



Somerset County Conservancy A Charitable Trust

www.somersetcountyconservancy.org

Newsletter

Spring / Summer
2013

New Kiosk at Kimberly Run Natural Area



A new kiosk has been constructed and will soon be full of maps and information about Kimberly Run Natural Area. The kiosk was sturdily built by Jeff Payne and Jim Moses adjacent to the parking area on Craig Road and next to the entrance road for the 3.5 miles of existing trails in KRNA. A large map designed by board member and GIS specialist Trish Miller will soon grace the covered board on the kiosk. This should help visitors plan their hikes through the forests and fields. Last winter the trails received a lot of use from cross country skiers and snowshoe tracks were even spied on the grounds. We encourage all members reading this newsletter to get out and enjoy the grounds—nesting birds are singing right now!

Inside this issue:

| | |
|-------------------------------------|------------------|
| Birding Event | <i>page</i> 2 |
| Way's to help the Conservancy | <i>Page</i> 3 |
| SCC's Education Plan | <i>Page</i> 4 |
| Eastern Hemlock of Kimberly Run | <i>Page</i> 5 |
| Fine Tuning the Heinemyer Discharge | <i>Page</i> 6 |

| | |
|-------------------------|------------------|
| We have a new Web Site! | <i>Page</i> 7 |
|-------------------------|------------------|

We apologize for being late with this Newsletter

A special Thank You to all those who contributed.

Birding Event Garners Pledges for Conservancy

The Roadrunner Birding Team consisting of Board member Jeff Payne, his son Chris and biologist Kim Van Fleet participated in the 30th annual World Series of Birding sponsored by New Jersey Audubon on May 11, 2013. Participating in the Cape May County only division they found 154 species of birds in 24 hours placing second of nine teams in this division behind the Cornell Lab of Ornithology team. Although dodging many rainstorms they had many highlights including Parasitic Jaegers, Nelson's Sparrows and many warblers.

The real winners of this event are the various conservation organizations that receive pledges for species found during the day. The Somerset County Conservancy received over \$3400.00 from 33 generous benefactors. These monies are used for various projects at Kimberly Run Natural Area making this jewel of a project even better for our visitors.

DAVE TAMBURINO

By

Lester Brunell

I first met Dave as a result of being the secretary of the Conservancy, but a technology-challenged one. For years, I pounded-out the minutes of our board meetings using a typewriter. I resolved to go to our Senior Citizen Center for computer classes. Dave was the instructor; he was a graduate of Penn State in electrical engineering and a computer whiz. We hit it off because we had similar boyhood pursuits and adult interests.

Dave became curious about this conservancy business. Soon after he came to the first board meeting he became a member-at-large; and shortly thereafter, he volunteered to help wherever he could. I was reluctant to leave the comfort of the late 19th Century. However, typewriter ribbons got hard to get; I had bought two old typewriters just to get a good ribbon. That had to end. Thanks to Dave, I was able to ease into the 21st Century.

Dave will be greatly missed by all of our members.

Donations in Memoriam

of

David Tamburino

Joan Tamburino

Lester Brunell

Jeff Payne

Jim & Meg Moses

CONSERVANCY DIRECTORS NEED HELP

Lester Brunell

Our Bylaws call for a 15-member board of directors; we now have 14 active directors, the most we have ever had. Nine have been on the board since our founding in 1994. Seven are in the workforce and seven are retired. Those in the workforce have limited time to devote to the Conservancy's business; some, retired and aging, are less physically able to do some of the work necessary. These are the 2013 board members:

Officers:

Jim Moses, President

Jeff Payne, DVM, VP

Lester Brunell, Secretary

Brooke Mishler, Treasurer

Directors

Pam Diesel

Bob Hook

Jeff Kimmel

Thurman Korn

Mike Lanzone

Roger Latuch

Len Lichvar

Dave Mankamyer

Trish Miller, PhD

Dan Seibert

From our founding, the directors have done all of the administrative and physical work necessary to keep the Conservancy functioning and progressing. In the early years, we owned 90 acres in three parcels that were located near each other. Those parcels had passive, mine-water, treatment systems built on them. We now own 575 acres in seven parcels that are more widely dispersed; six of them now have water treatment systems built on them.

