

# Streamlines



# 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, Chester County, is a spectacular property which showcases our organization's Mission. Originally home of founding members Everett and Grace Rodebaugh, the 197 acres of permanently preserved land arboretum, features а 55-acre ecologically diverse wetlands, forested riparian buffers, meadows, and forest habitats. The property hosts our many environmental education programs and features an ever-growing collection of projects that demonstrate sustainable practices.

Weekday visiting hours and information on page 3.

**1368** Prizer Road Pottstown, PA **19465** Phone (610) 469-4900 Fax (610) 469-4990 Email gva@greenvalleys.org

**Web** www.greenvalleys.org

#### Officers

Ed Bacon- President Allen Heist- Vice President John Eldridge- Treasurer Jo-an Rechtin- Secretary

#### Staff

Victoria Laubach - Executive Director victoria@greenvalleys.org

Dawn White- Environmental Education Coordinator dwhite@greenvalleys.org

Michael Bullard- Watershed Science Coordinator mikeb@greenvalleys.org

Zach Yodis- Sampler/Analyst zach@greenvalleys.org

Kelsey Stanton- Watershed Restoration Specialist kelsey@greenvalleys.org

Margot Taylor- Watershed Restoration Coordinator & Nature Educator

margot @greenvalleys.org

Elaine Armbrust- Bookkeeper

elaine@greenvalleys.org

Cover Image & image at right: Dragonflies at pond's edge. © 2012 by Darryl Moran. All rights reserved.

# From the Director

"Progress. There is much to report" writes Everett Rodebaugh in the summer 1970 newsletter. What was true then is certainly true today, and I am pleased to repeat Everett's words –

#### Progress. There is much to report.

The past year has been a pivotal time for Green Valleys, as we have made large advances in every aspect of our organization. In this newsletter and the newsletters to come, you will learn more about these advances, and we hope that all of our members will become more involved in the exciting work that we are doing!

The William Penn Foundation's Delaware Watershed Initiative is re-making the way watershed conservation is done in our watersheds and in the region. With our partners we have a very strong set of programs unfolding for the next three years. Our roles in this initiative are a perfect fit for our mission, and through this initiative we are able to dramatically increase the work we are doing in the watersheds. *More information on page 2*.

Our watershed stewardship volunteer programs continue to grow and we are moving forward with exciting new citizen science programs. With the important upgrades to our education facility we are providing a much-improved experience for students and campers, while out in the schools, our education programs are expanding.

Our watershed assessment program is elevating our understanding of water quality and water quantity issues throughout our watersheds, and is becoming the foundation for our restoration and conservation work in the decades ahead. The assessment program takes data from many sources and will, for example, provide us with much better mapping of wetlands, which are so critical to frogs, salamanders, and many other species.

STEM education has emerged as a priority for our organization. This summer, we will be hosting hundreds of National STEM students who will be exploring biodiversity and sustainability topics. Fully using the science education opportunities at Welkinweir has long been an aspiration for our organization; now we are realizing that goal.

Grants for important programs and services have increased significantly, while our administrative costs continue to decline – which means we are sending more resources than ever out into the watersheds. Most recently, we have been awarded multiple grants in support of summer nature camp, as well as in support of important building restoration work here at Welkinweir.

This year we celebrate our 50<sup>th</sup> anniversary, and reflect with pride upon what we have accomplished so far. Fifty years is an important milestone, but it also is a challenge: with the resources we have, and facing the environmental issues of today, *how much more can we accomplish in the next fifty years?* 

Yours in the watersheds,

# We Are Updating Our Member Communications

To reduce our paper usage, we are offering our members and friends the option of choosing to continue receiving printed copies of *Streamlines*, camp brochures, and other notifications in the mail, or to read them online. Which do you prefer? Please let us know! You can note your preference in the blue box at the bottom of page 6, or send us an e-mail at gva@greenvalleys.org. Please note that in order to receive online communications, we will need your most current e-mail address. Thank you for helping us improve our member

communications!



