

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

Number 2021 - 05

September - October 2021

Thursday, September 2, 7:30 pm via Zoom, social time, 7:00. "Invasive Plants With Rod Walker". Rod is President of "Partnership for Regional Invasive Species Management (PRISM)."

**Zoom link:** https://us02web.zoom.us/meeting/register/tZAkcOutqzlsEtAQPnJxtyZMl\_-uCYwYOp1s

Spend and evening with Rod and Maggie Walker. Married for 40+ years, Rod and Maggie Walker have been timberland owners for that entire time and more. Having owned land in Wisconsin and West Virginia, they purchased land in Albemarle County, Virginia in 1998 and moved here full time in 2012. Prior to retiring, their



professional backgrounds spanned journalism, real estate sales, law, and IT consulting.

Their timberland ownerships were originally for investment and enjoying various outdoors activities. Over time serious forestry activities crept in, starting with planting pine plantations and eventually moving into invasive species management.

When they were working on invasive plants on their Albemarle property, Jake Hughes from the Shenandoah National Park made them aware of the concept of Cooperative Weed Management Areas (CWMAs). Together with Jake, they organized the first CWMA to be formed in Virginia in 2014, now known as the Blue Ridge PRISM, to address invasive plants across ten counties of Virginia, comprising almost three million acres. For information on the Blue Ridge PRISM, visit <u>blueridgeprism.org</u>.

In addition to being the President of Blue Ridge PRISM, Inc. Rod is also on the:

- Board of Directors for the Virginia Chapter of the American Chestnut Foundation,
- Noxious Weeds Advisory Committee for the State of Virginia, which recommends changes to the state's Noxious Weeds law and regulations, and
- Advisory Council for the VA Forestry Association's Board of Directors.

Maggie is a member of the Albemarle Garden Club. And both are Master Naturalists.

#### President's Message

Where has the summer gone? The heat and humidity are still with us, but the hours of daylight have decreased and schools are in session. I had planned to schedule a summer trip to the Quarry Garden at Schuyler in Nelson County, but time has run out already. Next year, perhaps.

The Plant NOVA Natives kicks off its Plant NOVA Trees campaign this fall. This five-year effort will highlight the importance of native trees and support efforts to plant and preserve new and existing native trees. Check the website <a href="https://www.plantnovatrees.org">www.plantnovatrees.org</a> for related events.

Our September speaker is Rod Walker, the president and founder of the Blue Ridge Partnership for Regional Invasive Species Management (PRISM). This year the sale of invasive species, such as Japanese Barberry, English Ivy, Wintercreeper, and Burning Bush, has been the subject of a state-legislated work group led by staff from the Department of Conservation and Recreation and the *(continued on next page)* 

Department of Agriculture and Consumer Services. Rod serves on this important work group along with VNPS representative Jim Hurley and representatives of other conservation groups, governmental entities, and horticultural industry groups. Rod can share his views on the work group's progress on developing ways to reduce or eliminate the sale of invasive plants and encourage the use of native species. Register for this meeting by Zoom at <a href="https://us02web.zoom.us/meeting/register/tzAkcOutqzlsEtAQPn]xtyZMl\_-uCYwYOp1s">https://us02web.zoom.us/meeting/register/tzAkcOutqzlsEtAQPn]xtyZMl\_-uCYwYOp1s</a>

On the subject of encouraging the use of native plant species, in July I joined a number of groups and individuals at a meeting of the Prince William Board of County Supervisors to request that all native plants be used in landscaping for new projects on county-owned land. The board was receptive to the idea and directed staff to follow up. We plan to follow up ourselves with another appearance before the board in September to determine the staff response. Our proposal does not cover lawn areas, nor does it include school properties. Schools will require a separate effort

before the School Board.

As your president, I have continued to work to protect our national parks from impending data centers as neighbors. I testified before the Prince William Board of County Supervisors on July 20 and, along with a number of other group representatives, participated in a press conference before the meeting. You can read more about these efforts at <a href="https://www.pwconserve.org">https://www.pwconserve.org</a>

I hope that you have marked your calendar for the afternoon of Sunday, October 3. We have planned a noontime potluck picnic at the Manassas

National Battlefield Park picnic area off Groveton Road. We reserved the picnic pavilion. Depending on Covid conditions, bring a dish to share or bring your own picnic for you and your family. We will supply drinks and paper supplies. We'll also have a native plant exchange—bring a plant to share if you can—and door prizes. A botanical walk at Deep Cut will follow the picnic. I look forward to seeing many of you "in the flesh."