The Conservancy needs more help from its members-at-large. The workload has increased greatly. Last year, we acquired a 53-acre parcel that we are now integrating into our Kimberly Run Natural area (KRNA) location. The KRNA is now a 373-acre tract.

We need members-at-large to volunteer for specific tasks; a volunteer's duties would be limited to that specific task. The volunteer would not be required to attend the board's monthly meetings; they would only be required to report to the board when a task is completed. Broadly, we suggest: adopt a parcel of land (except KRNA), adopt a trail, adopt a number of nest boxes, or take care of other items/structures. The work can be divided or combined to suit. The things for which we need help:

ADMINISTRATIVE:

Fund Raising: conduct one campaign a year. We have an urgent need for someone with experience in this job, or willing to undertake it.

Accounting: Someone with experience with Quick Books Software to help us learn how to best use it.

Newsletter: prepare the manuscript or write articles for two issues per year.

LAND MANAGEMENT: The responsibility for the monitoring and maintenance of the water treatment systems has been assigned; volunteer help is needed only with the care of the land surrounding the treatment systems.

Land Parcels:

Coal Run: Elk Lick Twp, along Coal Run Road.

Hawk View, Mountain View and Oak Trail: Shade Twp, along or near Rt 403 between Kantner and Hooversville.

Kimberly Run Natural Area (KRNA): Somerset Twp, at intersection of US Rt 2129 (2-lane) and 219 (4-lane).

Lambert's Run: Stonycreek Twp, near Lambertsville. to Cemetary Road, to Staufer Road.

Mallards Rest: Jenner Twp, Black Hill Road, near Boswell.

Road: A ¾ mile (red dog) on the KRNA.

Trails: Four short ones at: KRNA, Lake Somerset (on PA Fish & Boat Comm land- for bird watchers), Mallards Rest and Oak Trail.

Nest Boxes: some 58, dispersed: KRNA-Penn Section: 8 duck along stream, 8 bluebird, 2 bat, 1 owl. Louie-Beach section: 18 duck, 16 bluebird, 4 bat. Louie-Beach is a more recently acquired parcel; many of these boxes need to be replaced. Lake Somerset: 1 purple martin box which is taken down in the fall. Mallards Rest: 10 duck.

Structures:

Foot bridges: two at KRNA, One at Mallards Rest.

Bench-tables (covered): Two at KRNA along the trail.

Benches-memorial: Eight at KRNA.

Signs: property name at all parcels except Mountain View. Mallards Rest: historical signs; Lake Somerset: birding trail markers; KRNA: trail markers; Oak Trail: treatment system interpretive signs.

Mowing: Mallards Rest and Oak Trail. At present, a member-at-large has volunteered to mow both. He must take a mower to the locations; neither is near his home.

SCC's Educational Program Approved

By Pam Diesel

Somerset County Conservancy's educational program for Kimberly Run has been approved by the Educational Improvement Tax Credit Program (EITC). EITC gives tax credits to eligible businesses contributing to scholarship organizations, educational improvement organizations and/or a pre-kindergarten scholarship organization. Corporations can give donations to non-profit organizations to receive tax credits.

The science program to be approved must be: innovative, of value added to the current school curriculum, and be an advanced educational program. The educational program must be for K-12 public education. The SCC approved program of environmental education for Kimberly Run Natural Area has emphasis on stream analysis including: water chemistry, macro-invertebrate collection and identification, stream health index, flow rate, microscopic life identification (algae, bacteria) and vertebrate organism identification (frogs, fish). The focus of the educational program can expand to include wetlands, terrestrial vegetation analysis, plant and fungi identification, amphibians, ponds and vernal ponds. The interested schools replying to the survey conducted by SCC were Somerset, Rockwood and Berlin.

On February 22, 2013, Jim Moses and Pam Diesel attended the meeting of the Community Foundation of the Alleghenies. They disperse the funds to the non-profit organizations with approved educational programs. SCC will be eligible for funds on July 1, 2013. Businesses are eligible for tax credits if they donate to the Somerset County Conservancy's educational programs at Kimberly run. Further information on donations can be received from: Carol Stern, Director of Donor Relations for the Community Foundation of the Alleghenies. Phone (814-525-9020) or email at stern@cfalleghenies.org.

