



Wild News

The Bi-monthly Newsletter of the Prince William Wildflower Society
A Chapter of the Virginia Native Plant Society

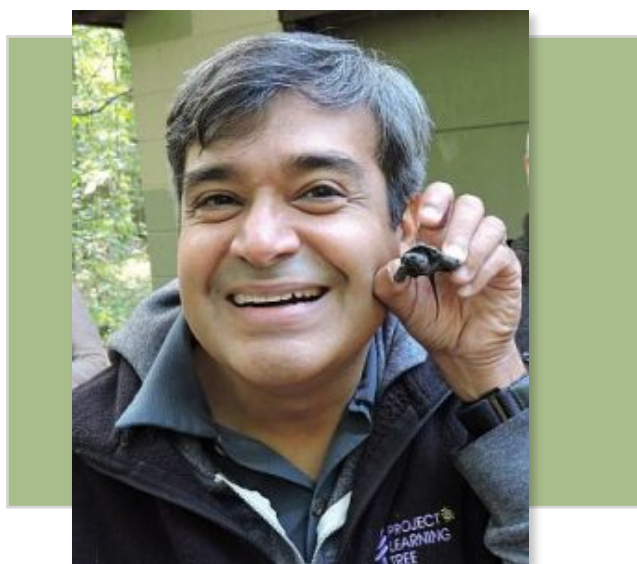
Number 2019 - 05

September - October 2019

Thursday, September 5 Meeting

7:30 pm, Bethel Evangelical Lutheran Church
8712 Plantation Lane, Manassas

"Wildflower Folklore and Ethnobotany"
with Alonso Abugattas



Alonso Abugattas is a well-known local naturalist, environmental educator and storyteller in the Washington, D.C. area. He is the natural resources manager for the Department of Parks and Recreation and the co-chair for the Beltway Chapter of Region 2 of the National Association for Interpretation.

He has been trained as a master gardener, was made an honorary Virginia Master Naturalist for his role in starting two chapters and serves as an instructor for both. He is a co-founder of the Washington Area Butterfly Club and has held several offices, including president, for the Potowmack Chapter of the Virginia Native Plant Society.

He invites you to check out his personal blog "[Capital Naturalist](http://capitalnaturalist.blogspot.com/)" and [Facebook group](#) where he posts regular nature notes using his own photography.

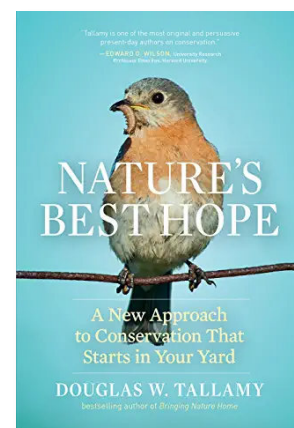
From the President — Nancy Vehrs

You'll want to make sure you attend our September 5 meeting! We are so pleased that Alonso Abugattas, the renowned naturalist behind the "Capital Naturalist" blog (<http://capitalnaturalist.blogspot.com/>) and Facebook group, will be our speaker. Besides having an incredible range of expertise, Alonso is an engaging speaker. We've also designated the September meeting as our annual meeting in accordance with our bylaws. We have no officer elections this year, but members will vote on our annual budget as shown on page four.

I'm sorry to report that William Carromero has stepped down as our vice president. In his role he has lined up speakers for our meetings for the last few years and through November. Thank you for your service, William, and we hope that you will continue to participate with us as your schedule allows.

February 23, 2020 Sneak Peak

Mark your calendars!
February's Author Lecture
this year will be given by
renown Entomologist and
Ecologist Doug Tallamy. Dr.
Tallamy will have his new
book available for signing,
Nature's Best Hope: A New
Approach to Conservation
that Starts in Your Yard. **The**
venue has yet to be decided.



