



FALL 2010

INSIDE THIS ISSUE:

BWA Honors Local Conservationist John Serrao at Annual Dinner Celebrating 21 Years of Watershed Protection	2
Class A Trout Waters	2
Five Join BWA Board, Three Current Members Relected to Second Term	3
Water Facts: "H2Ology"	3
Former BWA President Honored	4

WELCOME NEW BWA MEMBERS!

**Duane Kerzic
 Brian Peeters
 Judy & Jim Olivo
 Caryn R. Kunz
 Mark Dodel &
 Patricia Rylko
 Robert Larsson
 Susan Lyons
 Philip Zimich
 Mary Kinney
 Kathy & Eric Uhler
 Jeff & Mary Ellen
 Feick
 Duane Kerzic
 Paul & Theresa Jones
 -Wilson**



Let Us Promise You a Rain Garden

Two rain gardens were successfully installed in Stroudsburg on September 27, the first day of real rain in three months. The gardens captured and held the rain well. Three days later, when hurricane Nicole hit, 6 inches of rain didn't faze the gardens.

Cliff and Robin Lively, at 138 Broad Street received a 145 square foot rain garden extending along their front yard on the Clermont Avenue side. They selected a variety of flowering water-loving perennials and shrubs that will provide color spring, summer and fall.

Maria and Herbert Jacobs, at 120 Hemlock Road received a 160 square foot kidney-shaped rain garden along the street front and parking area of their yard. The plants in their rain garden were also selected for a changing color display.

Wayne Ross of Ross and Ross Nursery in Paradise Valley installed the gardens. He also installed pipes from the front downspouts of each house into the gardens. Wayne installed rain gardens at the Barrett-Paradise Friendly Library in Cresco last summer and would like to see more rain gardens capturing run-off to recharge groundwater and protect streams.

Let Us Promise you a Rain-Garden is a project of the Brodhead Watershed Association in partnership with the

Borough of Stroudsburg and Monroe County Conservation District. The project began with a workshop for Stroudsburg Borough residents on what a rain garden is and how to install one. Trish Attardo, Watershed Specialist for the Monroe County Conservation District, gave the workshop. A rain barrel was given away at the workshop.

Borough residents then had an opportunity to apply for a rain garden for their property. Two homes were selected based on their visi-

bility and suitability for a rain garden. Tom Harley, BWA board member and surveyor with Niclaus Engineering, calculated the size, based on the roof area that drained to the downspout that would feed the rain garden.

Lori Colgan, volunteer member from BWA worked with the homeowners to select the location of the gardens and plants. Signs describing the gardens to passers-by will be installed shortly.

We look forward to a tour of the gardens in the spring.



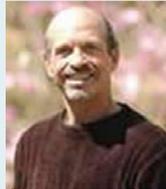


BWA Honors Local Conservationist John Serrao at Annual Dinner Celebrating 21 Years of Watershed Protection

John Serrao's 24 years of sharing his love for the natural world with Pocono residents and visitors drew the applause of 150 enthusiastic supporters gathered in his honor on October 7. John came to the Poconos in 1986 with his young family with knowledge and love for the environment, determined to build a career here that would spotlight the rich natural resources of the Pocono area. He has done that and more.

Leading hikes in state parks and gamelands, giving programs at schools and camps, educating visitors at resorts, including Sterling Inn, Buck Hill and Skytop and writing a weekly column for the *Sunday Pocono Record* - all this and more has been John's contribution to the Pocono area.

John has been a friend of the Brodhead Watershed Association since its beginnings. He was one of four speakers at our first organizational meeting in 1989 and promoted the importance of protecting the rich resources of the watershed.



Two standing ovations at his celebration dinner showed the warmth and love felt for John, and by extension the natural environment of the Poconos that we all cherish.

Also honored at the dinner was the Brodhead Forest and Stream Association. The club has undertaken several workdays to remove invasive plants on their 1400 acres along the Paradise and Brodhead creeks. Club members, under guidance from Lori Colgan, BWA's invasive plant specialist, have tackled severe infestations of Japanese knotweed, barberry and Russian Olive. The club was honored for their understanding of the threat of invasive plants to habitat and natural ecosystems - and doing something about it.

The dinner took place at the Buck Hill Tennis Club, with a barbeque buffet prepared by Dave Cook, Executive Chef at Buck Hill's Fairway Grill. Kietryn Zychal, Sharon Rose, Lori Colgan and Dale Price spent the afternoon arranging flowers, including local invasive plants that were identified with notes.

Class A Trout Waters

By Don Baylor

The PA Fish & Boat Commission classifies trout streams according to trout biomass, which is expressed in pounds per acre or kilograms per hectare. This classification system is independent of the stream classification system used by PA Department of Environmental Protection (PADEP). PA DEP's system, including Exceptional Value, High Quality Cold Water, etc., is not based on trout biomass but on water quality measured primarily by overall aquatic life, especially macroinvertebrates. However, having a Class A wild trout population can be helpful in petitioning for an upgrade in DEP's classification system.

