



WILD NEWS

Prince William Wildflower Society

A Chapter of the Virginia Native Plant Society

Number 2017-02

May-June 2017

Dan Schwartz: Soil Scientist at Northern Virginia Soil and Water Conservation District

Monday, May 15, 2017, 7:30 p.m.
Bethel Lutheran Church
8712 Plantation Lane,
Manassas, VA.



Title: “Medicines from the Soil: The Fight Against Antibiotic Resistance”

Description: Most of our antibiotics are derived from soil microorganisms, but bacteria are evolving resistance to these life-saving drugs. Can new advances in soil biology identify previously unknown microbes to solve this problem?

Dan Schwartz Bio:

Dan Schwartz holds a BS in Environmental Science from the University of Maryland, an MS in Environmental Science and Engineering from Virginia Tech, and is a Virginia-licensed soil scientist. His undergraduate course work focused on soil science, while his masters work and thesis were centered on urban water quality and treatment. Since 2003, Dan has worked as a soil scientist for the Northern Virginia Soil and Water Conservation District. In this position, he spent several years doing field work throughout the county which allowed him to experience the soil and geologic resources of the area first hand. He also coordinates the county-wide volunteer stream

monitoring program which measures the baseline health of our local waters by sampling the invertebrate species that live in the stream bottoms. Dan also assists Fairfax County homeowners with erosion and drainage problems caused by stormwater runoff, has participated in several research studies that examine the effectiveness of urban stormwater controls, organizes build-your-own composter workshops, and frequently gives presentations on soil and water quality to community and school groups of all ages. In his free time, he likes to hike and bike the trails around the DC metro area.

President's Corner

We're coming down the home stretch of another frenzied spring in Virginia. If you know me at all, you know that spring is my favorite season, but it also makes me a little crazy. So much to do and see! I want to catch all the spring ephemerals in bloom, participate in all the weekend environmental events, work in several public native plant gardens, help with our plant sale, and save a little time to work in my own garden between necessary meetings and obligations. There is not enough time in the day—and I'm *retired!*

For once the Virginia Bluebells (*Mertensia virginica*) were in full bloom for the annual Bluebell Festival at Merrimac Farm on April 9. This was the longest blooming season for bluebells that I have ever witnessed. They began blooming by late February because of the warmth of that month, entered suspended animation in our cold month of March, then perked up to bloom “on time” in April. I sold about 50

bluebells plants from my garden at the PWWS table at the festival and split the proceeds between PWWS and the Prince William Alliance, organizer of the annual event. Many thanks to PWWS members who led tours: Judy Gallagher, Charles Smith, Janis Stone, Harry Glasgow, and Charlie Grymes, and those who staffed our table with me: Joyce Andrew, William Carromero, Barbara Deegan, and Carol Thompson.

We were very fortunate this year to have good weather for our garden tour with approximately 100 visitors. Thank you, Nancy Arrington; Marie (and Paul) Davis; and Paige Thacker, Nancy Berlin, Leslie Paulson, and the rest of the Master Gardeners for showcasing your lovely gardens. We also thank all of the garden volunteers and those who provided refreshments. The garden tour is a chapter highlight every year. Will *your* native plant garden be ready for the tour *next* year?

PWWS thanks Diane Flaherty for her long service as our dedicated treasurer. She has resigned, and we are seeking a new treasurer.

As noted elsewhere in this issue, we welcome soil scientist Dan Schwartz of the Northern Virginia Soil and Water Conservation District as our lecturer this month. Dan is an excellent speaker, and can make highly complex science understandable to a layperson. We should learn a lot from his presentation on soil microorganisms and antibiotic-resistant bacteria because our health is on the line. See you on the trail!

~ Nancy

**Prince William Wildflower Society
Membership Meeting Minutes
Monday, March 20, 2017 - 7:30 p.m.
Bethel Lutheran Church, Manassas**

President Nancy Vehrs called the meeting to order at 7:32 p.m. She pointed out the framed *Flora of*

Virginia prints, given to the PWWS chapter for our donations to the Flora Project. Raffle tickets are \$5 for the two prints, and the lucky ticket will be drawn at our September meeting.

