

THE CATALYST

SLIPPERY ROCK WATERSHED COALITION MONTHLY ACTIVITIES UPDATE

THIS MONTH'S MEETING: Thursday January 8th at 7pm Jennings Environmental Education Center, pizza and pop will be provided. 12/11/03 Meeting Attendance: J. Belgradan, C. Cooper, C. Denholm, T. Danehy, M. Dunn, D. Johnson, V. Kefeli, A. Pavlick, S. Smith, W. Taylor

Scout Pack Assists Restoration Efforts at Erico Bridge



Front Row: Matt, Steven, Tim, Jacob, John, Tyler, Alex, Evan, Chris, Ian, Jacob
 Second Row: Adam, Parker, Lyle, Steven, Andy, Michael, Brandon, Zach, Adam
 Back Row: Bob, Den Chief and Mr. Hovis, Webelos Leader

On November 11th, the members of **Grove City Cub Scout Pack 76**, under scout leaders **Mr. Sestak** and **Mr. Hovis**, constructed wood duck nesting boxes to be installed at the Erico Bridge Restoration Project in Butler County, PA. The members participated in this activity as part of various cub scout requirements including working with tools, Craftsman, Naturalist, Wildlife Conservation Belt Loop & Pin activities, and the World Conservation Award. The scouts will help to install the boxes prior to the spring 2004 nesting season. On November 18th, **Dale Hockenberry**, from the Pennsylvania Game Commission, discussed the natural history relating to wood ducks and hosted a question and answer session about the construction of artificial nesting structures and their role in wildlife conservation.

Learn What the Experts Know (and don't know) About Passive Treatment

Mark your 2004 calendar for the **American Society of Mining and Reclamation's** 21st Annual Meeting!! ASMR and the West Virginia Surface Mine Drainage Task Force are holding a joint conference in Morgantown, WV, April 18-22, 2004. The last time there was such an excellent opportunity to have so many passive treatment system experts gathered together in this region was a decade ago!!! If you are involved in a watershed group, you should take advantage of this conference!!! Displays from watershed groups are welcome!

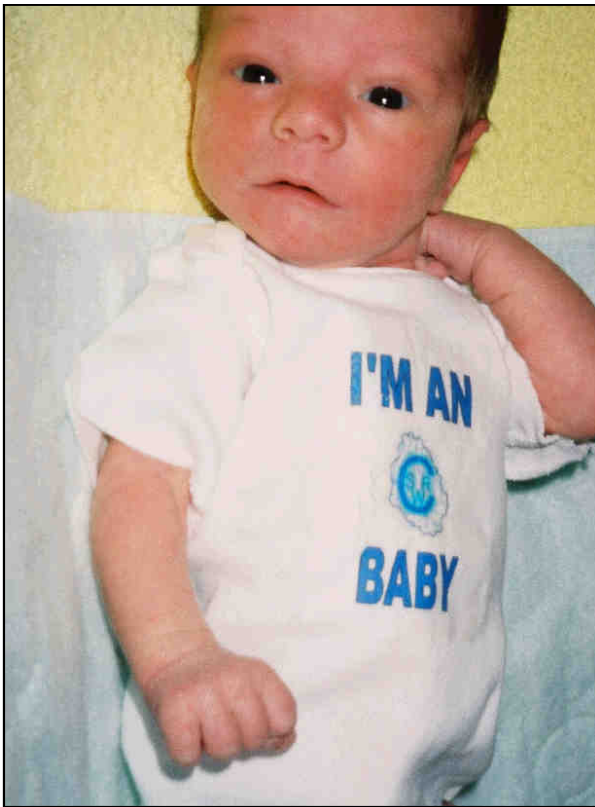
Expected attendees who are passive treatment experts include: Bob Nairn, University of Oklahoma; Carl Zipper, Virginia Tech, Paul Younger, United Kingdom; Art Rose, Professor Emeritus, Pennsylvania State University; Paul Egar, Minnesota; Carl Kirby, Bucknell University; Bob Kleinmann and George Watzlaff, US Department of Energy; Chuck Cravotta, US Geological Survey; Brent Means, US Office of Surface Mining; "BT" Thomas, and many more.

A pre-conference, two-day fieldtrip will be held in conjunction with the annual **Slippery Rock Watershed Coalition Symposium** on April 16 and 17. Participants will tour the **Jennings Environmental Education Center's** nationally recognized treatment systems and several passive treatment complexes in the Slippery Rock Creek headwaters on April 16. On April 17 participants will tour the over 20-component passive complex at **Ohioyle State Park**.

