

THE CATALYST

SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

NEXT MEETING: 7 pm on 6/11/15 at Jennings Environmental Education Center, pizza and pop provided. 5/14/15 meeting attendance: C. Denholm, M. Dunn, V. Kefeli, B. Kuban, W. Taylor, F. VanAtta

“FROM BIG TO SMALL, THERE WAS HELP FROM ALL!”

Stream Bank Planting at Slippery Rock Campground

The final component of the stream bank stabilization project at Slippery Rock Campground was completed this spring on April 11. About **25 volunteers** joined in a group effort that included people of all ages, from elementary school students to a college professor, and everyone in between. Numerous students in the **Geography, Geology and Environment Club at Slippery Rock University** pitched in to help, as well as **Shaun Busler, Dan Guy, and Ryan Mahony** from Stream Restoration Inc. and the Slippery Rock Watershed Coalition (with **Buck Neely** joining in a couple of days later as the SRWC finished the final work). In all, **2700(!!!!!) silky willow and black willow live stakes** were planted along the banks of Slippery Rock Creek along with a variety of native trees and shrubs including **35 Serviceberry, 25 Witchhazel, 25 Red Bud, 25 Ninebark, 25 Sycamore, 25 pin oaks, 50 American Chokecherries, 50 hemlocks, and 100 white oaks.**

The project first began when, after watching the SRWC complete a successful stream bank project at the nearby Carney site, leaders from the campground approached the SRWC about possible help in stabilizing a shaky and steep cut-bank 6 to 8 feet in height with severe undercutting in some sections. The SRWC received a **PADEP Growing Greener grant** to help support the work effort that included several goals: re-grading the cut-bank, placing “riprap” and rootwads along the toe of the bank for stabilization and fish habitat, placing geotextile, and extensive replanting. A riparian buffer was also established for stream protection and to increase biodiversity.

The most recent survey of the work was in late May, which showed much promise of the project’s success. Planted trees had budded and looked healthy, live-stake growth after 2 months was extensive and had an **estimated survival rate of over 90%(!!!!), brush layering placed during construction showed growth at every location, and tall grasses were flourishing along the bank!!!!**

The SRWC enjoyed working with the fine folks at the Slippery Rock Campground, and much appreciated the yummy lunch of hot dogs and hamburgers they supplied the planters on April 11th.





Special thanks to the Geography, Geology, and the Environment Club from Slippery Rock University for their hard work in planting at the Slippery Rock Campground stream bank!!!!
(See article, front page).

Paper by SRU Student and Professor on Algae Growth Published

Dean DeNicola, PhD professor of Biology at **Slippery Rock University**, and **Amber Lellock**, Biology major class of 2014, had their paper *Nutrient Limitation of Algal Periphyton in Streams Along an Acid Mine Drainage Gradient* accepted for publication in the **Journal of Phycology**. The research shows that high levels of metals in Slippery Rock Watershed streams affected by mining reduce the availability of nutrients for algae to grow. As a result, there is less food at the bottom of the food chain for some stream animals. The research was supported by SRU undergraduate research grants. **This is the 6th publication in peer-reviewed science journals based on research in the Slippery Rock Watershed by Dr. DeNicola, Dr. Stapleton, and their students!!!!** There have also been **over 20(!!!!) presentations at scientific meetings**. The other papers published are:



Student Amber Lellock adds some substrates that diffuse out nutrients for the algae study.

DeNicola, D.M. and M.G. Stapleton. 2014. Benthic diatoms as indicators of long-term changes in a watershed receiving passive treatment for acid mine drainage. *Hydrobiologia*.

DeNicola, D.M., L. Layton and T.R. Czapski. 2012. Epilithic community metabolism as an indicator of impact and recovery in streams affected by acid mine drainage. *Environmental Management*.

DeNicola, D.M. and M.G. Stapleton. 2002. Impact of acid mine drainage on benthic communities in streams: the relative roles of substratum vs. aqueous effects. *Environmental Pollution*.

DeNicola, D.M. 2000. Diatoms found in highly acidic environments. *Hydrobiologia*.

DeNicola, D.M. and M.G. Stapleton. 2000. Recovery of streams following passive treatment for acid mine drainage. *Verhandlungen des Internationalen Verein Limnologie*.

THANK YOU, THANK YOU for your efforts to understand and share the science!!!