Volunteers Needed: Help is needed at the upcoming April 9th Bluebell Festival at Merrimac Farm, the April 30th PWWS Garden Tour, and the May 13th PWWS Plant Sale. Sign-up sheets are available.

Nancy thanked Janet Wheatcraft and Brenda Hallam for bringing refreshments.

Program: Nancy introduced our guest speaker, Ms. Danielle Wynne, ecologist since 2002 with the Fairfax County Stormwater Planning Division. Danielle explained that her department must manage streams to comply with federal regulations, and a Watershed Management Plan has been developed so that they meet the requirements. The three pollutants in streams are nitrogen, phosphorus and sediment. If too much water enters the streams following heavy rains, the water brings along pollutants. She and her co-workers plan changes to the streams and surrounding areas so that rainwater flows slowly into the creeks and streams. Some of the pollutants can then drop into 'rain gardens' and retention ponds. Vegetation planted on the stream banks can also slow the flow of the water into the stream.

Danielle often works with students to help them meet Fairfax County science curriculum requirements. Students learn that stormwater is a valuable resource for people and wildlife, and they learn how streams and creeks can be managed to remain healthy.

Marion Lobstein, Botany Chair, reported that a test version of the Flora app is available on Android phones now. Soon it will be available on iPhones. There is a full dichotomous key on the app.

Door Prizes:

Carol Thompson - Bluebell plant
 Cathy Hindman - *Common Native Trees of Virginia*
 Marlies Smith - *Ferns and Mosses of Virginia*
 Jane Oliver Smith - *Seeing Trees*
 Brigitte Hartke - *Plant Invaders of the Mid-Atlantic Natural Areas*
 Danielle Wynne - a magnet
 Adjourned at 8:36 p.m.

In Attendance: Tom and Joyce Andrew, Charles Smith, William Carromero, Nancy Vehrs, Karen Waltman, Denise and Bret Rodgers, Marlies Smith, Janet Wheatcraft, Carol Thompson, Marion Lobstein, Jeanne Endrikat, Charlie Grymes, Cathy Hindman, Rose Breece, Jeanne Fowler, Nancy Arrington, Tom Attanaro, Jack and Deanna High, Janice Beaverson, Helen Walter, Rick and Diane Flaherty, Jane Smith.

Karen Waltman, Secretary

EVENTS

Weeding Parties at the pollinator planting beds at the I-95 Northbound Rest Area at Dale City. RSVP nvehrs1@yahoo.com :

Friday, May 19, 9-12

Thursday, June 1, 9-12

Thursday, June 15, 8-11

Thursday, June 29, 8-11

Thursday, July 20, 8-11

Water and refreshments provided; bring a reusable water bottle, gloves and hand tools.

Prince William Conservation Alliance Sponsored Events:**Wildlife Garden Spring Clean up**

Saturday, May 6, 9 a.m. AND

Saturday, May 20, 9 a.m.

Volunteers help us created an area at Merrimac Farm WMA where people and the environment can come together as one. It's a great area to watch wildlife, learn about native plants and pollinators, and get ideas for your own backyard. Wear long pants, sturdy shoes, and long socks. Merrimac Farm Wildlife Management Area, 15014 Deepwood Lane, Nokesville 20181

Minnieville Rd. Buffer Spring Clean up

Sunday, May 21, 1:30 to 3:30

Our Minnieville Buffer Project near K9 Gunner Memorial Dog Park has helped transform a barren slope from an environmental problem into an attractive buffer that showcases Virginia's native plants. Come help with the clean up and wear long pants, study shoes and a hat. RSVP appreciated to alliance@pwconserve.org 703-499-4954

PW Conservation Alliance Open House, with special guest Kevin Rose, VA Dept. of Game & Inland Fisheries

Monday, May 22, 5:30 to 7 p.m.