The EITC director of the tax credit division is James O'Donnell at (717-720-1420) or email at jadonnell@pa.gov. The EITC site is <http://newPA.com>.

The Eastern Hemlock of Kimberly Run Natural Area

By Tricia Miller, Ph.D.

On April 29th, I took a walk at Kimberly Run to take some photos for our new kiosk map. I started out at the gate and proceeded along Red Dog Road with my dog in tow. I headed off along the Blue and White Trail enjoying the warm spring day and marvelling at the beauty of our amazing extensive hemlock grove.

Since moving to Pennsylvania in 2000, the Eastern Hemlock (*Tsuga canadensis*) and its associated ecosystem have enraptured me. The trees, with their dense, shade tolerant branches create a unique microclimate and with it an incredible ecosystem upon which many species depend. However, this species and its associated ecosystem are declining throughout the eastern U.S. due to the introduction of the invasive Hemlock Woolly Adelgid (*Adelges tsugae*) from Asia. The Hemlock Woolly Adelgid is a tiny insect no larger than the period at the end of this sentence. The insect has a needle-like proboscis that penetrates the phloem of tender branches resulting in desiccation and defoliation. Trees typically die within 4-10 years. With very heavy infestation, complete stand mortality occurs resulting in dramatic changes to the ecosystem. While some hemlock species, including Western Hemlock found in western North America, have natural defences against adelgids, the Eastern Hemlock does not. More than half of the hemlock range in eastern North America is occupied by the pest, which continues to spread at a rate of approximately 20 km per year. If nothing is done to stop this pest the Eastern Hemlock is expected to go extinct within 30 years.



Back on the trail, I could hear song battles among Black-throated Green Warblers vying for space in the hemlock woods. I walked out of the hemlocks into the fields tracking toward the Pavilion Trail. As I turned down the trail, back into the hemlock grove, I noticed the tell tail sign of adelgids, a dry, white, woolly substance associated with all stages of the insect's growth, but most visible when egg masses are present. The lower branches of most trees in this section were heavily infested. My heart hung heavy knowing that our grove was under attack. I continued to survey along the trail and found woolly adelgids in varying levels of infestation to Red Dog Road. Luckily, I could find none of the bugs along the road. Jim Moses, Mike Lanzone and I returned at the end of the week to make a more complete survey and found that the infestation appears to be contained around the pavilion and has not reached the stream. Trees bordering the field toward Rt. 219 showed the heaviest infestation suggesting this as the point of origin.

Our hemlock grove is hugely important to the Natural Area, occupying over 50% of the total area. The loss of hemlock would dramatically change the character of Kimberly Run. To address this problem and understand how other species may be affected, the board has decided to conduct formal surveys to map the extent of the infestation. Additionally, we will begin treatment of large hemlock trees. Treatment consists of injecting the soil around each tree with imidacloprid, an insecticide. We have hired an intern, Chris Payne, a student at WVU, to conduct this work. Because of the expense and the sheer number of trees, we will focus our efforts on the largest trees and hope that more effective treatments become available. We are accepting donations and encouraging volunteers to assist with this huge effort to save our forest. For more information about the hemlock woolly adelgid in Pennsylvania visit <http://www.dcnr.state.pa.us/forestry/insectsdisease/hwa/>.

FINE TUNING THE HEINEMYER TREATMENT SYSTEM

BY Dan Seibert

Through the winter the Heinemyer Passive Treatment System has been treating the Heinemyer mine discharge. The only pollutant that degrades Lamberts Run from the Heinemyer discharge is iron. The treatment system has been lowering the iron level to about 10 mg/L at the outlet of the treatment system. Better water quality was anticipated from the Heinemyer system.