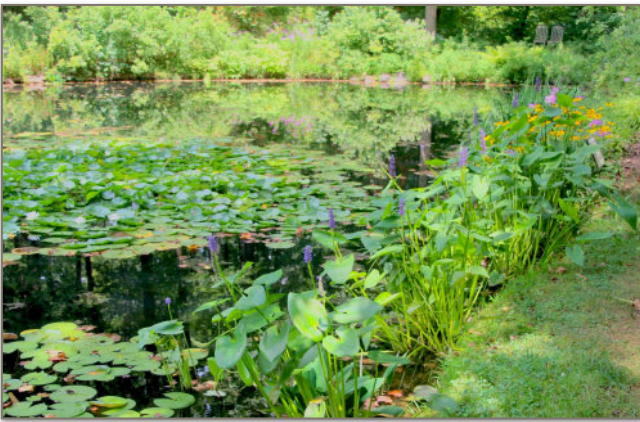
(From the President, continued from page one)

In July Harry and I made our trek to Concord, Massachusetts where the Thoreau Society holds its annual gathering. I always take the time to visit nearby natural areas. At Great Meadow National Wildlife Refuge, I was impressed that staff has made a dent in suppressing the invasive purple loosestrife. Much of the purple flowering plants were native Blue Vervain (*Verbena hastata*). Milkweeds were abundant and I witnessed a female monarch butterfly ovipositing on numerous plants near the parking lot, only one egg or two on each plant. As usual I took the opportunity to visit Garden in the Woods in nearby Framingham. If you are ever in that area, you MUST visit. The garden also serves as the headquarters of the Native Plant Trust, formerly called the New England Wild Flower Society, the oldest native plant society in the nation. I don't care for its new name because it connotes no sense of place and sounds like a financial institution, not a membership organization. However, the native gardens were stunning as always with black cohosh and native rhododendrons especially showy at that time of year.

While I was away, Valerie Gaffney filled in for me on a countywide bus tour for candidates for the Prince William Board of County Supervisors. Arranged by Kim Hosen of the Prince William Conservation Alliance, this tour included several representatives of environmental and historical organizations and showcased the environmental jewels of our county and stressed the importance of conservation. Valerie presented each candidate with VNPS/PWWS literature as well as copies of the Plant NOVA Natives guide. Thank you, Valerie.

A small group of us visited Mt. Cuba Center in Delaware and Longwood Gardens and Chanticleer Gardens in nearby Pennsylvania in early August. What a delight! Mt. Cuba Center serves as a trial garden and research center for Mid-Atlantic native plants where its staff determines the best native species and their cultivars for gardens. Right now they are testing sedges (*Carex* sp) with a goal of finding one that would serve as a lawn substitute and ground cover. I was delighted to find fragrant native azaleas (*Rhododendron arborescens*) in bloom in summer. The area of the ponds offered a shady respite with cardinal flower and pickerelweed providing some of the color, and the small meadow abounded in blooms and butterflies. We also visited the newly established native plant meadow at the venerable Longwood Gardens. (Longwood meadow views, final page) This meadow is a full 86 acres with several miles of trails. Joe-Pye Weed was especially stunning while we were there, and we were very thankful for some shady pavilions on a very warm morning walk. We ended our day with a visit to Chanticleer, described as a pleasure garden. It's a whimsical delight and combines tropical and native plants in unusual combinations. I recommend visiting them all.

(Scenes from an overnight trip, August 7 & 8, to Mt. Cuba, Longwood and Chanticleer Gardens. Mt. Cuba, clockwise - pickerelweed pond, native azalea in bloom, some of the sedges that were being tested as lawn alternatives, and our group in front of the pool)



Karen Waltman and I represented PWWS at the Bee Day at the historic Rippon Lodge in Woodbridge on August 10. Though it was lightly attended, we enjoyed our time there.