About the cover photo: A dragonfly perches on pond-side vegetation. Dragonflies spend several years as wingless, underwater nymphs, undergoing several metamorphoses before molting one last time into the mature, winged adult. Dragonfly nymphs are one of many macroinvertebrate species that serve as indicators of water quality.

#### **Green Valleys in Exciting New William Penn Foundation Initiative**

The William Penn Foundation is funding \$35 million in grants to protect and restore critical sources of drinking water for 15 million people in the basin. Their initiative, the Delaware Watershed Conservation Program, has made amazing strides in regional collaboration among conservation organizations, funding the work of 40 organizations who will protect land, restore waterways, and monitor the results on water quality. This innovative approach will result in the permanent protection of over 30,000 acres; develop watershed-wide water quality data; and test conservation incentives for landowners and businesses.

As part of this initiative, Green Valleys will work with numerous science & conservation organizations to pursue land protection and water quality monitoring within the Schuylkill Highlands Conservation Cluster. This target area was outlined by the William Penn Foundation to include tributaries of the Schuylkill River watershed in northern Chester and southern Berks Counties, including the watersheds of Hay Creek, Sixpenny Creek, French Creek, Pigeon Creek, and Pickering Creek. Green Valleys will work with our land conservation partners to identify high-priority lands for conservation to protect water quality,



as well as seek volunteers to participate in citizen science programs, such as Water Watchers, that will gather important water quality data to inform future preservation and restoration projects. Green Valleys is proud to be involved in this partnership.

# Meet Our New Watershed Science Intern!



Zabrina Gallagher will be joining us this summer to assist with the Watershed Science program. Zabrina is pursuing a chemistry degree at Immaculata University.

This initiative coincides with our 50th anniversary as a watershed protection organization, and its goals - to conserve, restore, and protect the water quality and quantity within the Delaware River Basin - align perfectly with those of our mission statement. As we celebrate our 50 years in the watersheds, we look forward to continuing our work and seeing it reinforced on an expanded scale. Our work within the Foundation's initiative is an exciting beginning to our next 50 years in protecting our natural water resources for all to enjoy.

#### **Volunteers Furthering Science**

What do bird watching, monarch butterfly migrations, frog crossings, and seasonal plant changes have in common? They are all opportunities for everyday people to make critical observations of the natural world. That volunteer-recorded data is the core of **citizen science**, and enhances scientific studies worldwide and on a wide variety of subjects. Specific programs include:

eBird - an online program that allows birders worldwide to submit their observations

<u>Project BudBurst<sup>SM</sup></u> – plants time their seasonal changes, such as leafing out, blooming, and fruiting, according to the changing climate. Project BudBurst<sup>SM</sup> utilizes a national network of amateur naturalists who record when these plant *phenophases* occur.

<u>Pennsylvania Amphibian & Reptile Survey (PARS)</u> –tracks the distribution of all "herp" species throughout the state

<u>Monarch Watch</u> – surveys national monarch butterfly status through

classroom activities

Volunteers may be most effective at gathering knowledge of the way our world works, which can lead to better-informed decision-making at multiple levels. For example, retired banker Charles Broley's passion for studying Florida bald eagles in the 1940's and '50's led to his monitoring their nesting population decline, which was discovered to result from the environmental effects of the pesticide DDT. Rachel Carson cited his studies in her book, *Silent Spring*, which led to a nationwide ban on DDT. The resulting bald eagle recovery is one of the greatest environmental success stories of the 20th century, and shows how an individual citizen scientist can contribute to make lasting, positive change.