Don't miss this valuable chance to build partnerships and learn from the experts! There are two options to choose from:

- 1) For those attending the **ASMR** conference, a fee of \$175 will include round-trip busing from Morgantown, WV, lodging, and meals. Registration is through ASMR. Contact Jeff Skousen at (304) 293-6256 for more information.
- 2) The **Slippery Rock Watershed Coalition Symposium** is free of charge. This trip will include the tour of the Jennings system and selected systems in the headwaters of Slippery Rock Creek (no transportation provided). Registration will be online (more information next month).

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Here is the newest member of the Slippery Rock Watershed Coalition! **Isaac Lee Busler** was born on December 6 and is the first child of **Stream Restoration Incorporated's Shaun and Melissa Busler**. Isaac may be too young to enjoy the pizza and soda at the monthly SRWC meetings, but he does make a good model for the SRWC t-shirt, created by **Deanna Treter**.

WHERE ARE THEY NOW?

Investigating Maintenance, Performance, And Continuous Treatment (IMPACT)

This month's featured system is **Jennings Environmental Education Center (JEEC)**. Way back in September 1997, the full scale Vertical Flow System was placed on-line at the Jennings Environmental Education Center in Brady Township, Butler County. Jennings, as many people know, has been used for research and is internationally recognized for passive treatment technology. Once again, as it was in 1994, this site will be included as part of the **American Society of Mining and Reclamation's** annual conference this year (see article on front page). For over 6 years, this full-scale passive treatment system has been neutralizing the highly acidic water that issues from an abandoned deep mine. In fact, this system neutralizes about **14 tons of acidity each and every year: 88 tons of acidity to date!!!** In addition, the system has prevented over **17 tons of iron** and about **6 tons of aluminum** from entering Big Run, a tributary to Slippery Rock Creek. That's a lot of pickup trucks & pop cans!!!

As expected, no success comes without challenges. Maintenance issues over the years have included a plugged outlet pipe that was replaced and a channel wetland that grew so well that the vegetation restricted the flow with the effluent overtopped a low berm, creating a sloped wetland (something wetland experts say is a difficult thing to do!) Because this system is incorporated into the Jennings Environmental Education Program, maintenance has been conducted as part of the on-going research efforts. The PEOPLE IMPACT has been amazing! An estimated **4000 students** have participated in the educational programs about this system! And it has been included as a highlight on numerous tours given to guests from as far away as Korea, Australia, Peru, and even OHIO!!!

Representative Water Quality

<u>Point</u>	<u>pH</u> (s.u.)	<u>Acidity</u> (mg/l)	<u>Alkalinity</u> (mg/l)	<u>Iron</u> (mg/l)	<u>Manganese</u> (mg/l)	<u>Aluminum</u> (mg/l)
Raw	3.3	284	0	56	15	19
Treated	6.8	0	172	1	12	0

Total metals concentrations

Before Construction



After Construction





The KIDS Catalyst

SLIPPERY ROCK WATERSHED COALITION FUN ACTIVITY



WINTER WORD SCRAMBLE

Winter has arrived! We don't see as many animals outside during the winter time as we do during warmer weather, but there are some creatures who stick around Pennsylvania and are very common to see. The names of six of these animals are shown below, but the letters of their names are scrambled! Your job is to unscramble the letters, write the name of each animal on the lines provided, and then draw a picture of each animal in the box. If you can do all this, send us in your paper and we will mail you a gift certificate!

