

THE CATALYST

SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

NEXT MEETING: 7 pm on 3/13/14 at Jennings Environmental Education Center, pizza and pop provided. 2/13/14 meeting attendance: J. Chips, S. Chips, S. Chips, C. Denholm, J. Gooney, V. Kefeli, B. Kuban, R. Morgan, J. Puskas, W. Taylor, F. VanAtta

Ceramic Artists Showcase the Use of Material Recovered From Abandoned Mine Drainage

Ten ceramic artists from five states generously donated their talents and time to create beautiful pieces that utilize metal oxides recovered from environmentally-friendly systems that treat drainage from abandoned coal mines, all of which were located in the Slippery Rock Creek Watershed. This collaborative effort was spearheaded by **Jamey Biggs** (jbiggs@concord.edu), a professor of ceramics at Concord University, who develops and generously shares his glaze “recipes” utilizing the iron oxide that forms under acidic conditions. (There are even pieces that sparkle in the sunlight!!!)

The ceramic art was beautifully displayed in the art gallery at **Concord University (Athens, WV)** and a reception for the exhibit, entitled, “Clean Creek: Iron and Manganese”, was held on Thursday, February 20th, from 5:30 p.m. to 7:30 p.m. As part of the event, **Margaret Dunn** and **Ryan Mahony** from Stream Restoration Incorporated were on-hand to provide a very well-received, presentation describing passive mine drainage treatment and the value to stream improvement, as well as how the use of the recovered metal oxides can help volunteers sustain the long-term performance of the systems.

Margaret and Ryan are also involved with **Clean Creek Products**, a division of Stream Restoration Incorporated, that was formed to market the metal-bearing material recovered after treating the abandoned coal mine drainage. All proceeds from the sale of our products, which include handmade pottery, jewelry, tiles and trivets, tableware, ornaments, wildlife replicas, and more, are used to fund further restoration efforts and maintain existing treatment systems. Visit www.cleancreek.org to see what’s new in our “**Green Store**”!!! You might want to consider a purchase for **Earth Day**, coming up soon on April 22nd! Gift certificates are also available!



The art work on display and the opportunity to talk to the artists were definite highlights of the event. To see photos of their work and to learn more about the artists, a catalog that includes glaze recipes can be found at the following: www.concord.edu/academics/fine-arts/clean-creek.



Special thanks to the following ceramic artists that have provided further meaning and encouragement to abandoned mine restoration efforts: **Jamey Biggs** (WV), **Pam Runyon Esch** (OH), **Bob Isenberg** (PA), **Shelly Cubarny** (PA), **Linda Arbuckle** (FL), **William Brouillard** (OH), **Susan Filley** (NC), **Matt Long** (MS), **Norma Acord** (WV), and **Amanda Wolf** (PA).



A tasty treat was brought to the February SRWC meeting! Members of the **Slippery Rock Campground Association** wanted to show their appreciation to the SRWC for their upcoming work in stabilizing a large section of stream bank along Slippery Rock Creek. This yummy cake was very much enjoyed!

Recent Publications by SRWC's Dr. Kefeli Utilized in Robert Morris University Classes

Dr. Valentin Kefeli, soil scientist and participant of the SRWC, recently published "**Fabricated Soil for Study of Biodiversity**," which was used in conjunction with a course he led at Robert Morris University. Through this book and Dr. Kefeli's lectures, undergraduate students learned the basics of fabricated soil, including its composition and applied uses, studied the changes in biodiversity and of microorganisms that took place during the exposure of fabricated soil during mining landscape rehabilitation at **Jennings Environmental Education Center (JEEC)**, and examined the mineral content of fabricated soil and its changes during exposure to open-air conditions. Students also studied ways fabricated soil can be used as a substrate for plant growth both inside and outside, as well as its use for a substrate for the growth of plants during winter under the conditions of a solar house.