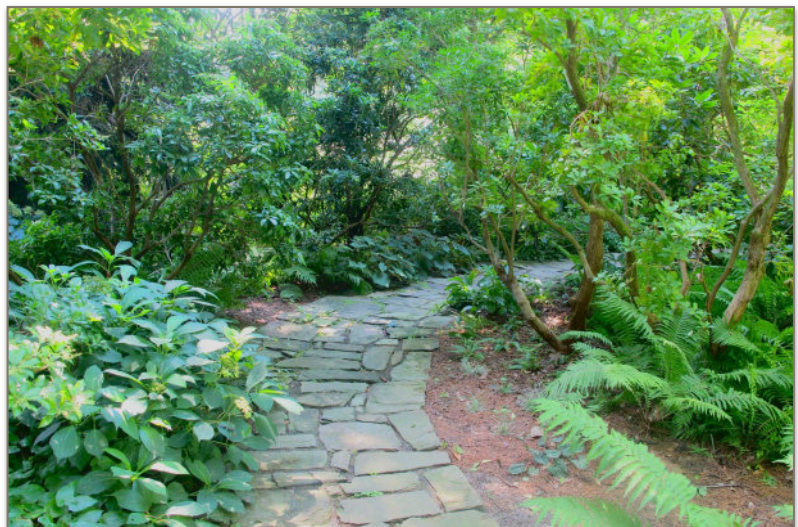
On Monday, August 12 I represented PWWS at the Prince William County Schools Sustainability Expo at Forest Park High School. Teachers, administrators, and support staff were energized by their speakers and the various organizations with table exhibits. Many schoolteachers are interested in pollinator gardens for their schools. Speaking of that, at the conclusion of the expo, I visited the native plant garden at Forest Park, and it is thriving. It was installed a few years ago under the loving hands of some master gardeners. Visit if you're in the area.

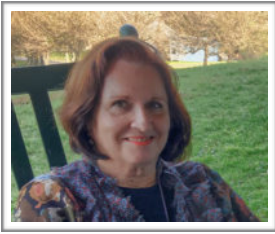
A core group of members still tries to keep the weeds down at the I-95 rest area at Dale City. We will be planting more natives there this fall and welcome more volunteers. Date(s) will be announced at our September meeting or by email and Facebook.

There is still time to register for the VNPS annual meeting September 27-29 in Front Royal. The Piedmont Chapter members have outdone themselves on the range of choices for field trips and workshops. We would love to have a good showing of participants from PWWS. Register now: <https://vnps.org/annual-meeting-2019-welcome/>.

~ Nancy

Scenes from the pleasure gardens of Chanticleer on Day 2 of the overnight trip

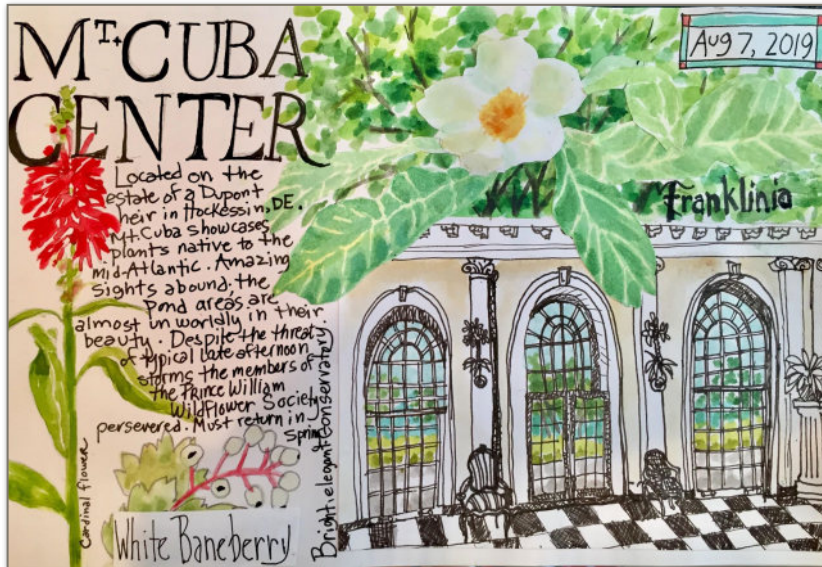




Artful Gardeners

Artist Kathy Webber, left, made a lovely sketch of the sun room at Mt. Cuba while waiting for a thunderstorm to pass by; she has given us permission to include it.