_____ EDER

_____ RANLACDI

_____ YKRTUE

_____ LEUB AJY

_____ IBABRT

_____ OCOCRNA

NAME: _____ AGE: _____

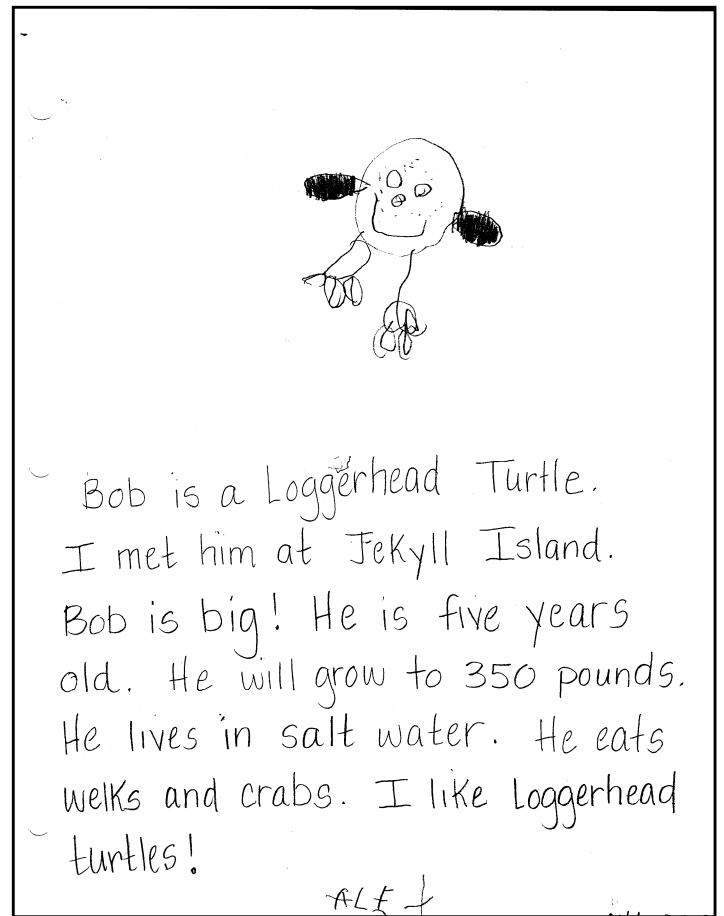
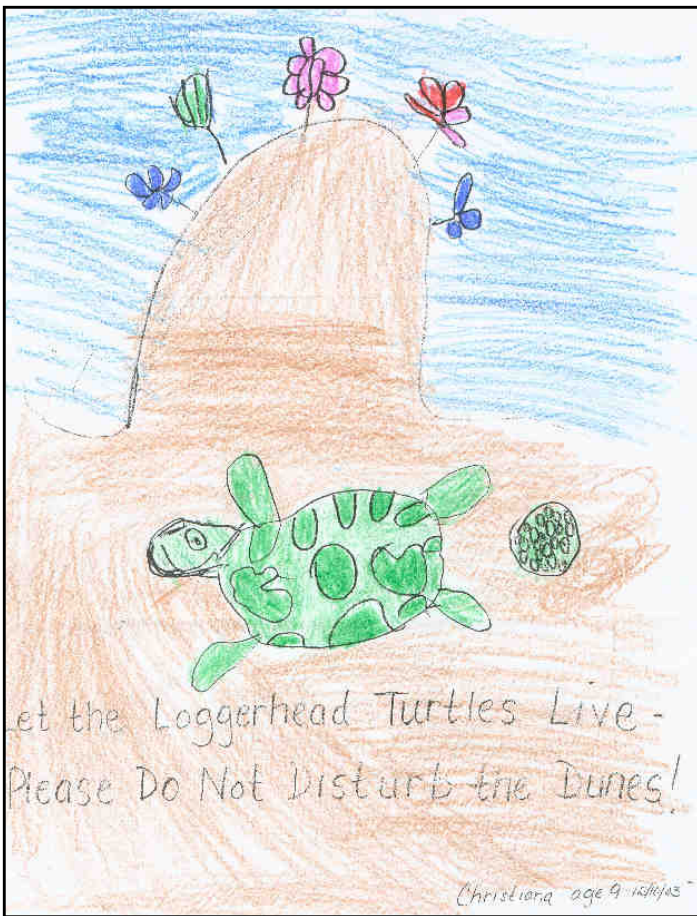
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Slippery Rock Watershed Coalition c/o Stream Restoration Incorporated
 A PA Non-Profit Organization
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Thank you Christiana and Alex for your great pictures and information about the loggerhead sea turtle! Loggerheads can be seen laying their eggs in nests in sand dunes in early summer along the Carolina coast. The holes they dig are often partitioned off with wooden posts and tape so people know to stay away. The baby turtles hatch and make their way to the ocean by moonlight in late summer. Here in the Slippery Rock Creek watershed in Pennsylvania, instead of the loggerhead, common turtles include box turtles, wood turtles, painted turtles, and spotted turtles. The bog turtle, an endangered species, is a rare sighting, but its range does occur in this watershed.