Till then, see you on Zoom September 2 for our official annual meeting. The Zoom will open at 7 for socializing with the meeting convening at 7:30 p.m. *Nancy* 



Pictured: Donna Murphy, Claudia Thompson-Deahl, and Val Neitzey

#### A Visit to a Meadow

In late July a couple of native plant friends and I had the pleasure of visiting the stunning wildflower meadow of PWWS VP Val Neitzey. Located at the foot of the Bull Run Mountains, the entire property is approximately seven acres. Val and her husband Shane created their colorful meadow from seed on about half an acre in the spring of last year. They used the Showy Northeast Wildflower Mix from Ernst Conservation Seeds in Pennsylvania. Later they received a custom seed mix recommendation from Bert and Eleanor Harris of the Clifton Institute and are using that to fill in and add to other areas. The meadow was buzzing and fluttering with pollinators during our visit. Enjoy these photos in color online!



#### **Local public meadows to visit:**

Deep Cut Meadow on Featherbed Lane at Manassas National Battlefield Park

Silver Lake Regional Park, located by the main parking area, Silver Lake Road off Antioch Road, Haymarket

Historic Brentsville Courthouse, 12229 Bristow Road, Bristow

## Prince William Wildflower Society Membership Meeting Minutes Thursday, July 1 2021 7:30 p.m. Meeting

President Nancy Vehrs opened the Zoom meeting at 7 p.m. for a social time, then called the meeting to order at 7:30 p.m.

Announcements: The first Manassas Bee Festival was June 26 at the Liberia House. It was well attended, and PWWS sold many native plants at their booth. Nancy Vehrs reported many people were interested in hearing about native plants. Thank you to the following members who volunteered for PWWS: Joyce Andrews, Brigitte Hartke, Sherry Parker and Harry Glasgow.

Nancy V. reported on the July 13 meeting of the P.W. Board of County Supervisors and some new County projects.

Our next meeting will include Rod Walker from Blue Ridge Partnership for Regional Invasive Species Management (PRISM).

On Sunday, Oct. 3 we will have a picnic and walk at Manassas National Battlefield Park. Nancy V. wrote to the MNBP and asked permission for use of a pavilion.

When not too hot, a Weeding Party will again be planned at the I-95 Rest Area near Exit 156.

A dozen participants traveled to Quarry Gardens at Schuyler on May 12, and another trip is planned for late July or Aug. Watch for an email. [See page 2 in the July/ August 2021 issue of *Wild News*.]

Nancy reported that Jil Swearington and Judy Fulton are working on a new edition of *Plant Invaders of Mid-Atlantic Natural Areas*. Orders are due by August 13.

**Program:** Nancy V. introduced Marion Lobstein, our beloved PWWS Botany Chair, and a charter and life member of Virginia Native Plant Society and PWWS. Marion is the immediate past vice-president of the board of directors for the Foundation of the Flora of Virginia Project (FFVP). Since 2001 she has been actively involved in development of the *Flora of Virginia*, published in 2012, followed by the Flora of Virginia App.

Marion summarized the changes in the 2020 update of the Flora of Virginia App. Some examples follow: Three families from new naturalized species were added; 3 family names were changed; there was a gain of 56 genera at the genus level; 35 genera are new to the Flora because they have

been documented to have now naturalized in Virginia; 39 genera are new because taxonomic understanding resulted in splitting; 13 genera were deleted and lumped into 11 genera; 192 new species of infraspecific taxa (such as varieties or subspecies) were added; 284 taxa had name changes; and 6 taxa were deleted. Also updates of the Graphic and Dichotomous Keys as well as additional photos have been added to the App.

Marion also discussed the seven education modules that have been developed to support use of the Flora of Virginia Manual and also the App. She expressed appreciation of the support of VNPS and of Mark Murphy, VNPS webmaster. He has recorded, edited, and will post these modules on the VNPS website and <a href="floraofvirginia.org">floraofvirginia.org</a>. In August 2021, a new board of directors for FFVP will meet for the first time. Marion previewed the members of the board, and VNPS member Sally Anderson will continue to serve on the board.

It's been a labor of love for Marion, but after 20 years she is ready to step down. We congratulate her and thank her and the whole team for all the work! The *Flora of Virginia* book and now the App are providing students, professionals and hobbyists with a valuable resource. Marion, thank you also for the updates-very appreciated!

In the May/June 2021 issue of *Wild News*, Marion updated the traditional Lily Family, and she plans on more such articles in the future.

Karen Waltman, Secretary

#### In Memoriam

PWWS mourns the loss of charter member **Phil Louer** at the age of 96 on July 25. He and his late wife Frances were active in PWWS for many years and opened their colorful azalea and wildflower garden in the Evergreen area of Haymarket for our spring tour several times. ( obituary )



#### **Condolences:**

PWWS sends its condolences to longtime member **Tiana Camfiord** on the tragic death of her son **Jason**.

