

Streamlines

Summer 2015



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- Welkinweir's bird biodiversity
- Connecting children with nature

WARNING
ADVERTENCIA
AVERTISSEMENT



KEEP CHILDREN
AWAY FROM
BAGGETS WITH EX-
POSURE OF LIQUID
CONTAINERS
CHILDREN PASSENGER C-
BAGGAGE AND BAGGAGE
AVERTENCIA A LOS NIÑOS



GREEN VALLEYS
WATERSHED
ASSOCIATION

Northern Chester County
Watersheds for 50 Years

GREEN VALLEYS WATERSHED
ASSOCIATION at
WELKINWEIR

The mission of Green Valleys Watershed Association is to protect, preserve, and restore the natural waterways of northern Chester County. We inspire, educate, and involve our community to make a difference for our generation and for generations to come.

Welkinweir

Our headquarters in East Nantmeal Township is a spectacular property which showcases our organization's Mission. Originally the home of founding members Everett and Grace Rodebaugh, the 197 acres of permanently preserved land feature a 55-acre arboretum, diverse wetlands, meadows, ponds, and forest habitats. The property hosts many of our environmental education programs, along with a growing collection of sustainability demonstration projects. Visiting hours on page 4.

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Cover Image:

Staff member Kelsey Stanton, former Executive Director & President Harriet Stone, and longtime volunteer & stream advocate Rob Blumenthal sample macroinvertebrates on the French Creek. © 2015 T. Davidock.

From the Director: Volunteerism on the Rise

*Over the past six years, our organization's volunteers have increased **tremendously**, bringing crucially needed time and talent to the programs and services which are at the heart of our Mission. GVWA volunteers are a diverse group of people, coming from schools, Boy & Girl Scout troops, local businesses, community organizations, churches, partner non-profits, and GVWA membership. What is shared across this diversity is the desire to give back to our community and to care for our streams. On behalf of myself and all of the staff at Green Valleys, **thank you!** It is a privilege to work with you, and we look forward to our shared accomplishments in the years ahead.*

Yours in the watersheds,



Victoria Laubach
Executive Director

Griffith Farm in West Vincent Township, 2010: GVWA leads a volunteer team of Girl Scouts and church group members in planting trees to restore a riparian buffer within the Birch Run watershed.



Pack a picnic and enjoy
"Welkinweir by
Moonlight"

Friday, July 31, 2015
6:30 to 9:00 p.m.



Bring your own picnic dinner and experience Welkinweir by twilight! We will provide beverages and ingredients for making s'mores by a campfire. Participate in nocturnal nature educational programs perfect for all ages: "moon gaze" through a telescope; take a nighttime hike through the nature preserve; and learn more about Welkinweir's evening animal visitors like moths, and amphibians. This event is free and open to the public!

Save the Date:
Run for Green Valleys!

Horse-Shoe Trail Race and
Welkinweir Fun Run

Saturday, September 12, 2015



Prepare to run for your watershed! We are excited to announce that this year's Run for Green Valleys will be a trail race on the Horse-Shoe Trail! Participants will race through some of the most scenic landscapes of Chester County. Proceeds will benefit our Watershed Restoration Program.

Water Quality and Cold Water Fish Habitat Threatened

The June 2015 report "Climate Change in the United States: Benefits of Global Action" provides a comprehensive look at the risks to our country stemming from a warming climate. Two general scenarios are presented; one in which greenhouse gas emissions continue to grow as usual and another where emissions are reduced. Through comparison of these two scenarios, the benefits of emissions reductions are estimated for the health, infrastructure, electricity, water resources, agriculture, forestry, and ecosystem sectors. Towards the end of the report, the projected impacts to cold water fish habitat across the U.S. are examined.

Locally, cold water fish habitat consists of either Exceptional Value (EV) or High Quality (HQ) streams. These streams support a range of cold water species, most notably several trout species very important to recreational fishing. Many of the trout streams are stocked, but we also have wild trout streams across the watersheds, including Class A wild trout streams in Valley Creek, and native wild Brook trout (*right*) in Sixpenny Creek in southern Berks County. Under the higher emissions scenario, cold water habitat disappears from the entire east coast of the U.S. by 2100; with reduced emissions, projections show that a majority of this habitat is preserved, although losses in southern Pennsylvania are still high. The full report is available for download at <http://www2.epa.gov/cira/downloads-cira-report>. –Michael Bullard



Native brook trout and other trout species require water temperatures between 50° and 65° F to thrive and reproduce. Climate change will cause these fishes' habitats to shrink. Image courtesy of U.S. FWS

Schuylkill Water Stewards: High-Tech Volunteers

We are pleased to announce the graduation of the second class of Schuylkill Water Stewards! There are now 23 volunteers in the SWS water quality monitoring network, which covers the French, Pickering, Pigeon, and Hay Creeks and Stony Run. This year also marks the beginning of SWS volunteer data collection, starting in April with macroinvertebrate collection along the Pine Creek in the Pickering Creek watershed.

