

THE CATALYST

SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

THIS MONTH'S MEETING: 7 pm on Thursday 5/10/12 at Jennings Environmental Education Center, pizza and pop provided. 4/12/12 meeting attendance: C. Denholm, M. Dunn, V. Kefeli, and W. Taylor

Don't Miss the Next Meeting (5/10/12)!!!!

Westminster College Student Presentations

Once again, **Dr. Helen Boylan's** Advanced Chemistry students from **Westminster College** participated in a water sampling event on Friday, April the 13th, but don't worry, no bad luck was encountered. In fact, it was another beautiful day, courteous of our good luck charm Dr. Helen Boylan. Prior to conducting the sampling, **Cliff Denholm** of **Stream Restoration Inc.** provided the students with a tour of the soon-to-be-completed McIntire passive treatment system where they learned about the history of the area and the purpose of each treatment component. Following the tour, the students broke into groups to conduct the water sampling and field tests. Thanks to **Wil Taylor** of the **Jennings Environmental Education Center** for providing the field kits for the students to use. The students took the samples back to their lab where they will perform the analyses. The students will present their findings at the next SRWC meeting which will be held on Thursday, May 10, 2012. So please come out and support the students and hear about how the new system is doing!!!

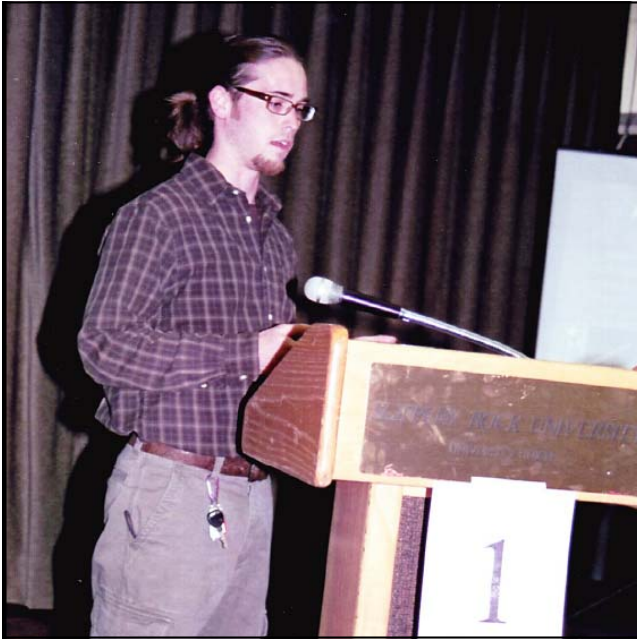
By the way, the McIntire Passive System treats the worst quality discharge in the 408-sq. mi. Slippery Rock Creek Watershed!!! This discharge was responsible for about 30% of the total pollutant load to Blacks Creek. Thanks to the PA Department of Environmental Protection US EPA 319 Program for making this possible and to our partners, the Tiche Family, Quality Aggregates Inc., Butler County Conservation District, Harsco Minerals, and many others. Stay tuned... more to come...

"Business Matters" Magazine Features SRWC, SRI, and BioMost

The **March 2012** edition of "**Business Matters**" magazine featured an article entitled, "Industry Supports Sustainable Practices". Author **David Means** visited the office to learn more about the passive treatment methods used to remove metals and neutralize acidity in abandoned mine drainage. David was interviewing local companies that extract natural resources and work hard not only to minimize impacts but also to improve the environment. **SRI, BioMost, Inc., Amerikohl Mining Inc., and Allegheny Mineral Corp.** were all companies identified by David as having "environmental practices that excel".

It was a pleasure for **Bryan Page, Shaun Busler, Tim Danehy, Cliff Denholm, and Margaret Dunn** to host David and share information about the value of partnership efforts between mining companies and restoration groups. We also enjoyed discussing the environmental benefits of passive treatment technology and the forest reclamation approach (focusing on the re-growth of hardwoods). Also highlighted were the importance of partnering with local volunteers, the work of the SRWC in cleaning up Slippery Rock Creek, and the unique items made by local glass and ceramic artists in partnership with Clean Creek Products. (Clean Creek Products (www.cleancreek.org) is a part of SRI (non-profit) which processes the iron and manganese compounds recovered from passive treatment components for use by the artists as colorants.) Clean Creek Products, which currently donates a portion of all sales proceeds to area watershed groups, is excited to be exploring even more ways to use this leftover material.

Thanks to David and to "Business Matters" for bringing to light just some of many of the positive things being accomplished by local companies!!!



A student presents his research findings on "Plant Biodiversity on Fabricated Soil" at the April 10th Symposium for Student Research, Scholarship, and Creative Achievement at Slippery Rock University (please see article below).

Symposium Celebrates Student Achievement; SRWC's Dr. Kefeli and Students Present Research

The Symposium for Student Research, Scholarship, and Creative Achievement at **Slippery Rock University** took place on April 10 in the Multi-Purpose Room of the University Union. Dozens of students participated in this forum where their achievement in all disciplines was shared and celebrated. The Symposium, and *The Journal of Scholarly Endeavor*, which includes abstracts of every Symposium presentation, showcase significant examples of student-faculty collaboration. Through the Symposium, students learn about research methods in their disciplines, the scholarly processes of information dissemination, and the creative achievement of exhibiting and performing original work. Exhibits, performances, poster sessions, and oral presentations were all a part of the day's events. Topics were varied and included art, biology, chemistry, communication, computer science, dance, economics, education, English, the environment, exercise and rehabilitative science, geography, geology, history, library, music, parks & recreation, philosophy, physical education, physical therapy, physics, and theatre.

