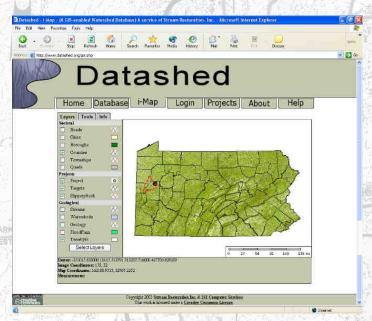
THE CATALYST

SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

THIS MONTH'S MEETING: Thursday December 11th at 7pm Jennings Environmental Education Center, pizza and pop will be provided. 11/13/03 Meeting Attendance: S. Busler, C. Cooper, C. Denholm, M. Dunn, D. Johnson, V. Kefeli, J. Reidenbaugh, W. Taylor

Unveiling "Datashed"



Stream Restoration Incorporated and 241 Computer Services are excited to announce the creation of a fully-featured, GIS enabled, internet database designed to assist watershed groups, academic institutions, private industry, government agencies, and others. The **Datashed** site was originally created to aid in the operation and monitoring of passive treatment systems, but has potential for many more uses.

Datashed features include:

- \$ Access to important documents, such as Operation and Maintenance Plans and inspection sheets
- \$ Password-protected submissions of data and photos
- \$ Direct printing of reports from the internet
- \$ Robust statistical calculations
- \$ Dynamically generated graphs of data uploaded to the site
- \$ Alerts to users of possible problems with passive systems based on defined criteria in the inspection sheets
- \$ GIS capabilities that allow easy viewing of geographic data and directs users to additional content

A prototype has been developed for **Grove City College** students monitoring the passive treatment systems in the headwaters of Slippery Rock Creek. Stream Restoration Inc. hopes this web site is helpful in assisting watershed groups in documenting and maintaining data they collect in the field. Although still a work in progress, several elements of Datashed are currently in a usable format. Check out the site at **www.datashed.org**. Contact **Shaun Busler** of Stream Restoration Inc. at 724-776-0161 for more information.

Stream Restoration Inc. greatly appreciates the work of **241 Computer Services** developer **Peter Drake**. Peter, a graduate of Grove City College, founded 241 Computer Services and has developed more than 20 commercial web pages. His superior skills in web site design and web programming are evident in his work. He designed for Stream Restoration Inc. the **easy-to-use on-line registration page** for September's **2nd Annual Ohio Watershed Riverboat Cruise**. For more information about this company, visit their website at **www.241computers.com**.

Ohio River Watershed Celebration Featured on Watersheds.tv

Real people are making a difference to protect our environment and you can, too! This is the mission of the Environmental Fund for Pennsylvania/GreenWorks. EFP/GreenWorks utilizes a combination of multi-media technologies to share informative and entertaining stories that explain the various roles individuals can play in caring for our world. By doing so, it is the aim of EFP/GreenWorks to inspire people every day to take part in the effort to make our planet a cleaner, healthier, and happier place for everyone. Visit www.greenworks.tv to learn more! A popular feature of GreenWorks is Watersheds.tv, an innovative multi-media program that brings the watershed community and hundreds of volunteers right into your home. A different story is featured each week at www.greenworks.tv/watershedstv/featuredtopic.htm. Thanks to producer Kelly Meinhart, the 2nd Annual Ohio River Watershed Cruise was the feature story on Watersheds.tv in early November. If you missed it, you can access the feature in the archives of the Watersheds.tv web page. Maggie Hall of DEP provided text for the feature and Melissa Busler of Stream Restoration Incorporated provided photos of the event. Over 425 individuals participated in the fun and informative cruise. Next fall plan on joining us when we cruise the Ohio River!!



Watersheds.tv Producer Kelly Meinhart

PHOTO OF THE MONTH



Look closely and you will see several fish in this picture (if your eyesight is good). What is the big deal? You are looking at a photo of fish swimming in Seaton Creek (at McJunkin Road), a tributary in the Slippery Rock Watershed which was formerly lifeless! The photographed site is located downstream of the DeSale treatment systems and upstream of Erico Bridge. Seeing different sizes of fish suggests they are reproducing!

WHERE ARE THEY NOW?

Investigating Maintenance, Performance, And Continuous Treatment (IMPACT)

Have you ever wondered what became of your favorite passive treatment system? Has it been forgotten? Does it feel neglected? You have not heard much about it lately, and you are wondering how it is doing. Wonder no more! Each month a passive system will be highlighted. We travel back in time to the year 1995 for this month's featured treatment system: **SR 114 B & D**, an anoxic limestone drain (ALD) system in PA State Game Lands #95 in Washington Township, Butler County.







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Before Construction

After Construction

<u>Construction</u>: 2 anoxic limestone drains (350 & 1150 tons); settling ponds (11,000 SF); wetlands (17,500 SF) <u>Project Participants</u>: Hedin Environmental, CDS Associates, Inc., PA Game Commission, Jesteadt Excavating, PA Bureau of District Mining Operations Knox Office, Stream Restoration Inc.

