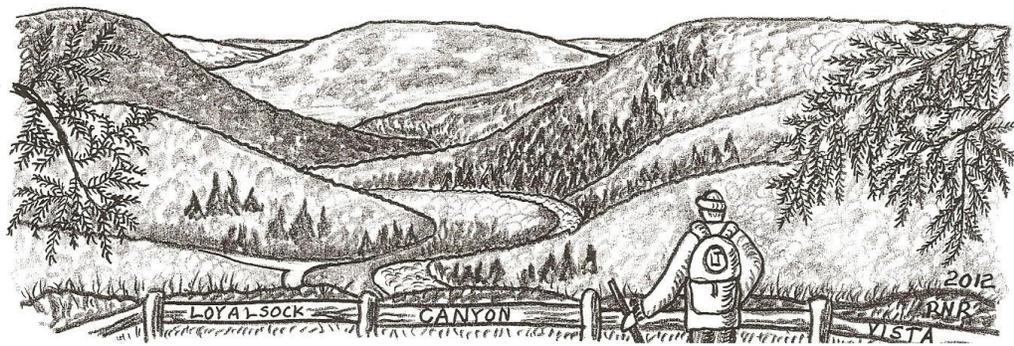


Loyal to the 'Sock

March 2014



“It is a capital mistake to theorize before you have all the evidence. It biases the judgment. “

Sir Arthur Conan Doyle, *A Study in Scarlet*, 1887

Hello, LCWA Members!

We are a little late at sending out our first newsletter of 2014, but as you will discover on page two, we have lots of plans for this year. This year we will need to invest more heavily in “in the Creek” projects within the Watershed. The coal industry has all but left our Watershed, but we are still working to neutralize the acids that remain and make more streams Class A Trout fishing streams.

We are still concerned that the Endangered Species Coordination Act, HB 1576 and SB 1047, will violate Pennsylvania's constitutional mandate to conserve and maintain our natural environment under Article I, Section 27. These Bills have the potential to limit the ability of the PA Fish and Boat Commission, the Department of Natural Resources and the PA Game Commission to locate and protect the environments of our rare and endangered fish, wildlife, and native plants. Limiting the ability to provide evidence of their presence opens the door to biases in judgment when it comes to making decisions about the use of our State's streams and forests.

As ever, Carol Kafer

LCWA President

Article I Section 27 of the Pennsylvania constitution states:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

Right before your Eyes!

Mark your calendar! Our first open meeting of 2014 will be held on April 22, at 7:00 pm at the Fire Hall in Barbours. Corey Richmond, Water Quality Specialist with the Sullivan County Conservation District, will be presenting a PowerPoint Program with some interesting visuals. A company (*Little River Research and Design: Fluvial Morphology in a Box*) has built a physical model of a meandering stream, then subjected the model to various “flood prevention improvements”, such as channel straightening, dredging and head cuts. Video of the model stream shows the stream before, during, and after the intervention, often with un-anticipated consequences. We will also provide updates on our various LCWA projects.

2013 in Review

- The LCWA had four meetings that were open to the public: Preserving our State Forests from Industrialization with John Childe, Hydrology and Flooding with Rob Cooley, Responsibilities of the PA Fish and Boat Commission with Jeremy Yohe, and the Endangered Species Coordination Act.
- We met with a Representative of Trout Unlimited National to find a way to treat more of the acid mine drainage (AMD) from mine Tunnel A.
- Another stream bank stabilization project was completed on Wallis Run.
- Dr. Jon Niles and his interns collected data on 92 (!) un-assessed streams in the Loyalsock drainage and on 30 streams recovering from the September 2011 flood. They also assessed 34 streams in Rock Run and Pleasant Stream drainages.
- We did maintenance work on the fence at Worlds End State Park and on the AMD treatment covers.
- We wrote over 50 letters to our elected officials expressing our concerns about our State Forests and our Threatened and Endangered Species.

Plans for 2014

- We have applied for a grant to purchase limestone sand to treat two headwater streams in Sullivan County for acid deposition. We have found that these treatments are effective, require little maintenance, and provide buffering for up to five years.
- We have applied for a grant to support Dr. Jon Niles and three interns to continue the study of the rate of recovery for the September 2011 monster flood caused by Tropical Storm Lee. We have also applied for a grant to support Dr. Jon Niles and three interns to collect data on 22 more un-assessed streams in the Loyalsock State Forest.
- Clinton County CleanScapes is planning to do a tire clean-up along the "Sock upstream from the mouth of Wallis Run. This is a popular recreation area. Due to flooding, tires have accumulated in the woods upstream and they end up being washed down into the swimming hole. The LCWA will be providing lunches for the workers and some muscle moving tires. The clean-up is planned for late April.
- We have been working with Worlds End State Park since 2004 to stop erosion of the stream banks adjacent to the cabins built by the Civilian Conservation Corps. The fence at the top of the bank has controlled the erosion caused by foot traffic. Since the fence clashes with the woodsy atmosphere of the Park that the campers enjoy, in the spring we plan to start planting attractive ground cover plants and ferns to discourage people from trampling the banks. We hope to eventually remove the fences.
- LCWA directors are participating with a number of other local environmental organizations to create a River Conservation Plan for the Loyalsock Creek. Having a plan will make more funding opportunities available for us.
- We contacted the PA Fish and Boat Commission and ask them to collect more data on the main stem of the Loyalsock.
- There will be an up-grade on the AMD treatment facility on the Lewis site in Sullivan County. A settling pond will be added to the current treatment facility to remove more metals from the water that flows into Birch Creek.
- At our request, Trout Unlimited National will be monitoring the pH above and below Mine Tunnels A & B.
- The Northcentral Pennsylvania Conservancy is planning another bank stabilization structure on Wallis Run. The LCWA will provide volunteers.

