

THE CATALYST

SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

THIS MONTH'S MEETING: Thursday 1/14/10 at Jennings Environmental Education Center, pizza and pop provided. No December Meeting was held.

FOUR (!!!) Colleges/Universities participate in Student Symposium

Hosted by—Westminster College and the SRWC

Thanks to the unwavering and dedicated efforts of Dr. Helen Boylan of Westminster College, the **Student Symposium on the Environment**, held on December 3, 2009 in the Hoyt Science Center at Westminster College, was a huge success!!!! The event began at 5:30 PM with a poster and networking session where people could meet, eat, and talk about their research. There were a number of excellent student posters including one by **St. Joseph High School** sophomore **Francis Anne Tosto**. Posters included:

Abundance and Composition of Understory Plants Inside and Outside of a Deer Enclosure at Jennings Env. Ed. Center
Slippery Rock University Ecology Class

Temporal Dynamics of Plankton Populations in Relation to Silica in a Freshwater Beaver Pond
Nicholas Divjak, Westminster College

Water Source at Cascade Park
Katie Williams & Cassidy Wozniak, Westminster College

Effectiveness of the Passive Treatment System for Acid Mine Drainage at Jennings Environmental Education Center
Slippery Rock University Ecology Class

Keeping Cascade Environmentally Healthy
Chelsea Mastilak, DiAndra DiBacco, Sara Ergen, Sammi DiNardo, Stephanie Finnegan, & Sean Schachner, Westminster College

Sulfide Remediation through the Use of Adsorbents
Travis Battiest, Youngstown State University

Effectiveness of Passive Treatment Systems in Reclaiming Streams Affected by Abandoned Mine Drainage
Frances Anne Tosto, St. Joseph High School

Design: Holistic, Ecological, Sustainable
Shari Mastalski & Beth Rihn, Slippery Rock University

Achieving Environmental Education through Community Development
Chris Bonessi, Justin Gaudi, & Alex Haas, Allegheny College

Following the poster session, **Vice President and Dean of Academic Affairs for Westminster College Jess Mann** provided a welcome and introduction to the event. **Shari Mastalski** then presented her original spoken word/dance piece entitled "Playing in the Dirt" before the oral presentations began. The presentations made were:

Analysis of De Sale Phase II: A Service Learning Project on Passive Treatment Systems
Lori Katrencik & Nathan Barefoot, Westminster College

Effects of Passive Treatment for Acid Mine Drainage on Epilithic Community Productivity in Streams
Lee Layton, Slippery Rock University

Internship at AGX, Inc. as an Industrial Hygienist/Environmental Specialist
Linda Farnham, Westminster College

A Recent Graduate's Perspective on the Value of His Internship for Placement in the Job Market
Bryan Page, Slippery Rock University

Westminster College Greenhouse Gas Inventory
Fred Romeo, Cassie Treshok, & Michael Gess, Westminster College

Nature as Viewed by the Great Chain of Being, Saint Francis, the Wanapum and Humanism and How We Must Reform Our Perception of Nature to Save the Planet
Steven Sankey, Westminster College

Bioregenerative Architecture: Building a Demonstration Straw Bale Unit
Shari Mastalski & Beth Rihn, Slippery Rock University

With about **60 to 75 (!!!!)** in attendance, there was **much, much to learn and knowledge to share and the excitement was contagious!!! Truly uplifting and rewarding!! Thanks to all the presenters for contributing your talents and time!!! WOW!!!!!!!!!!!!!!!!!!!!!!** We can not wait for next year's symposium!!!



Members of the Montour Run Watershed Association (MRWA), project partners, and invited speakers pose at the November 5 dedication ceremony for the McCaslin Road Mine Drainage Remediation Facility in Findlay Township, Allegheny Co. (See *H.O.P.E.* article on back page)

Westminster College Students Present Findings at SRWC Meeting

At the November 2009 SRWC meeting, **Westminster College** students from **Dr. Helen Boylan's** Advanced Chemistry course presented their findings on the effectiveness of the De Sale Phase 2 passive treatment system as part of an on-going service learning project. The project is a **partnership among Westminster College, Jennings Environmental Education Center, and Stream Restoration Incorporated** to provide the students with a hands-on experience utilizing the skills they have gained in a practical application while learning about abandoned mine drainage and at the same time provide the SRWC with valuable water quality data for selected passive systems. The students had previously collected water samples from each of the passive system's components, upstream and downstream of the passive system, as well as a few sludge samples from different parts of the system. The students then took the samples back to Westminster College to perform a variety of laboratory analyses. At the meeting, the students took turns presenting various aspects of the data to the SRWC. The students did an **excellent job** explaining their methodology and presenting their data. As usual, this monthly meeting of the SRWC is the most exciting of the year!!! The SRWC was very appreciative of the student effort and provided positive feedback. As the presentations seem to get better every year, we can only imagine what next year will bring. (Check out the article on the front page!)

What's News?

Check Out *The Point North* Magazine, Now Exclusively Online!