Monitoring: Quarterly water monitoring by PA DEP, Knox DMO; Slippery Rock University; Grove City College <u>Comments</u>: The average combined flow of the discharges is >150 gpm. Prior to treatment, drainage is acidic with about 40 mg/L of dissolved ferrous iron and about 1 mg/L or less of manganese and aluminum. The Anoxic Limestone Drains have operated without maintenance for over 8 years. Effluent from the ALDs is consistently net alkaline with about 120 mg/L lab alkalinity. A trash rack in one of the settling ponds requires about one hour of maintenance annually to remove leaves and debris. Natural, previously impacted, wetlands provide additional settling of iron solids.



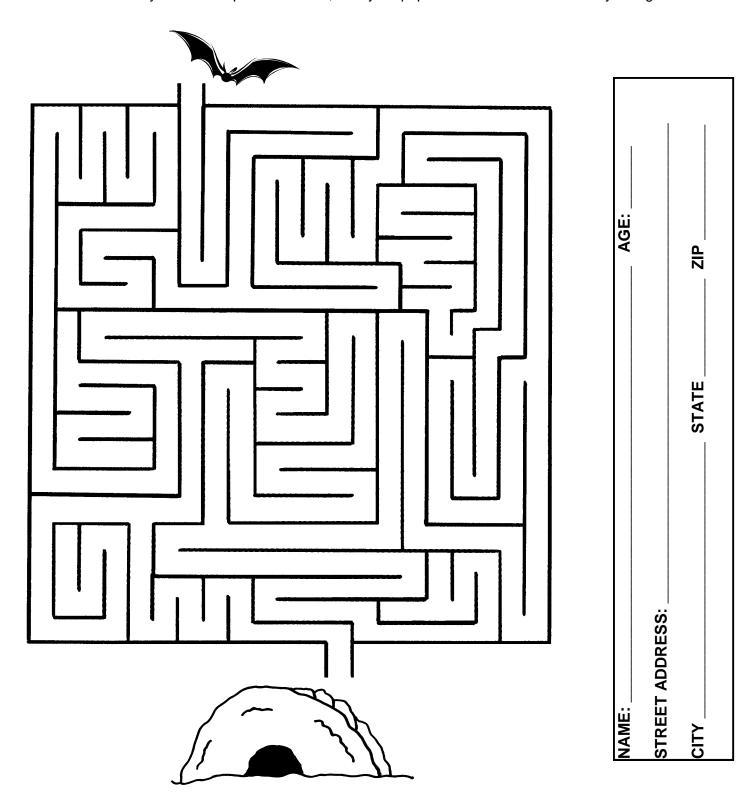
The KIDS Catalyst

SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



AMAZING MAZE

Winter is on its way! Because temperatures become cold and not much food is available, some animals hibernate during the cold winter months. Several bat species hibernate, while others migrate to warmer regions where insects are available to eat. Bats that hibernate like to do so in caves or mines. Their heart beat slows from over 1000 beats per minute (when in flight) to only 1 beat every 4 or 5 seconds. Hibernating bats can lose as much as one half of their pre-hibernation weight during hibernation! Can you help the bat below reach his cave to hibernate before winter comes? If you can complete the maze, mail your paper in to us and we will send you a gift certificate!



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Thanks to The William & Frances Aloe Charitable Foundation, Environmentally Innovative Solutions, LLC, Dominion Peoples, Amerikohl Mining, Inc., Quality Aggregates Inc., 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), 3016 Unionville Road, Cranberry Twp., PA 16066, (724)776-0161, fax (724)776-0166, sri@streamrestorationinc.org, www.srwc.org. Dec. Distribution: 1143 copies

Highlighting Other Partnership Efforts (HOPE!)

21st Annual ASMR Meeting

Calling all watershed groups! The American Society of Mining and Reclamation (ASMR) will be holding its 21st Annual Meeting in a joint conference with the Surface Mine Drainage Task Force in Morgantown, WV, on April 18-22, 2004. Held at the new Morgantown Radisson Conference Center, this event will provide valuable opportunities for watershed volunteers, scientists, regulators, and mining and reclamation personnel to exchange information and share ideas.

In conjunction with the annual **Slippery Rock Watershed Coalition Symposium** on April 16 and 17, a pre-conference, two-day field trip will include visiting the **Jennings Environmental Education Center** to participate in the "Construct Your Own Passive System Simulation" and/or several of the 15 systems in the watershed. Planned on the return trip is a tour of the over 20-component passive complex at **Ohiopyle State Park**, which includes Hybrid Flow Ponds, Horizontal Flow Limestone Beds, an Anoxic Limestone Drain, Vertical Flow Ponds, a Diversion Well, Naturally-Functioning Wetlands, and more.

At the conference, there will be short courses and workshops on stream restoration and channel design, satellite imagery, the geochemistry of acid mine drainage, and more. Technical sessions will include presentations on acid mine drainage, wetlands, invasive and native species, soils and overburden, forestry and wildlife, mine closure, passive treatment, revegetation, and others. There will be posters and exhibits. **Displays from watershed groups are welcome.** This is a great opportunity for those in watershed groups to get involved in building partnerships to work together in this forum for applied reclamation. For additional information, visit:

http://www.wvu.edu/~agexten/landrec/land.htm or

http://www.wvu.edu./~agexten/lanrec/2004TFS/1stCall.pdf

and click on 2004 ASMR and Task Force Meeting; or, contact Jeff Skousen at (304) 293-6256, email: jskousen@wvu.edu