Each Schuylkill Water Steward has completed training in water quality issues specific to our area, and has committed to at least 20 volunteer hours of monitoring. This may include taking quarterly stream samples for chemical and microbiological analysis (*upper right photo*); surveying particular streams for macroinvertebrate species (*lower right photo*); conducting annual **assessments** of a stream's physical habitat; or tracking potential sources of stormwater nonpoint source pollution.

Organizations and agencies across the country are quickly realizing the value of data collected by high-tech volunteers like the Schuylkill Water Stewards. Trained in professional monitoring techniques, these volunteers are tremendous assets to water quality programs monitoring the long-term health of a watershed.

The SWS team will mobilize again in August for summer quarterly sampling in the French and Pickering Creek watersheds. If you are interested in learning more about the Schuylkill Water Stewards program, contact us at gva@greenvalleys.org; or visit www.schuylkillwaterstewards.org. Training for a third class of volunteers will begin this fall – look for an opportunity to sign up in the coming months! –Kelsey Stanton



Below, from top to bottom: The PAMS bioswale in late June; SES students planting the rain garden in October 2013; the rain garden today.



Restoration Project Updates

Thanks to the generous support of multiple organizations and agencies, we are moving “full steam ahead” on several exciting projects that are part of our Watershed Restoration Program. Here are a few updates on our most recent accomplishments:

Basin Naturalization in Valley Creek Watershed

The PA Department of Environmental Protection is funding this joint project between Green Valleys, Valley Forge Trout Unlimited, and the other leading members of the Valley Creek Restoration Council through their Growing Greener grant program. Awarded in 2012, this pilot project will retrofit up to 12 stormwater detention basins to improve their ability to infiltrate precipitation through a combination of strategies. The basins currently undergoing retrofitting will receive re-contouring of the basin floor & upgraded outlet structures to better detain runoff, and their turfgrass covering will be converted to tall meadow-like vegetation for improved infiltration. Work is scheduled to begin in the fall. Six other basins will be naturalized with native meadow vegetation as a low-cost, high-impact model of stormwater management.

We are seeing strong interest from businesses, institutions, and local government in this program, and are currently discussing basin naturalization with several organizations. Dr. Clay Emerson, the engineer whose studies on Valley Creek’s basins from 2003 inspired this project, is working with the Valley Creek Restoration Council to compile a report on the basins’ progress over the years. Dr. Emerson and GVWA Communications Coordinator Kelsey Stanton also presented on the basins and the grant project before the Chester County Water Resources Authority. We look forward to the completion of this exciting grant project, which will hopefully spark more basin naturalization work in Valley Creek and other watersheds!

Stormwater Best Management Practices at Schools

In 2013 and 2014, we have partnered with the Phoenixville Area School District to construct two examples of green infrastructure on school campuses with help from students. Schuylkill Elementary School received a rain garden to improve drainage in a compacted area near the playground, and Phoenixville Area Middle School received a bioswale vegetated channel to capture rainwater from the cafeteria roof. Watershed Restoration Coordinator and Educator Margot Taylor worked with the schools’ faculty and staff to design both gardens and to lead students in planting them. The students also learned about the importance of the gardens in reducing and filtering stormwater runoff.

Both the rain garden and the bioswale are successfully improving stormwater infiltration at each school. The native plants, which include grasses and pollinator-friendly wildflowers, are establishing quickly and are attracting beneficial wildlife like insects and songbirds. *We’re excited to accomplish even more in the months ahead in this core aspect of our mission!* –Kelsey Stanton

Catch of the day: This adult Great Blue Heron finds the beaver dam on the great pond to be a perfect fishing spot, catching a largemouth bass before our wildlife monitoring trail camera in this sequence of photographs.



Ready, Set, Bird!

Birds of every size and shape fill the gardens, meadows, and woodlands with song and color throughout the year, delighting us with a constant stream of birdsong and activity! The Welkinweir Valley and surrounding landscape-including three Audubon-designated Important Bird Areas-of forested hills and stream corridors, wetlands, conserved meadows and pastures, and wildlife-friendly backyards and gardens, offer a network of refuges and connections that enable birds to travel in relative safety from habitat to habitat.

Our young to mature forests, meadows, and riparian habitats offer shelter, food, and nesting for a rich diversity of species, from specialist species (those requiring specific conditions to survive) to widely-adapted generalists. Throughout the year these rich, protected habitats serve as both a home for birds to raise families and survive the winter, and a welcome stopover for seasonal migrants.