Next time you're surfing the web, make it a "point" to visit *The Point North* Magazine, now a webzine! The Point North has gone "green", with all feature articles available online at www.thepointnorth.com. Be sure to check out "**Our Environment Matters**" each month. Which features articles by **Jennings Environmental Education Center staff and Cliff Denholm of Stream Restoration Inc.** In December's article, entitled "Feeding Feathered Friends", **Brandi Miller-Parrish** of Jennings describes the best ways to meet the five basic needs of birds (and other wildlife): food, water, air, shelter, and space. She offers tips on what to consider when setting up a birdfeeder during the harsh winter months. Visit the Point North each month for a new feature article on the environment, as well as many other worthwhile features, sure to be filled with helpful, fun, and interesting information everyone can learn from!



The KIDS Catalyst

SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



Christmas Word Search Fun!

Merry Christmas to all of the young readers of The Catalyst out there!!! We hope you have a fun Christmas and enjoy this month's Christmas word search puzzle! Try to find all 20 Christmas words that are hidden below. The words can be horizontal, vertical, diagonal, even backwards! Circle each word you find, and if you mail us your completed paper, we will send you a free gift certificate!

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|------------|----------|------------|----------|
| Angel | December | Lights | Snowman |
| Baby Jesus | Gifts | Nativity | Star |
| Bell | Holly | Ornaments | Stocking |
| Candycane | Icicles | Santa | Tree |
| Carols | Joy | Snowflakes | Wreath |

J	E	V	I	S	Z	C	N	R	E	B	M	E	C	E	D	S	E	T	W
S	N	O	W	F	L	A	K	E	S	N	R	A	V	C	H	E	R	A	H
C	A	H	L	Y	N	E	J	M	S	H	A	Q	U	I	R	C	G	S	E
B	E	L	E	B	C	W	V	I	B	L	M	U	P	T	C	Z	N	X	U
N	A	X	D	O	R	N	A	M	E	N	T	S	V	Y	H	T	I	W	R
G	W	N	I	M	V	C	R	F	L	G	E	W	B	C	E	Y	K	T	H
Y	T	R	A	C	H	R	C	Q	L	A	G	H	C	J	N	U	C	Y	W
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C	A	L	R	O	W	S	L	L	O	R	V	T	N	A	C	O	T	U	I
E	N	B	O	M	Q	O	X	U	J	B	F	I	D	C	Y	S	S	M	S
W	R	Z	C	H	R	S	N	B	M	N	A	V	S	B	D	W	O	F	A
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N	A	S	N	O	E	T	R	C	H	O	L	B	A	L	Y	L	I	T	G
B	H	E	O	L	I	G	H	T	S	C	W	R	J	D	U	E	A	R	S

Name _____ Age ____ Address _____



Slippery Rock Watershed Coalition c/o Stream Restoration Incorporated
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H.O.P.E.

(Highlighting Other Partnership Efforts)

Montour Run Watershed Association—McCaslin Road Dedication

Folks at BioMost, Inc. and participants in the SRWC have long admired the efforts of the **Montour Run Watershed Association (MRWA)** and enjoyed working with them on various remediation projects. Their fourth passive treatment system for abandoned coal mine drainage (**PA DEP Project Advisor Ron Horansky**) in western Allegheny County was dedicated in noteworthy ceremonies held on Thursday, 11/5/09 at the Findlay Township Municipal Building. (See *Photo of the Month* on p.2.)

The new system, the McCaslin Road Mine Drainage Remediation Facility, is located in a former and current storage area in the **"front yard" of the Findlay Township Department of Public Works property** near the intersection of Clinton and McCaslin Roads just north of Clinton, PA. Ceremony speakers from Findlay Twp. included: Chairman of Supervisors **Tom Gallant**; Manager **Gary Klingman**; and Public Works Director **John O'Neal**. Also on hand to explain the function and construction of the system were **Jeff Ankrom & Yan Sheykhet, Quality Aggregates, and Tim Danehy & Margaret Dunn, BioMost, Inc.**

Construction of the McCaslin Road Facility is an outgrowth of the Montour Run Watershed Assessment and Cleanup Plan performed under MRWA sponsorship and funded by a **PA DEP Growing Greener Grant**. Conducted between 2001-2003, the assessment evaluated the impact of discharges from abandoned coal mines in the 37-square-mile Montour Run Watershed. The evaluation included a year-long monthly water monitoring program, leading to recommendations for treatment approaches for the most damaging. A discharge from the Clinton Lake Mine complex was identified as a significant source of degradation (acidity and aluminum) to the West Fork of Enlow Run.

The scope of the McCaslin Road project included the design, permitting, and construction of a passive treatment system. This facility includes a steel-cased bore conducting the untreated drainage beneath Clinton Road (**Great work Centerline Boring, Inc.!!!**); PVC drainage conveyance piping (**Thank you, thank you to Dom Lee, President, Precision Kidd Steel for property access!!!**); limestone treatment bed with automatic flushing device; and 8,000-square-foot settling pond. This remediation system will improve the health of nearly **two miles of the West Fork of Enlow Run**. An estimated **14,000 pounds** of acid and **1,700 pounds** of aluminum will be prevented from entering the stream each year from this site alone!!! The resultant improvement in water quality will go far toward improved survival of fish and the aquatic life that support them.

In addition to funding through the DEP's Growing Greener program, **matching cash and donated goods and services** were provided by **Quality Aggregates Inc., BioMost, Inc., Stream Restoration Inc., and G&C Coal Analysis Lab**. A special thanks goes to Quality Aggregates' **very experienced and caring construction crew: WAYNE FUCHS, DREW FUCHS, and MASON FREDERICK!!!!**