The PAF&BC's system classifies trout streams as Class A, B, C, etc., with Class A being the best streams exhibiting the highest trout biomass. Minimum standards for Class A trout biomass vary according to trout species:

Wild Brook Trout fisheries – Total brook trout biomass of at least 26.7 lbs/acre.

Wild Brown Trout Fisheries – Total brown trout biomass of at least 35.6 lbs/acre

Mixed Wild Brook & Brown – Combined brook & brown biomass of at least 35.6 lbs/acre.

In addition to having the minimum biomass, Class A trout populations have to exhibit balance, having a certain biomass of smaller fish indicative of successful reproduction.

Total trout populations are measured by sampling a given length of stream, usually with electrofishing gear. Trout are collected, weighed, measured, and released unharmed. This is a sampling method; not all the trout are collected in one collecting pass (run). In order to estimate the total population, more than one run must be made. Fish collected on the first run can be held in live pens and a second and third run can be made with the trout retained separately for each run. This is referred to as the

"depletion method." Theoretically, fewer trout are collected with each subsequent run so that graphing or mathematical regression can be used to estimate how many trout would be collected before there were none left – the total population estimate.

Another way to obtain the total population estimate is called "marked recapture." With this technique, trout collected on the first run are marked, usually by fin clipping, and returned to the water. After the trout have had time to redistribute themselves, another run is made, and the number of marked (recaptured) fish can be compared to the number of new, unmarked fish to apply mathematical regression and estimate the total population.

Since trout populations can vary year to year with water conditions, one seasonal sampling does not automatically result in a change in classification. Fish Commission surveys in 2002 found Class A populations in 6 of 8 stations sampled on Pocono Creek. More samplings with similar results may be required for sections of Pocono Creek to be reclassified Class A.

Stocking of hatchery trout in streams with good wild populations has been shown to significantly reduce the number of wild trout. This happens because wild trout have a social order or dominance hierarchy which is disrupted by hatchery trout. This disruption displaces and stresses the wild fish. Of course, stocking also may impact wild trout by causing increase angling pressure. For these reasons, PA Fish & Boat Commission policy precludes stocking in Class A Wild Trout Waters.

In the Brodhead Watershed, PAF&BC currently lists all or portions of the following as Class A Trout Streams: Poplar Run, Cranberry Run, Devil's Hole Creek, Mill Creek, Middle Branch Brodhead Creek, Cranberry Run, Pensyl Creek, and Wolf Swamp

...continued on page 4

Five Join BWA Board, Three Current Members Reelected to Second Term

The following community members were elected to the Board of the Brodhead Watershed Association at the annual meeting in October. Each has worked toward protecting the environment and water resources in a variety of ways.

Lori Colgan was Invasive Plant Specialist for the Brodhead Watershed Association during the second phase of BWA's Invasive Species Management Plan. She also assisted with the "Let Us Promise You a Rain Garden" project. Lori spent four seasons at The Nature Conservancy's Northeast Office coordinating the "Weed Watcher" volunteers, an invasive plant detection program and has worked with U.S. Forest Service as a field botanist. She has a B.S. in Environmental Studies from East Stroudsburg University and a law degree with a concentration in Environmental Law from Vermont Law School. She also serves as Vice President of the Pocono Heritage Land Trust.

Jeff Feick is employed as Golf Course Superintendent at Glen Brook Golf Club. He lives in Smithfield Township with wife Mary Ellen, a veterinarian at Harmony Animal Hospital in Phillipsburg, NJ. Jeff graduated from East Stroudsburg University with a degree in Environmental Studies and attended Rutgers University where he received a two-year certificate in Professional Golf

Turf Management. His interests include fly fishing, kayaking and a lifelong fascination with observing the natural world.

Robert Larsson, Ph.D. is an Assistant Professor of Environmental Studies at Sussex County Community College in Newton, NJ. He earned his Ph.D. in Environmental Engineering at Loughborough University of Technology and a B.S. in Engineering Science from Rensselaer Polytechnic Institute. He was a Peace Corps volunteer and worked for UNICEF as well. He has worked for many years in Africa on rural water supply.

John K. Leiser, Ph.D. graduated summa cum laude from East Stroudsburg University in 1996 with a B.S. in Environmental Studies. In 2003 he earned his Ph.D. in Biology from Lehigh University. John is an Associate Professor of Biology at Northampton Community College. He is an Associate Board Member of the Monroe County Conservation District, a Board Member of Pocono Avian Research Center, and served on Cherry Valley National Wildlife Refuge Feasibility Study Team. His work has been published in *Animal Behavior*, *The Journal of Fish Biology*, and many other journals.

Paul Wilson, Ph.D. is Assistant Professor of Biology at East Stroudsburg University. He received his education

from Washington University and Lafayette College. He has published in the *Journal of Human Evolution* and in *Behavioral Ecology* and has made numerous presentations at professional forums and annual meetings as well as at the Pennsylvania Academy of Science.

Nominations for a second term are: Patricia Kennedy, Kenneth Zinis, and Kietryn Zychal.