The Slippery Rock University Center for Student Research was created in 2008 with the goal of providing any Slippery Rock student who wishes to work closely with a faculty member in a research, scholarly, or creative experience with the opportunity to do so. **Dr. Valentin Kefeli**, SRWC participant, worked with several students on some of the projects presented at the Symposium. Students **Jordan Beaver (Slippery Rock University)**, **Ryan Yarrington (Slippery Rock High School)**, and **Taylor Houston (Slippery Rock High School)** gave an excellent oral presentation, "Plant Biodiversity on Fabricated Soil." Because soil produced by natural processes is a non-renewable resource, their Soil Fabrication Research Project is an attempt to create soil comparable to that produced naturally by mixing the necessary components manually. Working at **Jennings Environmental Education Center (JEEC)**, four cold frames were constructed in late spring 2011 and filled with fabricated soil. They were left for the summer to see what plants, if any, would take root. One of the goals of the Fabricated Soil Research Project is to avoid the overuse of chemical fertilizers, pesticide control and genetically modified crops. The students' attempt to investigate plant biodiversity in fabricated soil was a way to protect and regenerate soil.

These same three ambitious students also had a poster session entitled "Cold Frames and Wooden Modules with Fabricated Soil for Plant Growth and Propagation." Their faculty advisors were **Professor Valentin Kefeli (Robert Morris University)**, **Professor Christopher Leininger (Slippery Rock University)**, and **Shari Mastalski (MS3 Alumna, Slippery Rock University)**. In a project sponsored by the **Slippery Rock Rotarian Club**, the students grew willow and poplar trees at **JEEC**. They used trunks of young trees for the formation of cold frame walls, with arches for the cold frames created from one-year old poplar twigs. The cold frames were filled with fabricated soil. Rooted willow cuttings and American chestnut seedlings were planted. The focus of their research was the use and re-use of biological material for regenerative wood construction. The students also built wooden modules filled with fabricated soil (consisting of different carbon and nitrogen containing substances) for use in the construction of green roofs and green walls. The main idea is to create modules or blocks refilled by fabricated soil, which could be considered as a platform for the selection of Pennsylvania native plants for green roofs. We applaud the hard work of Dr. Kefeli's students and each of the students who took part in the Symposium!



The KIDS Catalyst

SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



Go Fish!

Fishing is fun! If you are under the age of 16, you can fish for free in Pennsylvania (a current Pennsylvania fishing license is required for anyone age 16 and over). The Pennsylvania Fish and Boat Commission has a great web site you can check out to learn more about fishing, including the basics if you are new to this fun activity! Visit their web site at www.fish.state.pa.us. May is "Take Me Fishing in PA" month! The web site has information on upcoming regional family fishing events to celebrate May! Registration information is also available. We hope you enjoy the fishing word search below! If you mail us your completed paper, we will send you a free gift certificate!

BAIT	FLY	MINNOWS	STREAM
BOAT	HAT	MOSQUITOES	TACKLE BOX
BOBBER	HOOK	NET	WADERS
CREEK	LAKE	POLE	WATER
DOCK	LURE	REEL	WORMS

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I	B	L	L	G	B	O	B	B	E	R	E	V	W	S	S	E	T	R	K	C	E

Name _____ Age _____ Address _____



Slippery Rock Watershed Coalition c/o Stream Restoration Incorporated
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“Save-the-Date”

Ohio River Watershed Celebration

Thursday, September 27th!!

Mark your calendars now! You won't want to miss the 11th annual Ohio River Watershed Celebration, set for **Thursday, September 27th!** This year's theme is **“Our Rivers—Get to the Point”** and the event promises to be another fun, exciting opportunity to celebrate and learn more about the watershed's many valuable resources. Set against the beautiful backdrop of Pittsburgh's autumn cityscape, as we sail the beautiful rivers the event gives each participant the opportunity to enjoy awesome natural autumn surroundings while networking, learning, and, of course, relaxing! The Networker Cruise, for people over the age of 18, will offer highlights of many points of interest, both current and historical, in a very informative narration. In addition, watershed and energy efficiency presentations will be presented, and over 60 watershed and energy-related displays will be on the *Majestic*. The Networker Cruise is for Watershed Groups, Energy Conservation Advocates, Professionals, Government Personnel, Business and Industry Leaders, Educators, and Interested Citizens. We would love to see you there!

As in years past, the popular Imagination Cruise will once again be offered to students K-12 and their families. Activities related to understanding the Ohio River Basin – its history, ecological communities, importance, environmental challenges, and suggestions for its protection and conservation - will keep students busy and learning! Students will have plenty of time to participate in the various activities, while still enjoying the view from the deck rails of the *Empress*. Each student will be given a specially designed “Learners Log” to write and draw records of information gained and experiences enjoyed along the way. The “Log”, along with the results of their crafts and informative activities, helps to build knowledge, as well as lasting memories, of their river journey.