CD's, DVD's, CD Players, Fax Machines, VCR's, Copiers, and now small freon appliances like window air conditioners, dehumidifiers, and dorm-size refrigerators.

Thank you **Sheryl Kelly** (Environmental Specialist and Recycling & Waste Management Coordinator for the Butler County Department of Recycling and Waste Management) for reminding us of this excellent chance to rid our homes of unwanted and potentially dangerous materials. For general questions about recycling in Butler County, you can contact Sheryl at (724) 284-5305 or email skelly@co.butler.pa.us. The web site www.recyclebutler.us is also a wonderful source of recycling information!