Highlights of This Year

The diversity of birds that inhabit or pass through Welkinweir offers enjoyment for new bird enthusiasts and experienced birders alike. The ponds provide food year-round: in winter and early spring, migrating waterfowl such as **Hooded Merganser**, **Northern Pintail**, **American Black Duck**, and **Common Loon** (new this year!) join resident mallards and wood ducks; by late spring the **Ospreys** have returned while the summer brings **Great Blue** and **Green Herons**. The forests are home to birds that require many acres of woodland: in summertime they ring with the calls of warblers like the **Ovenbird**, **Scarlet Tanagers**, and thrushes such as the **Wood Thrush**. **Pileated Woodpeckers** are year-round residents here. Along the forest edges in summer you are certain to hear the cheerful, bouncing song of the **Indigo Bunting**, and you might also catch the curious buzzing call of the **Blue-Winged Warbler**. Riparian areas offer a chance to glimpse a **Red-Shouldered Hawk** or a male **Orchard Oriole** in his dramatic rusty-orange plumage. **Tree Swallows** swoop over the pond and meadows from spring to fall; their aerial acrobatics and iridescent blue-green and white feathers are sure to dazzle! *-Kelsey Stanton*



Welcome, Eric Hughes!

Our newest intern is a student at Owen J. Roberts High School. A nature enthusiast who enjoys almost anything having to do with the outdoors, Eric is most interested in birds and plants. This interest began at a very early age: according to Eric, “since I was four, I have been learning about and studying birds and plants...and I enjoy spreading my knowledge to anyone who is

interested. I have participated in many competitions related to those fields, and I have experienced many different environments through nature-related travel. I see working at Welkinweir as a great opportunity to learn and gain experiences doing the things I love, as well as an opportunity to pass on what I learn to others and hopefully benefit the property and those who visit it!”

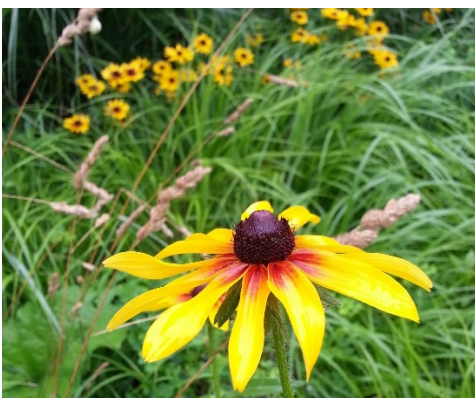


Welkinweir was one of 12 gardens represented at the 2015 Regional Intern Outreach Day at Awbury Arboretum. Our horticultural intern, Matt Rozanski was one of 110 participants at the most successful work day to date.

Calling all birders!

There’s no better way to learn about Welkinweir’s bird biodiversity than to join our *free* Saturday morning bird walks! Whether you encounter a Great Blue Heron patiently stalking fish in the pond, or catch the brilliant flash of a male Baltimore Oriole flying from his perch near the meadow, you are guaranteed a “front-row seat” to the world of Welkinweir’s birds.

We are also looking for volunteer birding assistants who can help the bird walk leaders once or twice a month with identifying and recording birds spotted on our walks. Share your love and knowledge of birds with others! If you are interested, please contact kelsey@greenvalleys.org.



Visiting Welkinweir

The grounds are open **Monday - Friday, 9 a.m. - 4:30 p.m.** Parking is available in the large lot near the pavilion. We may have programs or private events occurring on weekends and we ask members who want to visit then to **inquire during business hours** about availability. We thank visitors bringing dogs for keeping them leashed and cleaning up after them.

Discoveries are waiting to be made at Summer Camp!

Are you still looking for a camp where your children can...

- Disconnect from electronics and reconnect with the outdoors?
- Have new opportunities to explore, discover, and play?
- Get their hands dirty and have fun?

Then get in touch with our Summer Nature Day Camp! Spaces are still available in the following weeks for the listed age groups:

- **Dragonflies (ages 4 and entering Kindergarten):** July 20, July 27, August 3, August 10
- **Bullfrogs (children entering grades 1 & 2):** July 20, August 3, August 10
- **Turtles (grades 3, 4 & 5):** all weeks are full
- **Hérons (grades 6 & 7):** August 10

Please contact Dawn White for updates or to be placed on a waiting list for specific camp weeks.



Connecting with Nature in Pottstown

"Nature club is amazing. It is a great experience," and, "Thank you so much for letting me participate! It was so much fun," exclaimed two of the 21 second graders who participated in afterschool Nature Explorers Club, presented by Green Valleys this spring.