Betty Truax, right, is a gifted photographer, and Charlie Grymes sent us this photo of her, capturing the beauty of one of our native grasses; her photo of Indian Grass in bloom is lower right.



Calendar of Events

SEPTEMBER

Thursday, September 5, 7:30 pm
PWWS Annual Meeting & Program
Wildflower Folklore and Ethnobotany
Bethel Lutheran Church, 8712 Plantation Lane,
Manassas, VA

Saturday, September 7 — Plant Nova Natives will sponsor a Native Plant Festival & Sale, 9 am - 2 pm
Eleanor C. Lawrence Park, Centreville, VA

Wednesday, September 11, 7-9 pm
"The Song of Insects — A Talk and Walk" with Wil Hershberger
Norma Hoffman Visitor Center, Alexandria, VA

Saturday, September 14, 9 am - 3 pm
Loudoun Wildlife Conservancy Native Plant Sale
Morven Park, 17263 Southern Planters Lane
Leesburg, VA

Saturday, September 21, 9 am - 3 pm
Potowmack Chapter Fall Native Plant Sale
Green Spring Gardens, Alexandria, VA

Weekend of September 27-29 All Day
VNPS Annual Meeting and Conference
Holiday Inn Blue Ridge Shadows
Front Royal, VA

OCTOBER

Thursday, October 10, 7:30-9 pm
"Plants of the Forest Floor" by Margaret Chatham
Green Spring Gardens, Alexandria, VA

Sunday, October 27 — 8 am
Last Sunday of the Month Bird and Nature Walks with Nancy Vehrs and Harry Glasgow, Merrimac Farm in Nokesville, sponsored by the Prince William Conservation Alliance alliance@pwconserve.org

For more native plant sales not listed here, visit this website:
<https://www.plantnovanatives.org/local-native-plant-sales>

or this one for both events and sales:
<https://choosenatives.org/native-plant-sales/2019-native-plant-sales-events/>

Overview of Changes to Asteraceae and Aster Species Found in Northern Virginia to Upper Shenandoah National Park

Marion Lobstein, Botany Chair PWWS

[Modified from article in
September-October 2012 *Wild News*]

This time of year, late summer into early fall, the wildflowers we enjoy (or may not enjoy in the case of ragweed allergy sufferers) are dominated by members of the composite family Asteraceae. From Northern Virginia out to the upper part of Shenandoah National Park (SNP), there are approximately 150-200 species of composites that bloom from September into late autumn. Of these species, roughly one quarter are species of two genera – approximately 25 species of goldenrods (*Solidago* and *Euthamia*) and 25 species of asters (now transferred to a number in genera). In this article, the “aster” species will be the focus. Goldenrods will be covered in other articles to be posted on the “Botanizing with Marion” web link found at <http://pwws.vnps.org>.