PWCA, 2241F Tackett's Mill Drive Woodbridge, VA

Please join us to learn more about our local wildlife, habitats, and Merrimac Farm, the first Wildlife Management Area in Northern Virginia. Our Open House is free of charge, everyone is welcome. For more information, contact us at alliance@pwconserve.org or 703-499-4954.

Bird Walks at Merrimac Farm

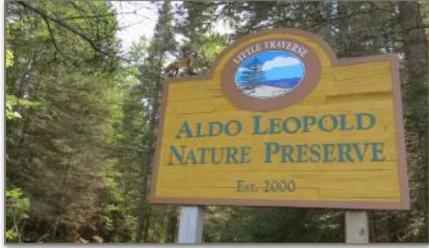
on the last Sunday of every month, 8 a.m.

Meet at Merrimac Farm, Stone House, 15014 Deepwood Lane, Nokesville, VA

We'll look for birds as we travel through the uplands to the edge of the floodplain, covering a variety of habitats, including open fields and woodland edges. Everyone is welcome. Dress for the weather, bring binoculars and cameras. More info and RSVP (appreciated) to PWCA, 703-499-4954 or alliance@pwconserve.org. Bring binoculars and cameras.

PW Wildlife Society Spring Walks

Contact Nancy Vehrs at nvehrs1@yahoo.com or 703-368-2898 for information. Watch PWWS Facebook page for possible events with short notice



May

Thursday, May 25, 10 a.m. – **Crow's Nest Natural Area Preserve in Stafford**; Carpool at 9 a.m. from Park and Ride at Brittany Neighborhood Park on Exeter Dr. (about one mile from I-95 off Dumfries Rd., Rt. 234).

June

Friday, June 2, 10 a.m. **Leopold's Preserve, Haymarket**. Meet at parking lot on Thoroughfare Road.

SAVE the DATES

Monday, May 15, 7:30 pm — PWWS Meeting with Daniel Schwartz, "Medicines from the Soil: The Fight Against Antibiotic Resistance"

September 29, 2017 — PWWS Annual Meeting, Shepherdstown, West Virginia

PRINCE WILLIAM WILDFLOWER SOCIETY

P.O. Box 83 - Manassas, VA 20108-0083

Chartered: January 10, 1983

Logo: *Mertensia virginica* - Virginia Bluebells

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Iris and Iridaceae Taxonomy Overview in *Flora of Virginia*

By Marion Lobstein, PWS Botany Chair

Worldwide, Iridaceae, the Iris Family comprises 65 genera and approximately 6700-7170 species. The growth forms of this family range from herbs to shrubs with all of our species being herbaceous. The Iris Family or Iridaceae was named by A.L. de Jussieu in 1789. This family was first recognized by John Ray in 1703 as a separate group of flowering plants. The basis for Iridaceae is the genus *Iris*. Linnaeus is credited with naming this genus in 1753. The name "Iris" is derived from the Greek word for rainbow and is also the name of the Greek goddess of the rainbow. The color variation of iris flowers is like the colors of the rainbow.

References to members of the Iris family go back to antiquity with the Greeks such as Aristotle and Theophrastus and in Roman times with Greek physician Dioscorides in his first century *De Materia Medica* and the Roman author Pliny the Elder. *Iris pseudocorus*, yellow iris or flag, was used as an emetic and purgative, and as a source of tannins to dye or tan leather, as well as to make a black ink. The ancient Egyptians revered the iris and used orris root in ceremonies, perfumes, and as symbols of life, victory and power. European herbalists such as Rembert Dodoens, John Gerard, and Nicholas Culpeper of the 16th century wrote about the medicinal uses of species of irises.

John Clayton in the *Flora Virginica* (second edition 1762) listed species in the two Iris family genera, *Iris* and *Sisyrinchium*. Clayton listed *Iris verna*, dwarf crested iris, *Iris virginica*, Virginia blue flag, and *Sisyrinchium bermudiana*, the Bermuda blue-eyed. Herbarium specimens of these species are in the John Clayton Herbarium at the British Museum of Natural History.