Green Valleys has always counted the work of volunteers as one of our biggest strengths. We support and offer many volunteer service & science opportunities: each year, staff and volunteers organize tree plantings with community groups; participate in monitoring and protecting springtime frog migrations at local roadways; and lead litter clean-ups throughout the watersheds. This year marks the start of our new citizen science initiative, **Water Watchers**, which seeks to create a comprehensive program that volunteers can engage in. We are collecting meaningful data that give an accurate picture of stream health. Volunteer Water Watchers can, in a sense, take the pulse of their watersheds. The



Citizen science provides tremendous support to many studies. Above: volunteers in West Vincent Township monitor and protect amphibians crossing local roads to lay eggs each spring, such as this pickerel frog.

data generated from our program will be used by the William Penn Foundation's Delaware Watershed Conservation Program, to inform future conservation and restoration efforts.—KelseyStanton

#### **New Chestnut Grove Demonstration Plot**



Welkinweir's Chestnut Grove, a planting of Chinese chestnuts in a typical American orchard-style layout, is now our demonstration plot for American chestnut plantings. The American Chestnut Foundation (TACF), in collaboration with Morton Arboretum and ArbNet (of which Welkinweir is a member), has developed a program to showcase American chestnut restoration efforts by planting chestnut trees in public gardens such as Welkinweir. This spring, American chestnuts (*Castanea dentata*), Chinese chestnuts (*Castanea mollissima*), and "Restoration 1.0" chestnuts (TACF's 6th generation hybrid of American and Chinese chestnuts which have approximately 94% American genes; most of the offspring show moderate to good blight resistance) will be planted in the Chestnut Grove.

A new 3-panel kiosk will display educational signage that gives the background on the American chestnut and its importance to the ecology and economy of early America; the story of the blight that nearly wiped it out; and the restoration efforts of many people who believe this tree can be a part of our forests again.

We are excited to be a part of this new program that will contribute to the restoration efforts of this magnificent tree. – *Victoria Laubach* 

The American chestnut was called "The Redwood of the East" because of its great size. Before the appearance of the Chestnut blight on imported chestnut trees in the early 1900s, these kings of the Piedmont and Appalachian forests were major contributors to our local ecosystems. One out of every four trees in Chester County was a chestnut at one time; remnant sprouts from the still-living rootstock can be found throughout our woodlands, able to grow to only a fraction of their former size before again succumbing to the blight. Image courtesy of NPR.

#### **Mowing for Monarch Butterflies**

Many of our readers are now familiar with the plummeting population of monarch butterflies – a topic which we will examine in our next issue of *Streamlines*. In our area, one of the most important sources of food for both caterpillars & adult monarchs is common milkweed, followed by butterfly weed and swamp milkweed. May is when the shoots of common milkweed appear (photo below), and now is a good time to identify them and set these important native plants aside from your mowing and weeding program. *This summer's monarchs will thank you!* 

#### **New Horticulture Interns**

Welcome to Christine Varga and Matthew Rozanski, this year's new interns! Christine came as a volunteer with an interest in horticulture last fall. She is working to gain experience for her application to the Longwood Professional Gardener Program. Matthew has just completed his junior year in Temple Ambler's Horticulture program, with an interest in land stewardship, plant conservation, and education. Last summer, he volunteered at Quarry Hill Botanical Garden in California. If you are visiting and see them out on the grounds, please be sure to say hi!





#### National Trust for Historic Preservation Grant for Roof Restoration

We have been awarded a \$10,000 grant from the Louis Appell, Jr. Preservation Fund for Central Pennsylvania of the National Trust for Historic Preservation, in support of the Addressing Moisture Issues for Collections Preservation project.





#### **Visiting Welkinweir**

The grounds are open to visitors during regular business hours (Monday through Friday 9 a.m. to 4:30 p.m.). While we currently allow dogs, we ask that you respect others who are visiting by keeping dogs on a leash; please clean up after your dog (and encourage others to clean up after their dogs as well) so that our policy of allowing dogs can continue.

We often have special programs or events occurring on weekends, and we ask, if you are a member who wants to visit on the weekend, to call during business hours so we can inform you of any upcoming events. We offer Saturday morning walks (see calendar) that are open to all and we encourage you to come out to the property at this time. Staff will be available to answer any questions.