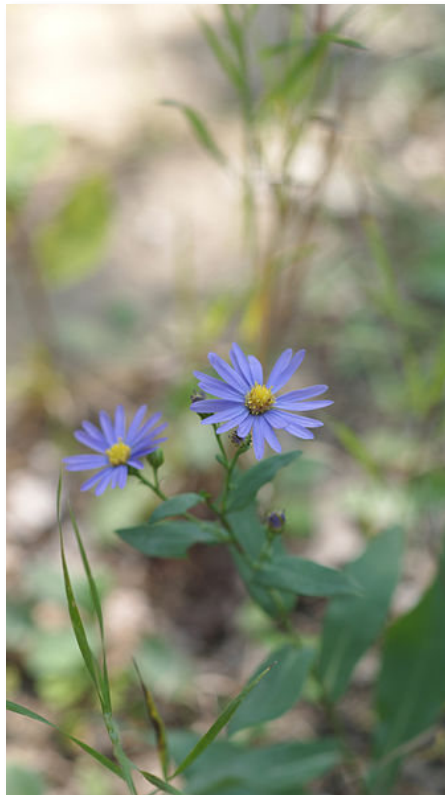
The term “aster” is derived from a Greek word for star and refers to the shape of the flower head. In the 1990s-based analysis of the genetic material of many species of asters, scientists concluded that true species of the genus *Aster* are Eurasian species and that our North American native species should be reassigned to other genera. Differences in the flower structure and fruits also were used in the process of splitting up the *Aster* genus. In our area (Northern Virginia through the upper half of SNP), approximately 25 native species of asters are divided into five genera – *Doellingeria*, *Eurybia*, *Ionactis*, *Oclemena*, and *Symphyotrichum*. Only *Aster tataricus*, a naturalized species from Asia remains in the genus *Aster*. The history of these “new” genus names will be discussed in the accompanying article on the taxonomic history of the “aster.”

Virtually all of our “aster” species are perennials with alternate leaves and often, prominent basal leaves. Most species have fibrous root systems, and some species have rhizomes (underground storage stems). As composites, the flower heads (capitula) made up of many separate flowers with a leafy cup or involucre of bracts (modified leaves) (called phyllaries) on the lower surface of the head. In “aster” species, flower heads are

made up of both petal-like ray flowers that can vary in color from white to pink to blue to purple as well as tubular disk flowers that are usually yellow but can turn purple to brown with age. In various species of “asters,” these ray flowers are pistillate (female) flowers that can be pollinated and produce fruits, while in other species they may be sterile. The disc flowers are perfect (bisexual with male and female structures) and are fertile. In both types of flowers the typical flower parts the 5 petals are fused into a corolla (forming a ligulate or tongue-like “petal” in the ray flowers and a tube in the disc flowers). The sepals are modified into bristle-like pappi (pappus, singular term) that assist in wind dispersal of the fruits. If stamens are present they are 5 in number, and the anthers unite to form a ring around the style of the pistil of the female structure. The female part or pistil has an inferior ovary (below the attachment of the pappi or modified stamens and the corolla), an elongated style, and a stigma with two branches. These inferior ovaries are embedded in the base or receptacle of the flower head or capitulum.

All flowers of this genus are pollinated by insects such as bees, bumblebees, butterflies, moths, wasps, beetles, and even flies. Species such as the New England aster are often used in butterfly gardens. The “Butterfly Website” (butterflywebsite.com/butterflygardening.cfm) is a good website for flower species for butterfly gardening. Mature aster flower heads that contain dry fruits called achenes or cypselae, sport a variety of shapes and are important in identification of species. In these fruits, there is only a single seed closely surrounded the seed coat (derived from the ovary wall). The bristle-like pappi aid in the wind dispersal of fruits of “aster” species. Medicinal and culinary uses of asters have been more limited than that of other groups of composites. However, the young leaves of the large-leaved aster are recommended as greens in edible plant books. Various American Indian tribes did use native species of asters for a wide variety of medicinal purposes ranging from teas to dried leaf/ root preparations to treat fevers, diarrhea, stomach problems, pregnancy complications, colds, wounds and abrasions, skin eruptions (such as in poison ivy dermatitis), nosebleeds, and a host of nervous system complications such as epilepsy and mental illness. The Iroquois used a preparation as a love medicine or potion. Other tribes burned dried aster flowers as incense to attract game such as deer or to drive away evil spirits.

Photo: *Symphyotrichum cordifolius*, credit, WIKIMedia



It seems a daunting challenge to identify aster species with traditional wildflower guides such as Peterson's or Newcomb's, even older floras. To learn the "new" names is an additional challenge but will help to keep our minds sharp! It is well worth the effort to identify these beautiful species of composites found in our area.