The KIDS Catalyst

SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY

Pennsylvania's State Fish

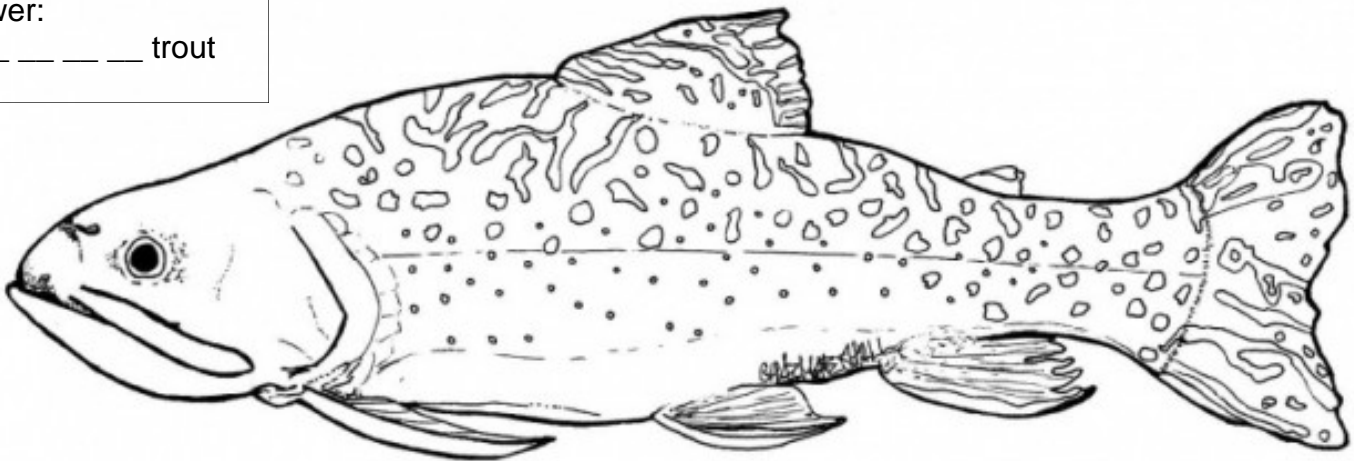


The alphabet puzzle below will give you the name of the state fish of Pennsylvania. This fish is the only type of trout native to Pennsylvania. A "native" animal or plant means it has lived here since the time of the arrival of the first European settlers. This fish can only live in clean, cold water. Pollution from agriculture, mining, urbanization, and mining has caused a major decrease in their numbers. Most of these fish caught by anglers (fishermen) are hatchery raised and stocked. But wild ones can still be caught. One of the goals of the Slippery Rock Watershed Coalition is to clean stream water that has been polluted from abandoned mine drainage. We love to see fish in streams where they hadn't been for years!

In each box below, figure out which letter of the alphabet is missing. Write that letter on the line. After you do all 5 boxes, you will spell out the name of Pennsylvania's state fish that you learned about above. Then, you can color the picture and mail us your paper. You will earn a \$1 credit on Amazon.com that you can save, and combine with future Kids Catalyst rewards to buy something great of your choice!

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

Answer: _____ trout



Description: The main color of the body of this fish is usually dark green to brownish in color, with a marbled pattern of lighter shades. Red dots with blue halos are scattered on its sides. The belly and fins are reddish in color, with the fins having white edges.

Name _____ Age ____

Address _____

Parent's email address for Amazon.com gift credit:



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

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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. June distribution: 1126 copies

“Celebrate the Bloom” at Jennings this July 18!

The 3rd annual “Celebrate the Bloom” festival on July 18th from 9 AM to 7 PM at Jennings Environmental Education Center near Slippery Rock, PA will be an exciting day of music, fun, food, and amazing nature experiences for young and old, and we hope you will join us to showcase some of our region's best nature-related art and natural artisan products.

Folk, rock, and a little country music comprise the “Tunes at the Bloom”, thanks to **Dennis McCurdy/Lonesome No More Productions**, who has arranged this stellar line-up of musicians:

- * 12:30 pm **The Carpenter Ants**
- * 1:55 pm **Tony Denikos Music**
- * 2:30 pm **Nameless in August**
- * 3:45 pm **BeJae Fleming & Jackie Blount**
- * 5:00 pm **The Carpenter Ants**

This all-day, free event focusing on nature, art, and music promises to have something for everyone!!!

Jennings is now accepting applications for artisan vendors for “Celebrate the Bloom”!!! By being a vendor, you will not only have the opportunity to sell your products to an audience of appreciative, nature-loving folks, your participation will assist JEEC in showcasing one of our region's unique natural resources: the Blazing Star Prairie. This truly one-of-a-kind wonder is a treasure to be shared and to be protected. In July, the wildflowers of the prairie take center-stage, with the Blazing Star playing the lead. Don't miss this chance to play a supporting role in Mother Nature's beautiful show!!!



Last year, 100% of responding visitors told us they would recommend this event to their friends, and 100% of last year's responding artisan vendors told us the event was profitable! To be an artisan vendor, you may fill out an artisan application at: <https://celebratethebloom.wordpress.com/get-involved/artisans/>. Each 10'x10' booth space is an affordable \$35. Payment must be received for your space to be confirmed! Please contact the Jennings staff with any questions at 724-794-6011. We hope to see you at the prairie!