# Watershed Restoration

# Local Students Learn the Importance of Watershed Protection through Service

Welkinweir was the site of a service learning opportunity for students from the Montgomery School, a private grade school in Chester Spring. Green Valleys staff led 19, 6<sup>th</sup> grade students to plant 50 tree saplings around the two largest ponds, which will increase the forested buffer around them. The students already know the importance of riparian buffers for water quality; part of their curriculum in David Kline's science class focuses on watershed resources and the effects of human activities within them. Each year the class raises and releases trout as part of the "Trout in the Classroom" program, developed by the PA Fish & Boat Commission and PA Trout Unlimited chapters. The students conduct water quality testing as part of their program requirements, to ensure that living conditions for the trout are healthy.

For their service learning project, staff taught students how to properly plant each tree to ensure its survival. They also showed students how to inoculate the tree roots with mycorrhizal fungi; these fungi live on plant roots in a symbiotic relationship, giving the plant access to mineral nutrients in exchange for a small portion of the plant's carbohydrates. The students then worked in small teams to plant the saplings, which were chosen for their ability to tolerate riparian conditions and support wildlife; some of the species included were black gum, dogwood, and scarlet oak. After lunch, the hard-working students installed wire cages around each tree to protect them.

At the end of the day, the class participated in a fun and educational nature walk, where they inspected the dam and lodges built by Welkinweir's resident beaver family. They also saw creatures which depend on healthy watersheds for survival, such as turtles, water snakes, and an osprey. The students left tired but excited by the nature they experienced and helped to protect. Both the students and Welkinweir certainly benefited from this inspiring day of service. – *Kelsey Stanton* 





#### French Creek Clean-Up's Successful Second Year

Many thanks to all of the hard-working volunteers who participated in this year's stream clean-up in Phoenixville on Saturday, April 26! Twenty-five volunteers—including students from the Phoenixville Middle School Environmental Awareness Club, Camphill Soltane, and Montgomery County Community College—worked in two different areas along the French Creek. Together they removed over 80 bags of litter, almost 30 tires, and a

refrigerator! PennDOT crews disposed of the trash as part of the <u>Great American</u> Clean-up<sup>TM</sup> of Pennsylvania and the 2014 Schuylkill Scrub.





#### **Medications Collection Sites Set Up Across the County**

West Vincent Police Department is pleased to announce the installation of a *MedReturn* Drug Collection Box in their Township Building, the most recent in Chester County. Residents both within the Township and surrounding communities can now conveniently, safely and anonymously dispose of all unwanted prescriptions, OTC medications, vitamins and even pet medicines! The Department feels very fortunate to now be able to offer this service, right here, all year long! West Vincent Police Department is committed to reducing drug abuse and keeping the environment safe. The box is accessible during the Township's regular business hours, 8:30am to 4:30pm, Monday through Friday, at 729 St. Matthews Road, Chester Springs. *Prevent soil and water contamination. Never dispose of unwanted medications in the trash or by flushing them.* 

### Choose Your Adventure! At Summer Nature Day Camp

Spaces are still available in many of our summer camp weeks. We have many exciting activities planned...some old favorites, and some new! Our next Camp Open House is June 7 from 9:30-11:30 a.m. in the Education Building, located by the visitor parking lot. But we suggest you register for your child's favorite camps prior to June, before spaces fill!

#### Donors Still Needed for Summer Camp Scholarship Fund

There are 7 children from Pottstown and surrounding communities waiting for scholarships in order to attend a week of camp. Can you help us meet our goal is to send all of these children to camp? A donation of \$125 will send a Kindergarten-age child; \$230 will send a child, in grades 1 through 5, to camp for one week. Any amount is appreciated and will be combined with other donations.

Please send your contribution to Summer Camp Scholarship Fund, Green Valleys Watershed Association, 1368 Prizer Road, Pottstown, PA 19465.

#### Camp Supply Needs

Cleaning out your garage? Basement? Business office? Perhaps you have something our camp can use! The following materials may be donated in new or gently used condition. Please contact Dawn White to schedule any donations.