"Fabricated Soil for Study of Biodiversity" was edited by **Margaret Dunn** of Stream Restoration Incorporated, who is also a participant in the SRWC. Additional authors contributing to this publication were **Wil Taylor** of JEEC, **Dr. Maria Kalevitch** (Robert Morris University), **Dr. William Dress** (RMU), **Shari Mastalski** (Slippery Rock University), and **Christopher Leininger** (Carnegie Mellon University).

Another recent publication of Dr. Kefeli's was "Green World in Biosphere and in Space", which was also used in conjunction with a course taught at Robert Morris University. Students learned about energy flow and transformation, population dynamics and food production, consumption types and trophic levels, nutrient cycles, urban agriculture, biomes and green roof construction, cell structure and cell manipulation, plant growth and differentiation, photosynthesis, fabricated soil, biofuel production, the visible spectra and light quality, and more.

Dr. Kefeli, a native of Russia, has an amazing variety of professional and life experiences that he greatly enjoys sharing with his students. His expertise in the field of soil science and related green agriculture afford his pupils the opportunity to learn a lot as they prepare for their careers.



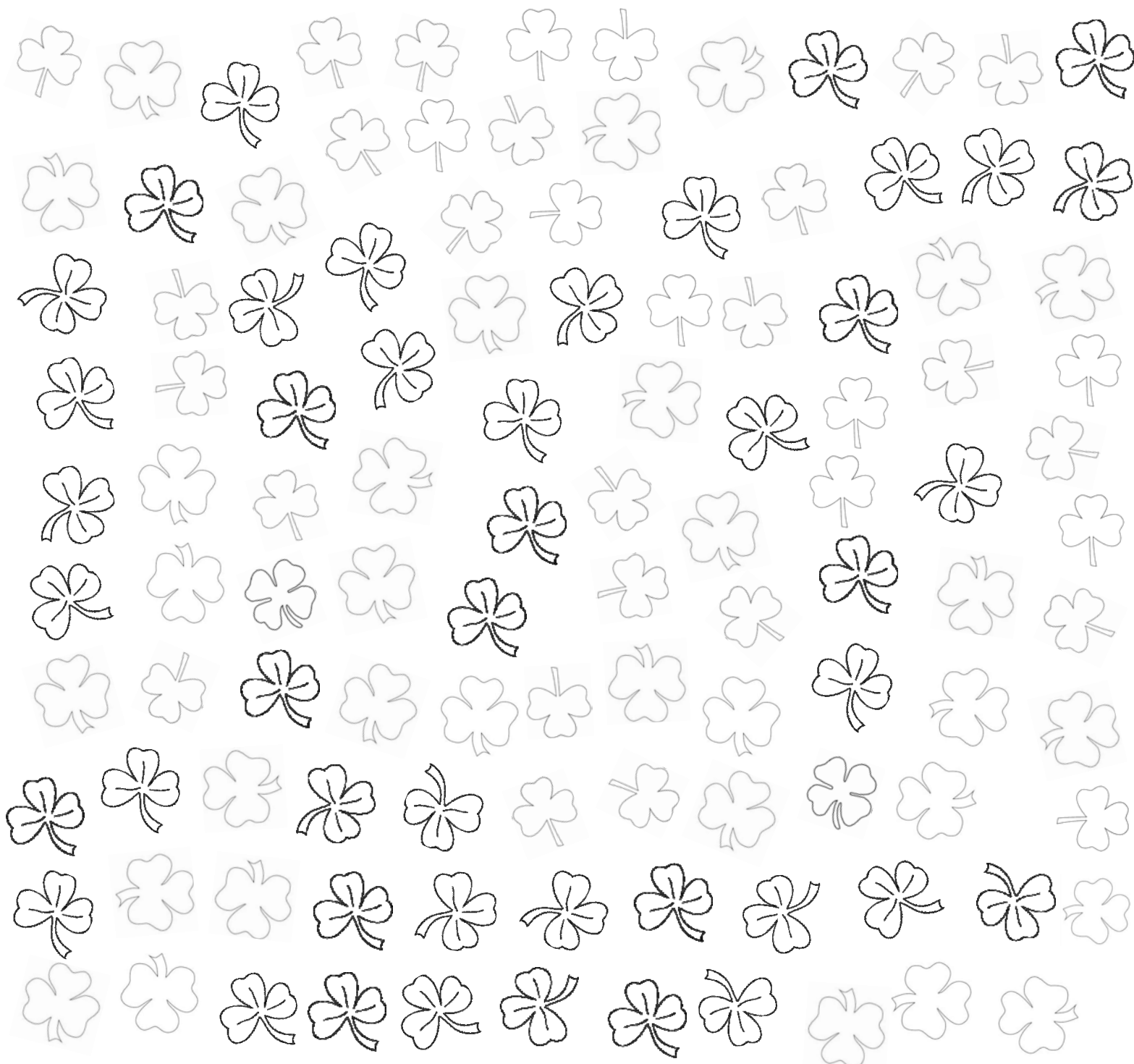
The KIDS Catalyst

SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



Four-leaf Luck

As we near St. Patrick's Day, we take a look at a symbol of March 17th and of good luck: the rare four-leaf clover. According to tradition, clovers with 4 leaves (instead of the usual 3) bring good luck to their finders. Estimates claim that there are 10,000 three-leaf clovers for every 1 four-leaf clover. Even rarer is the five-leaf clover! Clover is a food source for many animals, including rabbits, deer, foxes, groundhogs, wild turkey, Canadian geese, and several species of butterflies. Hidden in our clover patch below are 2 four-leaf clovers! See if you can find them, and if you do, color or circle them. Send us your completed paper, and we'll mail you a free gift certificate! Good luck!



Name _____ Age ____ Address _____



Slippery Rock Watershed Coalition c/o Stream Restoration Incorporated
A PA Non-Profit Organization