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

### by Marion Lobstein, Botany Chair, Prince William Wildflower Society

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 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 *Euthanmia*) and more than 30 species of Asters (now transferred to a number in genera). In this article, the "Aster" species will be the focus.

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 but some species have rhizomes (underground storage stems). As composites, the flower heads (capitula) are 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, floret heads are made up of both petallike ray flowers that can vary in color from white to pink to

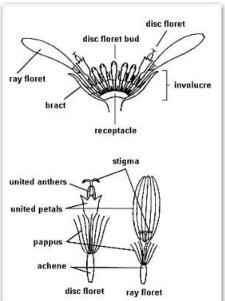
blue to purple as well as tubular disk florets that are usually yellow but can turn purple to brown with age. In various species of "Asters," these ray florets are pistillate (female) flowers that can be pollinated and produce fruits while in other species they may be sterile. The disc florets are perfect (bisexual with male and female structures) and are fertile. In both types of florets are fused into a corolla (forming a ligulate or tongue-like "petal" in the ray florets and a tube in the disc florets). 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 sepals 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, butterflies, moths, wasps, beetles, and even flies. Species such as the New England Aster are often used in butterfly gardens. 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

identification of species. In these fruits, there is only a single seed closely surrounded by 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. 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. A chart of our species of "asters" with name changes is included in the taxonomic history, on page 6.

Pictured: Diagram of composite flower structure.



## Taxonomic Changes for Regional Species of "Asters"

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 to five other genera— *Doellingeria, Eurybia, Ionactis, Oclemena,* and *Symphyotrichum.* 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.



Pictured: New England Aster, Symphyotrichum novae-angliae

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, and, from Roman time, 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. As early as the 1600s, there was controversy among herbalists and botanist as to whether there was 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 20 species of Aster. In the 1762 second edition of Flora Virginica, John Clayton and Johann Gronovious noted 14-15 species of Aster. In 1829 the Frenchman Alexandre De Cassini introduced the genus Eurybia and in 1832 the German Christian Nees von Isenbeck introduced the genera Symphyotrichum 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 *lonactis* (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, 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 lonactis 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 Symphyotrichum to separate our native Asters from Eurasian Asters. It has been a long and complicated journey of naming and renaming our beautiful fall Asters. In the December 2020 Flora App update, there are no significant updates on these species in our area.



Pictured: Blue Wood Aster - Symphyotrichum cordifolius with Pearl Crescent Butterfly

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 more than a century old, 1903!

"Aster" Genera	Authority (who proposed the genus) & date proposed	Meaning	"Aster" Species in our area and Flora of Virginia scientific names
Aster	Carl <b>Linnaeus</b> 1753	Greek for "star"	Aster tataricus - Tartarian Aster - no change (an introduced species from Asia)
Doellingeria	Nees (Christian Nees von Isenbeck) 1832	Named in honor of German botanist I. 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 <b>Greene</b> 1897	Greek for "violet rays"	A. linariifolius - Stiff-leaved Aster - now Ionactis linariifolius
Oclemena	Edward Lee <b>Greene</b> 1903	Derivation unknown	A. acuminatus - Whorled Wood Aster - now Oclemena acuminata
Sericocarpus	Nees (Christian Nees von Isenbeck) 1832	Greek for serikos "silky" and karpos "fruit"	A. solidagineus - Narrow-leaf White-top Aster - now Sericocarpus linnifolius A. linifolium - Toothed White-top Aster - now Sericocarpus asteroides
Symphyotrichum	Nees (Christian Nees von Isenbeck) 1832	Greek for "born (grown) together" and "hair" (perhaps referring to the hair-like pappi)	A. concolor-Eastern Silvery Aster-Symphyotrichum concolor A. cordifolius-Blue Wood Aster-Symphyotrichum cordifolium A. dumosus-Bushy Aster-Symphyotrichum dumosum A. ericoides-Heath Aster-now Symphyotrichum ericoides A. laevis-Narrow-leaved Smooth Aster-now Symphyotrichum laeve A. lateriflorus-Calico Aster-now Symphyotrichum lateriflorum A. lowrieanus-Lowrie's Aster-now Symphyotrichum lowrieanum A. novae-angliae-New England Aster-now Symphyotrichum novie-belgii A. oblongifolius-Aromatic Aster-now Symphyotrichum novi-belgii A. oblongifolius-Aromatic Aster-now Symphyotrichum oblongifolium A. patens-Late Purple Aster-now Symphyotrichum patens A. phlogifolium-Thin-leaf Late Purple Aster-now Symphyotrichum phlogifolium A. pilosus-Frost Aster, White Heath Aster-now Symphyotrichum pilosum A. prenanthoides-Crooked-stem Aster-now Symphyotrichum puniceum A. shortii-Short's aster-now Symphyotrichum shortii A. simplex-Panicled Aster, Tall White Aster-now Symphyotrichum subulatum A. subulatus-Annual Salt-marsh Aster-now Symphyotrichum undulatum A. undulatus-Wavy Leaved Aster-now Symphyotrichum racemosum O