- Small photocopier
- Set of 2-way radios (Must have at least a 2-mile range.)
- Crayons & markers
- Glue sticks

#### After School Nature Club Excites OJR Elementary Students

After eight exciting weeks of nature exploration, Green Valleys' after school Nature Club for the second graders of the Owen J. Roberts School District came to a close in mid-April. The eight lessons, each inspired by a different aspect of nature - from habitats and birds to water - included a variety of activities that kept the children both entertained and engaged with their natural surroundings. By the end however, the children had some obvious program favorites. Topping the list was "Animal Adaptations": a lesson that included interacting with and assessing pelts, skulls, & taxidermy birds, and an activity in which students used three adaptations of rabbits – camouflage, speed, and freezing – to understand how they avoid being eaten by predators. The students were also drawn to wildlife-themed lessons, especially the "Bird" and "Insects" lessons. In both cases, the students, armed with field guides, were thrilled with the challenge of searching for and then identifying wild animals in their schoolyards (photo at right). Through the snow, wind, and rain, the dedicated nature explorers of Nature Club discovered a new-found awareness of the outdoors that will stay with them for years to come. - Regan Dohm

#### **Pottstown Students Benefit from Environmental Education Programs**

Thanks to funding from the Pottstown Area Health and Wellness Foundation. Pottstown students are benefitting from after-school Nature Explorers Clubs and environmental school programs & field trips for the second year in a row.

The Exploring Ecosystems field trip to Welkinweir in April was a new experience for many of the 60, 4<sup>th</sup> grade students from Elizabeth Barth Elementary School. Students explored the life of a pond with Kelsey Stanton, collecting macroinvertebrates and learning about the beaver and its adaptations for life in the water. Dawn White led students through the meadows exploring food webs and the birds who utilize meadow habitat, while Brad Mayberry, one of the 4<sup>th</sup> grade teachers, led the students

in a stream study and water pollution

discussion.



The after-school Nature Explorers Club began at Barth Elementary this year with 24 3<sup>rd</sup> grade students, up from 2013's inaugural registration of 11 students. We are very excited that interest has grown! Regan Dohm and Dawn White are leading the Club this spring. The field trip and Nature Explorers Club provide students with outdoor learning opportunities they do not currently have, through activities create awareness understanding of nature in their communities. These new experiences also promote healthy interactions with the natural world. - Dawn White



#### **Grants Received in Support of Camp Programs**

The Society of Women Environmental Professionals provided \$500 to support conservation projects carried out at summer nature camp, as well as a certificate, stating:

In recognition and support of their program and this project which promotes the involvement of local girls in protecting the natural environment and supports their pursuit of careers in the fields of science, engineering and the environment, The Board of Directors & the Grant Committee, in pursuit of the Mission of the Society of Women Environmental Professionals of Greater Philadelphia, hereby awards the 2014 SWEP of Greater Philadelphia Grant to Green Valleys Association of Southeastern PA, Inc.'s Habitat Awareness and Conservation Summer Camp.

For the past four years, the Kate Svitek Memorial Foundation has provided grant funding for guest speakers at our camp. Guest speakers-outdoor and environmental education experts, local naturalists, and live animal programs which educate and entertain campers-enhance and distinguish our camp program from other summer camps. The foundation's recent grant award of \$1,345 will host 8 speakers for all age groups this summer.

A \$1,000 grant from the H.O. West Foundation will fund senior counselors as they lead 6th and 7th graders for 4 camp weeks.

National Penn Bank contributed \$2,200 as a sponsor for the Summer Nature Day Camp brochure and school fliers.

# May - July 2014 Calendar

#### **Nature Education Programs at Welkinweir**

For all program information and registration, please contact Dawn White at 610-469-8646, or e-mail <a href="mailto:dwhite@greenvalleys.org">dwhite@greenvalleys.org</a>. Please see the online <a href="mailto:Environmental Education Calendar">Environmental Education Calendar</a> for more nature education program dates.

# Free Guided Nature Walks Saturday mornings, rain or shine.

Enjoy guided walks with volunteer naturalists to observe wildlife in our nature sanctuary. Bring binoculars and field guides if you

have them. Ages 6 to adult. No experience required.

All spring walks begin at 8:00 a.m.

May 3 – Joe Hudson & Dan Sullivan May 10 – Sue Lucas

**May 17 –** Tom Reeves & Steve Strawbridge



June 7 – Sarah Neto

Summer Nature Day Camp Open House Saturday, June 7, 9:30-11:30 a.m.