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The Allegheny Front (WESA 90.5 FM) Features Clean Creek Products

How exciting to have Clean Creek Products featured on a radio program covering environmental issues throughout Pennsylvania!!!! Produced at **WYEP-FM**, an NPR-affiliate public radio station in Pittsburgh, **The Allegheny Front** brings attention to environmental stories and current events that impact our lives.

Margaret Dunn and **Ryan Mahony** had the pleasure of being interviewed by **Jennifer Szweda Jordan**, host of The Allegheny Front about the ceramic art that uses materials recovered from abandoned mine drainage as colorants. This interview and other episodes can still be heard by accessing their website: **www.alleghenyfront.org**.

We were thrilled to hear that neighboring states also heard the broadcast on their local station!!! In Pennsylvania, you can listen to The Allegheny Front broadcast on the following radio stations: **WESA 90.5 FM** in Pittsburgh, PA every Saturday at 7:30 AM; **WIUP 90.1 FM** in Indiana, PA every Monday at 7:30 AM; **WLRI 93.0 FM** in Lancaster, PA every Tuesday at 8:00 PM; and **WNJR 91.7 FM** in Washington, PA every Monday at 5:00 PM. Additional radio stations also broadcast The Allegheny Front - check the website!

Thanks again to Jennifer Jordan for taking the time to highlight both the ceramic art and artists that use materials recovered from abandoned mine drainage!!!

Come Join Us!!!

If you're a regular reader of *The Catalyst* (or even if this is the first issue you've ever seen!!) and have never come to one of our monthly meetings, what are you waiting for?! Now's the time to check things out! Spring is right around the corner, the perfect time to consider being a part of our interesting and challenging projects! Come to **Jennings Environmental Education Center** the second Thursday of each month, at 7 PM, for some free pizza and soda, and to hear about opportunities to revitalize our streams! There's no obligation to volunteer, and anyone and everyone is welcome! If a meeting is cancelled for some reason, there will be a notice about the cancellation on our web page: **www.srwc.org**. We love seeing new faces at our meetings! Hope to see you soon!