In its third year, this grant-funded program is open to second graders at Elizabeth B. Barth Elementary School in Pottstown. The club provided an excellent means for students from low-income families in urban areas to experience and learn about nature, wildlife, environmental issues, and conservation, all while participating in hands-on, outdoor activities. The nature club occurred twice weekly over six sessions. Topics covered included: local habitats, animal adaptations, birds and migration, aquatic animals, and pollution. Each class concluded with the students' journaling about what they had learned that day.

The students thoroughly enjoyed nature club, with many expressing sadness at the club's conclusion and wishing that it would continue into third grade. The students were always inquisitive and excited to learn. Multiple students expressed how they would tell others what they had learned - "I will tell my mom, dad, sister, brother, and cousin to not throw trash on the road. Find a trash can," commented one student. And all of the participants seemed to take away with them a greater appreciation for the environment.

This program was made possible through a grant from the Pottstown Area Health & Wellness Foundation.

-Dawn White



Summertime Memories (clockwise from top left): Campers make new friends while exploring Welkinweir's woods, meadows, ponds, and stream; participating in nature-themed activities; learning about the miniature world of insects and other "creepy crawlies"!

Community Nature Programs Calendar

July - August 2015

Nature Programs at Welkinweir

Guided Nature Walks

Free Saturday morning nature walks will resume this October.

Children's Programs series will return this Fall!

Kinder Nature, Little Wonders, and Night Owls classes will return in October! Please check our Education Events Calendar starting in August for program dates and details.

New! Full Moon Walk & Picnic

Friday, July 31 – 6:30-9:00 p.m.

Pack a picnic dinner and watch the moon rise over Welkinweir! Experience the wonder, mystery, and romance of a moonlit night. Enjoy s'mores over a campfire following a nocturnal walk through the preserve and gardens. This event is free and open to the public. *Bring your own picnic materials. S'mores provided. Flashlights and bug spray recommended. Please, no coolers or dogs allowed.* Contact gva@greenvalleys.org for more information.

Nocturnal Animal Hike & Campfire (part of the Penn Liberty Bank nature program series)

Friday, August 7 – 7:30-9:00 p.m.

View nature at night at Welkinweir! Enjoy stories and s'mores at the campfire, then search for signs of nighttime animals, play sensory games, and learn more about nature in summertime.

Perfect for families with children ages 5 and older. S'mores are provided; bug spray and flashlights are recommended. Fees per person: GVWA Members \$6, Nonmembers \$8. Advanced registration required no later than Thursday, August 6.

Library Programs: Little Sprouts Nature Classes

*Ages 3-5 with caregiver. **Free.***

*Register at Chester Springs Library by calling 610-827-9212.
Register at Henrietta Hankin Library by calling 610-321-1700
or online at www.ccls.org.*

Chester Springs Library Tuesdays 10:30-11:15 a.m.	Henrietta Hankin Library Thursdays 10:30-11:15 a.m.
July 21 <i>Things with Wings</i>	July 23 <i>Animal Coats and Coverings</i>
August 18 <i>Sensational Senses</i>	

To learn more about upcoming education programs and to register for specific classes, please contact Education Coordinator Dawn White by calling 610-469-8646, or email dwhite@greenvalleys.org.

Please join us...

Your membership is an investment in clean water and healthy watersheds, for now and for future generations.

Name _____

Address _____

City, State ZIP _____

I would prefer to pay by:

Check (*made payable to Green Valleys*) Visa MasterCard
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Credit Card # _____

Exp. ___ / ___ CID _____ Phone _____

E-mail address _____

Phone & e-mail needed to process credit card payments. We do not share your information with other charitable organizations.

Detach this form and mail with payment to:

Green Valleys Watershed Association
1368 Prizer Road, Pottstown, PA 19465

Online membership also available at www.greenvalleys.org

Dues and contributions are tax-deductible. Green Valleys is a registered charitable organization. A copy of registration and financial information is available by calling 1-800-732-0999. Registration does not imply endorsement.

MEMBERSHIP includes newsletter subscription, notice of special events and programs, and reduced rate to special programs, workshops, and summer nature camp.

Membership levels (please check one):

- Individual..... \$45
- Family..... \$60
- Naturalist..... \$100
- Environmentalist..... \$250
- Protector..... \$500
- Preservationist..... \$750
- Steward..... \$1,000

I am a: New Member Renewing Member

Please send me information about including GVWA in my legacy planning.

Please notify me of Green Valleys volunteer opportunities.

E-mail: _____

I prefer to receive my copy of Streamlines via: Mail E-mail

Visit our website at www.greenvalleys.org

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