Walk the grounds, see our facilities, meet the Education Coordinator to get your questions answered and ease campers' apprehensions.

1368 Prizer Road, Pottstown, PA 19465

Online membership also available at www.greenvalleys.org

# Nocturnal Animal Hike and Campfire Friday, June 20, 7:30-9:00 p.m.

View nature at night! Enjoy stories and s'mores at a campfire, then search for nighttime animals and play sensory games. *Refreshments provided. Bring bug spray and flashlights. Ages 5 and up with adult.* Sponsored by Penn Liberty Bank.

GVA Members \$5/person, Nonmembers \$7. Advanced registration required by **Thursday, June 6.** 

# Fireflies! Friday, July 25, 7:30-9:00 p.m.

Discover the amazing lives of "lightning bugs" as we a play a game to uncover the mystery of how and why they light up; study the insects themselves; and make a firefly to take home! Refreshments provided. Bring bug spray, a jar for catch/release of fireflies, and flashlights. Ages 5 and up with adult. Sponsored by Penn Liberty Bank.

GVA Members \$5/person, Nonmembers \$7. Advanced registration required by **Thursday**, **July 24.** 

#### **Community Programs at Welkinweir**

Annual Mother's Day Tea & Azalea Bloom Walk Sunday, May 11, 12:30-3:30 p.m.

Integrated Pest Management (IPM) Walk Tuesday, July 1, 12:30 p.m.

# Please join us...

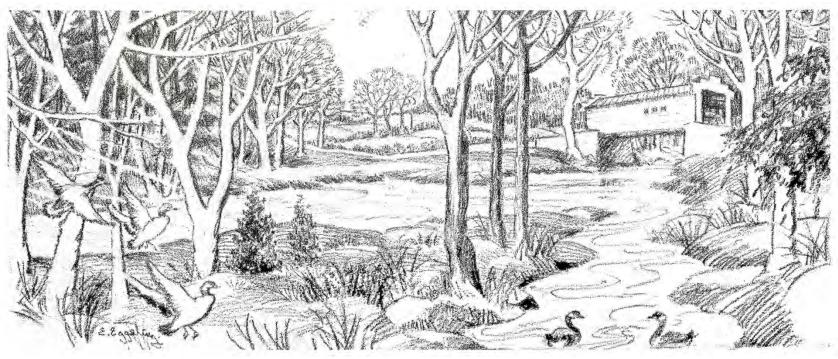
# Your membership is an investment in clean water and healthy watersheds, for now and for future generations.

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

| Name  | <b>MEMBERSHIP includes</b> newsletter subscription, notice of special events and programs, and reduced rate to special programs, workshops, and summer environmental camp. |         |
|---|--|---------|
| Address   |  |         |
| City, State ZIP   | Membership levels (please check one):  |         |
| Township  | ☐ Individual   |         |
| I would prefer to pay by:   | ☐ Family   | \$60    |
| <ul><li>□ Check (made payable to GVA)</li><li>□ Discover</li><li>□ American Express</li></ul> | ☐ Naturalist   | \$100   |
|   | ☐ Environmentalist   | \$250   |
| Credit Card #   | □ Protector  |         |
| Exp / CID Phone   | ☐ Preservationist  | \$750   |
|   | ☐ Steward  | \$1,000 |
| E-mail address  | I am a: ☐ New Member ☐ Renewing Member  Become a "Friend" with an additional contribution: \$  |         |
| Detach this form and mail with payment to:  Green Valleys Watershed Association               | ☐ Please notify me of GVA volunteer opportun   |         |

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

E-mail:



50 YEARS AND COUNTING...

Visit our website at www.greenvalleys.org

# **NOTUME 20' ISSUE 5 Sheing 5014**

# Address correction(s)

Nonprofit Org. U.S. Postage PAID Permit No. 82 Aq (mwotstropy CETEBEVILING 20 XEVES

1398 BKISEK KOYD | BOLLSLOMN' BY 18462