Patricia Kennedy Ph. D. is an Associate Professor in the Communications Studies Department at ESU. She resides in Stroud Township on McMichael Creek. Before joining the ESU faculty, Pat spent more than 20 years as an attorney-- much of her work in environmental law. She earned a Ph.D. in Mass Communications with a focus on political and environmental communication from Syracuse University. Pat has been an active member of the BWA Board since 2007. She served as

BWA's Vice president for outreach in 2008-9 and is the current president of BWA.

Kenneth Zinis is an Environmental Engineer with Sanofi Aventis and works in the Health, Safety and Environmental Group. He has over twenty-five years of experience in the petroleum, chemical and pharmaceutical manufacturing industries and is a licensed wastewater treatment plant operator in NJ. Ken resides in Northampton County.

Kietryn Zychal resides in Tobyhanna Township. She has a B.S. in Business and Economics from Lehigh University and is also a licensed real estate agent. Kietryn was an aspiring actress for many years and lived in New York City and Los Angeles. She is a writer and journalist. Kietryn prepared the petition BWA submitted to DEP for designation of the upper Swift-water Creek and Indian Run as Exceptional Value.

Encourage a Friend to Join Today!!!

Name: _____

Street: _____

City: _____ Zip: _____

Phone: _____

E-mail: _____

Preferred method of BWA receiving news & info:

Regular Mail	Email	Both
--------------	-------	------

Circle One:

Family \$30	Individual \$15	Senior \$10
-------------	-----------------	-------------

Student \$5	Contributor \$100
-------------	-------------------

Adopt-A-Stream Site \$250

Return, with your check to:

Brodhead Watershed Association
Box 339, Henryville, PA 18332

The official registration and financial information of Brodhead Watershed Association may be obtained from the Pennsylvania Department of State by calling toll-free, within Pennsylvania

Water Facts: "H₂Ology"



What is the major cause of Pollution of Drinking water in towns and cities?

The major source of pollution is rainwater that flows into the street and catch basins, (called urban runoff or stormwater runoff).

While this rainwater alone is not necessarily harmful, it frequently carries untreated waste products from our streets, roofs, and yards directly into streams, rivers and lakes, all drinking water sources.

Class A Trout Waters...continued from page 2

Run. Listed Class A streams in other Monroe County drainages are Aquashicola Creek, Singer Run, Pohopoco Creek, Middle Creek, and Dotters Creek.

However, these are not the only streams in Monroe County with Class A populations. There are many streams the Fish Commission has not surveyed. Aquatic Resource Consulting (ARC), surveying streams for private clients and through grants obtained through the Brodhead Watershed Association, has found quite a few additional Class A streams. For some time, I have felt that the Fish Commission should add these streams to their Class A list. Although the Class A Wild Trout designation does not affect the DEP permitting process, it is indicative of high water quality and provides baseline information against which future impacts can be measured.

Recently, the Fish Commission has expressed interest in documenting any Class A trout populations not currently on their list. I am preparing to submit to the Commission ARC's documentation of Class A wild trout populations on the following streams or stream sections: Indian Run, upper Swiftwater Creek, Tank Creek, Yankee Run, upper Paradise Creek, upper Cherry Creek, and Taylor Creek. Additionally, Buck Hill Creek, Griscom Run, Reeders Run, Michael Creek, Scot Run, Spruce Cabin Run, lower Stony Run, and Leavitt Branch Brodhead are stream segments for which we do not have data but which may have possibilities for Class A Wild Trout designation.

In our annual water quality work for Pike county, ARC has documented other Class A stream segments not on the PAF&BC list. We will submit these data to the commission as well.

Former BWA President Honored

Former BWA President, Don Miller, 1997 -1999, was honored with an Environmental Partnership award at the Northeast PA Environmental Partners dinner on October 14, 2010. Named the 2005 Conservation Educator of the Year by the Monroe County Conservation District, he is dedicated to the conservation and preservation of the county's natural resources.

Don currently works as a technology instructor at Clear Run Elementary Center in the Pocono Mountain School District where he works with elementary students on environmental lesson. He is a Naturalist at the Monroe County Conservation District and was instrumental in establishing the Environmental Education Center and its integration into local schools. Over the past 20 years, He is an active member of the Monroe County Open Space Advisory Board, Paradise Township Environmental Advisory Council, Pocono Heritage Land Trust Board of Directors and the Nature Conservancy's Tannersville Cranberry Bog Preserve Committee.

Don Miller is committed to educating the public about conservation and sharing his vision for community supported, cooperatively developed open space programs that honor and protect the natural places and open spaces that make the Poconos exceptional.



Want to contact us?

Phone: 570-839-1120 **Email:** brodheadwatershed@verizon.net **Web:** www.brodheadwatershed.org



Brodhead Watershed Association

Box 339
Henryville, PA 18332

The Brodhead Watershed Association is a non-profit organization formed in 1989 to promote and preserve the environment of the Brodhead watershed and the water quality of the Brodhead, Cherry, Marshalls, McMichael, Paradise, and Pocono creeks and their tributaries.