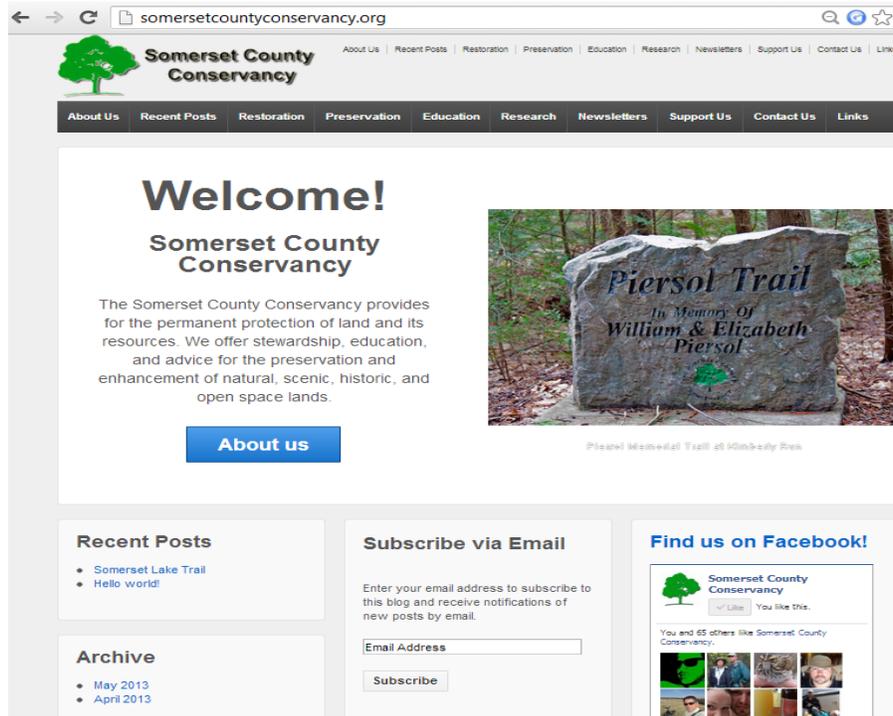
There are two reasons the Heinemyer system was not meeting expectations. First, the mine water chemistry changed slightly and all of the iron flowing from the mine was in a reduced form, which means more oxygen is needed to cause the iron to precipitate in the treatment system. The second reason is that the precipitation reaction that changes the iron from a reduced (ferrous) form to an oxygenated or (ferric) form is an acid producing reaction. In this reaction every part of iron that is precipitated produces two parts of acid. Although the Heinemyer discharge is alkaline, at times the precipitation reaction would produce enough acid to make the water net acid. This addition of acid slowed the precipitation of the iron in the system.

To correct and manage the performance of the Heinemyer system, a water pipeline was constructed this winter between the Flight 93 treatment system and the Heinemyer system. The flight 93 treatment system water, at its outlet, has two qualities that the Heinemyer system needs to work as anticipated. The Flight 93 system water is very high in alkalinity and oxygen so mixing the two waters was the obvious action to take. Initially, after mixing the water from the two systems the iron level was reduced, from 10 mg/L to 4 mg/L at the outflow of the Heinemyer system. It is anticipated that experimenting with the flow rate from the Flight 93 system that the iron level can be reduced to 1 mg/L. We will probably have to wait until next winter to complete the fine tuning of the flow rate from the Flight 93 system when the temperature is down again and the flow rate is up again. The higher temperatures and a lower flow rate from the Heinemyer discharge during summer will cause the system to function more efficiently. The final fine tuning of the flow rate from the Flight 93 system to the Heinemyer system will be completed next winter.

Hopefully the fall issue of the newsletter will have information on the construction of the upgrade of the Conservancy system located a few hundred yards below the Heinemyer system on Lamberts Run.



FLIGHT 93 WATER MIXING WITH THE HEINEMYER DISCHARGE



We have a new web site!!!

Designed and built by Board Member Mike Lanzone, this new website will enable us to post frequently with updates, stories, and events to keep everyone in the loop. This new website is also totally interactive with the ability for visitors to post comments and & share pictures on the site as well as on our Facebook page which is linked to the website. The site will have a lot more content added over the coming month, but eventually there will be trail maps and site information with locations and directions to all of our sites. Upcoming events and sharing of information as well as historical info about the Conservancy is what this web site will be about. Please visit the site and let us know what you think and join in with your posts, photo and experiences!

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Somerset County Conservancy

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\$ 75 Sustaining Member

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