## **Educational Modules Explore the Flora of Virginia's Features**

#### by Ann Regn and Marion Lobstein, Flora Education Committee Members

A new series of video modules breaks down the wealth of information and various features of the Flora of Virginia Manual and its App into understandable chunks. The seven modules, designed and produced by the Education Committee, uses educational objectives to tackle the vast subject and are suitable for a wide range of audiences and learners. Each module has been closed captioned and may be viewed with or without this feature.

Here is a list of the titles of the module titles:

- 1. Tour of the Flora of Virginia
- 2. How to Use the Flora App
- 3. Basic Botany
- 4. Taxonomy
- 5. Keying
- 6. Plant Families
- 7. Habitats

While each presentation stands alone, the series provides a comprehensive approach to understanding and using the Flora. Each video presentation is about an hour long and is divided into 3 or more sections. Timestamps and descriptions allow viewers to navigate to specific topics and areas of interest. Live links provide additional resources for deeper investigations.

Presenters include Flora Board Education Committee members Marion Lobstein, Sally Anderson, Michelle Prysby, Jan Hodges, Ann Regn, and guest Linda Wilcox. Mark Murphy, VNPS webmaster, recorded, edited, and will post these modules on both the VNPS website, <a href="mailto:vnps.org">vnps.org</a>, and the Flora of Virginia Project website, <a href="mailto:floraofvirginia.org">floraofvirginia.org</a>. These will be available in early September 2021.

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#### A YES! MAGAZINE ARTICLE:

Potowmack chapter Member Toni Genberg's home "Ecological Oasis" was featured in a recent <u>Yes! Magazine article</u>. The article features some of Toni's beautiful photographs.

https://www.yesmagazine.org/environment/2020/02/07/ yard-sustainability-native-plants

#### **EVENTS**

Saturday, September 11, 9 am - 3 pm, Loudoun Wildlife Conservancy Native Plant Sale, 17195 Southern Planter Lane, Leesburg. Thousands of beautiful fall-blooming flowers, shrubs, trees, vines and ferns will be available from three native plant nurseries. Experts will be on hand to help you choose the right plants for your garden. Visit here for more info:

https://loudounwildlife.org/event/fall-native-plant-sale/

Friday and Saturday, September 17 & 18, VNPS Annual Meeting. Info at <a href="http://www.vnps.org">http://www.vnps.org</a>

Saturday, September 25, 9 am - 3 pm Patowmack Chapter Family Fall Festival and Native Plant Sale. Green Spring Gardens, 4603 Green Spring Road, Alexandria

Sundays, September 26 and October 31, 8 am.
Last Sunday of the Month Merrimac Bird and Nature
Walk, every month (except December when we sponsor
the Nokesville Christmas Bird Count) at Merrimac Farm,
Stone House, 15014 Deepwood Lane, Nokesville,
directions. Everyone is welcome. Dress for the weather,
bring binoculars and cameras.
More info and RSVP to PWCA, 703.499.4954 or
alliance@pwconserve.org. View the bird list for Merrimac
Farm HERE.

Sunday, October 3, 12 noon, Prince William Wildflower Society picnic at Manassas National Battlefield Park. Meet at the shelter at the picnic area off Groveton Road. Door prizes and plant swap.

Thursday, November 4, 7:30 pm. PWWS Presentation by Warren Laws, president of the Virginia Chapter of the American Chestnut Foundation.

## **Prince William Wildflower Society**

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



Next Meeting:
Thursday, September 2, 7:30 pm via Zoom,
social time starts at 7 pm. "Invasive Plants With Rod Walker"







Views of Val Neitzey's late-July Meadow

On a recent mid-summer day, several wildflower enthusiasts visited Val's meadow garden. Many pollinators flitted and buzzed around her 6 1/2 acre field. They were drawn to the Monarda, Mountain Mint, Wild Senna, and Butterfly Weed as well as Partridge Pea, Joe Pye, Liatris, Coneflower, and Nimbleweed that grow in her meadow. One can also spot a Sycamore tree and many yellow flowers - perhaps a variety of coreopsis. Photos courtesy of Nancy Vehrs