Taxonomic Changes for Regional Species of Asteraceae

In modern taxonomic treatments, the genus *Aster* has been radically altered for our native "asters"! Based on molecular (DNA) and morphological (physical characteristics) evidence, our area's native "asters" have been reassigned, as their original genus is now divided into five other genera – *Doellingeria*, *Eurybia*, *Ionactis*, *Oclemena*, and *Symphotrichum*. Our only remaining *Aster* species is the Tartarian aster, *Aster tataricus*, an introduced species from Asia. That species and many other Eurasian asters are primarily still classified in the genus *Aster*. According to molecular DNA studies, our native asters are more closely related to *Solidago* (goldenrods) and *Erigeron* (daisy fleabanes) species than the Eurasian asters.



Photo: *Doellingeria umbellatus*, Paul Rothrock

The history of the use of the name "aster" goes back as early as 2,300 years ago with the Greeks. Greek naturalists, such as Hippocrates, Aristotle, and Theophrastus as well as later in Romans times, Dioscorides and Pliny, all used the name of "aster". In the middle ages, many herbalists used the name or variations as they described medicinal uses of this plant. In the 1600s, a controversy among herbalists and botanist occurred as to whether there is only one species of *Aster* or multiple species.

Around the same time, there was an influx of North American asters into Europe. Carl Linnaeus in the mid-1700s recognized twenty species of *Aster*. In the 1762 second edition of *Flora Virginica*, John Clayton and Johann Gronovius noted 14-15 species of *Aster*. By the early 1800s, the Frenchman Alexandre De Cassini introduced the genus *Eurybia*, and the German Christian Nees von Isenbeck in 1832 introduced the genera *Symphotrichum* and *Doellingeria*. In the early 1800s, Asa Gray and John Torrey used other genus names, such as *Eurybia*, to separate *Aster* species, but Gray later decided to lump the asters into one genus in his *Gray's Manual of*

Botany (1848). In the late 1800s and early 1900s, the American Edward Lee Greene proposed *Ionactis* (1897) and *Oclemena* (1903). Nathaniel Britton and Addison Brown, in their *Illustrated Flora of the Northern United States, Canada, and the British Possessions*, used *Eurybia glomerulus* as a synonym for *Aster glomerulus*, as well as *Doellingeria* and *Ionactis* as valid genera. As late as 1991, Arthur Cronquist, in the second edition of the *Manual of Vascular Plants of the Northeastern United States and Adjacent Canada*, recognized *Ionactis* as a valid genus. It was only in the mid-1990s, however, based on new

molecular (DNA) and morphological evidence, that Guy L. Nesom reintroduced the use of the "new" genera of *Doellingeria*, *Eurybia*, *Ionactis*, *Oclemena*, and *Symphotrichum* to separate our native asters from Eurasian aster. It has been a long and complicated journey of naming and renaming our beautiful fall asters, and there will probably be more changes to come!

A table, on the following page, summarizes the information on the taxonomy of our "asters" authorities (who first assigned the genus name) and dates, the derivation of each genus name, and a list of our area species in each genus. As you will notice, these are not new or recent genera. The latest date of these genera being proposed is almost a century old, 1903! In the *Flora of Virginia*, 1st edition 2012 and 2nd printing

with correction 2013) and in the Mobile App of the *Flora of Virginia* (released 2017) these binomial changes are used. The original article was written by Marion Lobstein in the late summer of 2012 and the release of the *Flora* was not until December 2012. However, she had access to the proof manuscript of the *Flora*.

Prince William Wildflower Society

Wild News is the bi-monthly newsletter of the Prince William Wildflower Society, P.O. Box 83, Manassas, Virginia 20108. View full-color version at vnps.org/princewilliamwildflowersociety/

Nancy Vehrs, President; Brigitte Hartke, Editor. Please send your newsletter submissions to BrigitteHartke@gmail.com.