In the *Flora of Virginia*, the treatment of Iridaceae includes two genera, *Iris* and *Sisyrinchium*, and 15 species with two varieties. Worldwide the *Iris* has 282 species that are primarily native to the Northern Hemisphere. In the *Flora*, there are eight and two varieties treated in the *Iris*. All of these *Iris* species except for *Iris pseudocorus*, yellow iris or yellow flag, and *Iris domestica*, blackberry or leopard lily, are native and are found in our northern part of Virginia. Linnaeus assigned binomials to all of these *Iris* species except *Iris cristata*, dwarf crested iris, and *Iris domestica*, blackberry or leopard lily. *Iris cristata* was described and named by William Aiton in 1789 and also was renamed briefly *Neubeckia cristata* by R. Alefani in 1863. In that same year Alefani also proposed renaming *Iris verna* as *Neubeckia verna*. In the *Flora*, there are a limited number of taxonomic changes in this family's treatment in the floras from the late 19th- early 20th century. Based on DNA research, the primary

taxonomic change is for *Belamcanda chinensis*, the blackberry lily, renamed *Iris domestica* in 2005 by P. Goldblatt and D. Mabberley. This Asian species has a varied taxonomic history. Linnaeus first assigned the binomial of *Epidendrum* (an orchid genus) *domesticum* in 1753 based on an illustration by Engelbert Kaempfer which, in turn, was based on a collected specimen that was a combination of an orchid and a member of the Iris family. In 1914 W. Druce renamed Linnaeus' species *Vanilla domestica* (the genus *Vanilla* is also an orchid genus). To complicate this story, Linnaeus also assigned the binomial *Ixia chinense* to another specimen of the blackberry lily. Other common synonyms for this species are *Belamcanda chinensis* by A. de Candolle in 1807, *Belamcanda punctata* C. Moesch in 1794, *Gemmingia chinensis* (L.) C. Kountze in 1891, *Morea chinensis* C. Thunberg in late 1700's, and *Pardanthus chinensis* J. Ker Gal. in 1805).

photo: green-eyed grass, Nancy Vehrs

In the *Flora* in the section “Taxa Treated in Manual”, two *Iris germanica*, the German iris, and *Iris sibirica*, the Siberian iris, are included as waifs. Waifs are species that have been observed but are not yet established as naturalized species. Neither of these waifs has been yet documented in our area. *Sisyrinchium*, blue-eyed grasses, has 80 species native only to the New World. This genus is described in the *Flora* as “a difficult genus, with a number of taxonomic questions remaining in our area.” The *Flora* included seven species of *Sisyrinchium* with three species documented in our northern area of Virginia. All seven of these species are native species. *Sisyrinchium* was named by Linnaeus in 1753 with the species *Sisyrinchium bermudiana*, the Bermuda blue-eyed grass. This genus name is based on the Latin *sūs* "pig" and "nose" Greek *rhynchos* based on pigs observed grubbing for the rhizomes of an European iris, *Iris sisyrinchium*. The name “*Sisyrinchium*” was used by Pliny and Theophrastus for this species of iris. Linnaeus’ choice of this genus name *Sisyrinchium* by for this New World genus apparently was arbitrary. Of the seven blue-eyed grass species treated in the *Flora*, only two species *Sisyrinchium angustifolium*, narrow-leaf blue-eyed grass, and *Sisyrinchium mucronatum*, needle-tipped blue-eyed grass, are common in our northern part of Virginia. *Sisyrinchium fuscatum*, coastal plain blue-eyed grass, has been documented in Fairfax County. *Sisyrinchium angustifolium* was named by P. Miller in 1768, *Sisyrinchium mucronatum* by A. Michaux in 1803, and *Sisyrinchium fuscatum* was named by E. Bicknell in 1899. It is interesting that Linnaeus used two examples of *Sisyrinchium bermudiana*, an alpha and a beta specimen, to assign the *Sisyrinchium bermudiana* binomium. Linnaeus used the alpha specimen as the basis to describe this species and he indicated it was “of Virginia,” but the beta specimen was a specimen was collected in Bermuda. The specimen he described as “of Virginia” was possibly *Sisyrinchium angustifolium*.