Maintenance at Tunnels A & B



On October 25, 2013, Corey Richmond, Steve Szoke, Tom Yarnell and Carol Kafer did some maintenance work of the covers over the passive acid mine drainage (AMD) treatment intakes at Tunnels A & B on White Ash land in Sullivan County. The covers prevent algae growth, and the snow fencing keeps out the leaves. In the past, without frequent maintenance, the inflow pipes became clogged with algae and leaves. LCWA membership dues paid for



the covers, which keep the AMD treatments working 24/7.

Treating More Acid Mine Drainage (AMD)



On November 21, 2013, Corey Richmond, Steve Szoke and Carol Kafer met with a representative from Trout Unlimited National to explore funding opportunities to treat more of the ADM at Tunnel A. Less than 30% of the acid drainage from the mine is currently being treated. The passive treatment facility at Tunnel A was constructed in 1999. In the past 14 years, alternative technologies have been developed. In order to acquire baseline data, in 2014, Trout Unlimited will be collecting water samples above and below where water from Tunnel A drains into the Loyalsock. Removing acid and metals in the headwaters of the Loyalsock contributes to the quality of our water all the way to the Bay.

More Bank Stabilization at Wallis Run

On December 5, 2013, the LCWA helped the Department of Conservation of Natural Resources, the Northcentral Pennsylvania Conservancy and the Lycoming County Conservation District to plant forty 3-4 foot tall trees on the bank of Wallis Run by the most recent PA Fish and Boat Commission bank stabilization/trout habitat structure. The tree species selected were swamp white oak (*Quercus bicolor*), sycamore (*Plantanus occidentalis*), and River Birch (*Betula nigra*). These species tolerate flooding and will send their roots in all directions, helping to stabilize the bank. The species we planted were all native and suitable for the site conditions/soils. The Sycamore will provide quick growth, bank stability, and shade on the stream. The Swamp White Oak will provide bank stability, acorns for wildlife, and shade. The River Birch will provide shade, bank stability, and spring-ripening seeds for turkey/grouse/small birds. With so many hands at work, the planting was done quickly. Getting the vehicles out of the mud and back up on the road was a different story.



Geological Mystery in Loyalsock Creek: The Haystacks

by Ruth Rode

The 59.21 mile long Loyalsock Trail passes by the Haystacks at mile 57.23. The origin of these mound-like, hard sandstone formations puzzles geologists. This tightly cemented rock still displays evidence of failed attempts at blasting to avoid log jams during the lumber era. Colleagues at Bloomsburg and Susquehanna Universities, and at Hobart and William Smith Colleges, have found that this very hard, quartz-rich rock formation covers about 100 square miles and is unique in the entire Paleozoic column of the Appalachians. Sedimentologists across the country and in Great Britain have not found other examples elsewhere. They suggest that this strata was formed in response to a singular event or events; maybe an ancient tsunami which may have occurred because of a meteorite. Source: Dr. John Way, Lock Haven University, "Study Underway to Determine the Origin of the Haystacks", The Sullivan Review, 10/4/07.

Meet one of our Directors

Those of you who have been fortunate enough to attend several of our watershed meetings in Barbour know Geogene Wurster for her tempting baked goods that keep members gathered around her table both before and after our programs. In the early 70's Geogene's husband, Gordon, and several friends established the first Loyalsock Creek Watershed Association with the very same goals: protect the creek where they fish and play and preserve it for future generations so that they too would have memories of family and friends along the "Sock". Geogene has continued to be an active director whose reflection on the past helps guide our efforts concerning the future.



Geogene's ever popular Shoo-fly Cake:

3 c flour, 1 c brown sugar, 1 c butter (2 sticks) – mix – save 1 c crumbs for top
1 c dark molasses (Brer Rabbit) + 1 c hot water + 1 tsp baking soda
Mix all above, pour into 9x12 greased and floured pan, cover with crumb mixture
Bake at 350 for 20 – 25 min. Do not overcook.

Where's my email???

For the first newsletter of the year, we like to send our members a hard copy. If we have your email address, we will also be sending an electronic copy. If you would like to be moved onto the electronic copy list, please contact us at loyal2thesock@gmail.com. If you have friends or family who might be interested in joining the LCWA, feel free to share our newsletter with them.

2014 Loyalsock Creek Watershed Association Membership

The LCWA is a 501(c) 3 non-profit organization whose members care about maintaining and improving the natural resources of the Watershed. To keep up with events in your watershed, become a member and receive our newsletter "Loyal to the 'Sock" and reminders of upcoming events.

Renewal New Member

Please send me newsletters and updates by

Name _____

Mail E-mail Both

Address _____

\$10 - Loyalists (our loyal members)

\$25 - Guardians (of our streams)

\$50 - Protectors (of our forests)

\$100 - Defenders (of our Watershed)

\$200 - Historians (of our past)

E-mail: _____

When you mail something to us, please be sure to address envelope to the **Loyalsock Creek Watershed Association** and not just LCWA. Our mail box is right next to the **Lycoming County Water Authority** (also LCWA) and too much of our mail ends up in the wrong box.

Loyalsock Creek Watershed Association, P. O. Box 216, Montoursville, PA 17754