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Next submission deadline:
October 12, 2019

Taxonomy of Asters Summary

"Aster" Genera	Authority (who proposed the genus) & date proposed	Origin of Genus name	"Aster" Species in our area and "modern" names used in the Flora of Virginia and the Mobile App of the Flora of Virginia
Aster	Carl Linnaeus 1753	Greek for "star"	A. tataricus-Tartarian aster-no change (an introduced species from Asia)
Doellingeria	Nees (Christian Gotfried Nees von Isenbeck) 1832	Named in honor of German botanist Ignatz Doellinger	A. infirmus-Cornel-leaved aster now Doellingeria infirma A. umbellatus-Flat-top white aster now Doellingeria umbellata
Eurybia	Alexandre De Cassini 1820	Greek for "wide" and "few" (small and wide) rays	A. divaricatus-White wood aster now Eurybia divaricata A. macrophyllus-Bigleaf aster now Eurybia macrophylla A. schreberi-Schreber's aster now Eurybia schreberi
Ionactis	Edward Lee Greene 1897	Greek for "violet rays"	A. linariifolius-Stiff-leaved aster now Ionactis linariifolius
Oclemena	Edward Lee Greene 1903	Derivation unknown	Aster acuminatus-Mountain aster now Oclemena acuminata
Symphyotrichum	Nees (Christian Gotfried Nees von Isenbeck) 1832	Greek for "born (grown) together" and "hair" (perhaps referring to the hair-like pappi)	A. cordifolius-Blue wood aster - Symphyotrichum cordifolium A. dumosus-Bushy aster - Symphyotrichum dumosum A. ericoides-Heath aster now Symphyotrichum ericoides A. laevis-Smooth aster now Symphyotrichum laevis A. lateriflorus-Calico aster now Symphyotrichum lateriflorum A. lowrieanus-Lowrie's aster now Symphyotrichum lowrieanum A. novae-angliae-New England aster now Symphyotrichum novae-angliae A. oblongifolius-Shale barren aster - Symphyotrichum oblongifolium A. patens-Late purple aster- Symphyotrichum patens A. pilosus-White heath aster - Symphyotrichum pilosum A. prenanthoides-Crooked-stem aster - Symphyotrichum prenanthoides A. puniceus-Purple-stem aster - Symphyotrichum puniceum A. sagittifolius-Arrow-leaved aster- Symphyotrichum cordifolium A. shortii-Short's aster- Symphyotrichum shortii A. simplex-Panicked aster, tall white aster - Symphyotrichum lanceolatum ssp. lanceolatum A. undulatus-Wavy leaved aster - Symphyotrichum undulatum A. vimineus-Small white aster- Symphyotrichum lanceolatum ssp. lanceolatum

Prince William Wildflower Society

A Chapter of the Virginia Native Plant Society

P.O. Box 83

Manassas, Virginia 20108-0083



Next Meeting: Thursday, September 5, 2019, 7:30 pm
 Alonso Abugattas: *"Wildflower Folklore and Ethnobotany"*
 Bethel Lutheran Church, Plantation Lane, Manassas, VA

At Kennett Square, Pennsylvania : Longwood's Newest Garden, the Meadow Garden ~ A Bucolic Tapestry

A main destination for PWWS members on the recent field trip was the Longwood Meadow Garden. With three miles of meandering hiking trails, four learning pavilions and the historic Webb Farmhouse and Galleries, this 86-acre meadow was worth our visit. It has been evolving in the years since its opening in June 2014, when more than 100 species of natives were planted to create sweeps of color, texture and biodiversity. We saw black-eyed Susan, hollow Joe-Pye Weed, various sunflowers, ironweed, as well as swamp milkweed, and a host of others. In the fall there will be native asters, warm-season meadow grasses; and red and sugar maple, and red, white and mossy-cup oaks along the edges. Everywhere butterflies, birds and bees were seen profiting from the bounty of the meadow.



The meadow was designed by Jonathan Alderson. "Built to showcase the beauty of native and naturally producing flora throughout the seasons, the Meadow Garden illustrates how native plants can be used in guests' own green spaces for both aesthetic and habitat benefit."