Iris versicolor – Virginia Blue Flag

Raffle for Framed Botanical Prints

PWWS is holding a raffle this spring and summer for two framed botanical prints. Chief *Flora of Virginia* illustrator Lara Call Gastinger completed in watercolor a number of her pen-and-ink illustrations from the *Flora*, to remarkable effect. Reproduced as giclées on art paper, 8 × 10, with deckle edges, these works are a lovely gift or addition to your collection. Our raffle features a Showy orchis (*Galearis spectabilis*) and Sweetbay Magnolia (*M. virginiana*). Each framed print comes with an olive green mat, acid-free foam core backing, a pocket on the back to hold the artist's Certificate of Authenticity, and wire hangers installed on the back. Tickets are \$5 and will be available for purchase at our May meeting. The drawing will be held at the September meeting.

Karen Waltman

Bluebell Festival Thank-Yous

Thank you to the following PWWS members who volunteered at the PWWS booth on April 9th at Merrimac Farm's Bluebell Festival in Nokesville:

Nancy Vehrs, Harry Glasgow, Carol Thompson, William Carromero, Dee Brown, Barbara Deegan, Joyce Andrew and Karen Waltman.

Also, PWWS members Charles Smith, Janis Stone, Nancy Vehrs and Harry Glasgow led a variety of nature walks.

Karen Waltman

April 30th Garden Tour Thanks

The volunteer hostesses for the Gardens - Nancy Arrington, Marie Davis, and the PW Master Gardeners.

Brenda Hallam, Joyce Andrew, Karen Waltman, Leslie Paulson and the many Master Gardeners at The Teaching Garden, St Benedict Monastery. Tiana Camfiord, Marion Lobstein, Nancy Vehrs, and Carol Thompson at Nancy Arrington's garden.

Below, three photos of the garden of Nancy Arrington



Bonnie Fulford-Nahas, Paul Davis and Deanna High at Marie Davis's garden.

Many brought cookies for the refreshments table at the Teaching Garden. Thank you to Kathy Burch, Jannell Bryant, Janet Martinet, Nancy Vehrs, Dee Brown, Deanna High, Brenda Hallam, and Karen Waltman.

Thank you to all. It was a beautiful day, and the gardens were beautiful. Apologies if we have left out anyone!

The Tour

On a beautiful May day, a total of 105 people passed through the gardens of Nancy Arrington. Marie Davis' garden was well-attended and enjoyed by about 90 visitors. The Teaching Garden was viewed by at least 80 visitors. Here are a few photos of the gardens. To view them in color, please visit the website www.vnps.org/princewilliamwildflowersociety :



In the garden of Marie Davis — above, natives in a front-yard bed, below, Calycanthus



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A Chapter of the Virginia Native Plant Society
P.O. Box 83, Manassas, Virginia, 20108-0083



Next Meeting: Monday, May 15, 7:30 p.m.

Dan Schwartz: "Medicines from the Soil: The Fight Against Antibiotic Resistance"

Bethel Lutheran Church, Plantation Lane, Manassas, Virginia 20110

Bring on the Caterpillars!

You have heard it frequently: North American bird population numbers have been dwindling dramatically in recent years. Habitat loss and the practice of landscaping with plants not native to our area, not even to the United States, are major factors, as you know. Lovely but unproductive, the plants many people are choosing to grow in their gardens are often non-native azaleas, privet, crepe myrtle, Japanese maple, boxwood, barberry, forsythia, heavenly bamboo, English ivy and pachysandra, to name a few.



photo: Christian Skorik

Crucial to the survival of most nestlings at this time of year is the availability and abundance of caterpillars, the main, and in many cases, only food brought to them by their parents. Research indicates that it takes from 6,000 to 9,000 caterpillars to raise just one clutch of chickadees. Planting native species that support the insects and their caterpillars is absolutely essential to the birds' survival.

So what can you do? Welcome caterpillars into your garden, spare the insecticides and choose mostly natives. Ask your local nurserymen/women for native plants, and specifically for straight species natives.