



Wild News

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

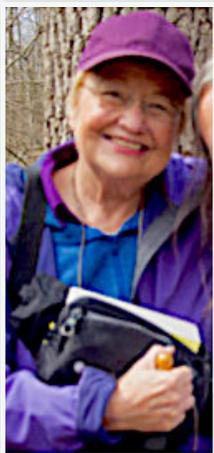
Number 2024-04

July — August 2024

**Prince William Wildflower Society
Membership Meeting
July 15, at 7 pm (note earlier start time)
Bethel Evangelical Lutheran Church,
Manassas**

“Up Close and Personal with Invasives”

On Monday, July 15, at 7:00 pm rather than our usual 7:30 pm time, we will meet at Bethel Lutheran Church in Manassas. Weather permitting, we will meet outside at the picnic tables to focus on what an invasive plant is, how to identify it, and look at examples of common local invasives. Invasives are nonnatives that outcompete native plants and are what we often call weeds. These introduced plant species from other places than their native range are becoming increasingly problematic.



This program will be presented by Marion Lobstein, PWWS Botany Chair, and Claudia Thompson-Deahl, PWWS Conservation Chair. Both Marion and Claudia will review what is meant by invasives and some background about the origin of some of our most common ones. There will be specimens of some of these common herbaceous invasives on display. Marion will review how to use the “Graphic Key” in the Flora of Virginia App to identify these. If you have already downloaded the App on

your smartphone or tablet, please bring it with you for a hands-on review of how to use the “Graphic Key.” If you

have not yet downloaded it, there is information below how to download this especially useful App.

Claudia will also review some of the woody invasives and how to deal with eliminating these. She will also talk about native species you can plant to replace these invasives.

This will be an informal meeting for our members to learn about invasives, how to identify them, how to eliminate them in your home yard and garden, and the importance of planting native species to replace these nonnatives. Refreshments will be available to enjoy and time for socializing.



Information on and how to download the the Flora of Virginia App: The Flora of Virginia manual was published in 2012 and weighed 7 pounds. The Flora of Virginia App was released in 2017 and is frequently updated with latest information. The App contains the information from the manual plus photographs, invasive information, range maps for over distribution of native and naturalized nonnative species in Virginia, and more. The App is downloadable for both iOS and Android phones and tablets. Once is purchased for \$19.99, future updates are free. Visit <https://floraofvirginia.org/flora-app/> or the App store on your device and search “Flora of Virginia.”

President's Column



Hot, sticky weather may have settled in early this summer, but it did not deter us from participating in outdoor activities. Intrepid

PWWS volunteers stepped up to staff our booth at the 4th Annual Manassas Bee Festival on June 24 that managed to *bee* a big success despite temperatures in the high 90s. Education Chair Lois Montgomery had to sit out the event because of a Covid exposure so we had to pivot from activities she had planned to lead. We simplified our exhibit and asked visitors whether they could name a native plant. It's disheartening that so many could not, but we used this exercise as a teaching opportunity. All participants received a native plant sticker. We also sold many Plant NOVA Natives guides. Though we did not sell plants as we have in the past, PWWS member Adrian Willing of *Bee American*, *Plant Natives* had loads of natives for sale at his nearby booth, and the Manassas Beautification Committee offered a free native plant to everyone while supplies lasted. I thank Brian McDougal for setup and takedown, and volunteers Karen Waltman, Janet Wheatcraft, Brigitte Hartke, and Janine Lawton for staffing the exhibit with me. I especially thank Val Neitzey for volunteering on the spot to take the last shift, allowing us to keep the exhibit open until the end.

On Saturday, June 29, members from our sister chapters, Piedmont and Potowmack, joined four of us from PWWS on a trip to Ice Mountain just over the state line in West Virginia. This unique Nature

Conservancy site is open only by reservation and requires a volunteer docent. Lois Montgomery describes our adventure elsewhere in this issue of *Wild News*.

We are pleased that new PWWS Member Amber Miller will be leading a hike for us in the Bull Run Mountain Natural Area Preserve on Saturday, July 27. She is the Black and African American Fellow of the Virginia Outdoors Foundation. Her hike, "**Reading your landscape through the Bull Run Mountains' history,**" will focus on native and invasive plant identification and ethnobotany through a mostly Black and African American and Native Nations historical lens. The cultural information comes from Amber's own ethnobotanical study conducted between fall 2021-spring 2023 as well as that of Ethnobotanist Dr. Susan Leopold's study of the Bull Run Mountains.

A field trip being planned for some time in August is a visit to the [Quarry Gardens at Schuyler](#) in Nelson County built around a former soapstone quarry. Originally conceived and managed under the ownership of Bernice and Armand Thieblot, this native plant garden is now under the management of the Center for Urban Habitats led by Rachel and Devin Floyd. It is designated as a VNPS Registry Site, a voluntary program designed by the VNPS to protect the plant treasures residing in natural communities throughout Virginia. The primary requirement for Registry eligibility is that the site has regional or state significance because of its native plants. The Quarry Garden uses only plants that are native within a 15-mile radius. Unless I hear that a significant number of our members would like to visit on a Saturday, I will schedule this field trip for a weekday. Contact me at nvehrs1@yahoo.com.

Our PWWS meeting on July 15 will be a little different from our usual lectures. Marion Lobstein and Claudia Thompson-Deahl will present their interactive program on invasives in the picnic area of Bethel Lutheran Church where live examples can be found. The program will begin at 7 p.m. to ensure that it ends well before dark. I will be out of town for this meeting, so our capable VP Val Neitzey will preside. Please invite friends to attend with you so that they, too, can learn how to identify invasive plants and see what a threat they are to biodiversity.

Watch your email box for announcements on upcoming events including information on the VNPS annual meeting in Harrisonburg planned for September 20-22.

~ Nancy



President Nancy finding an ice-cold respite at an Ice Mountain vent on a very hot day. See Lois Montgomery's report on the field trip on Page 6 of this issue.

Pictured on facing page, worker bee volunteers at the PWWS tent at the Bee Fest. Janine Lawton, Janet Wheatcraft, Karen Waltman. Val Neitzey and Nancy Vehrs. Brian McDougal and Brigitte Hartke are not pictured.

**Prince William Wildflower Society
Membership Meeting Minutes
May 20, 2024
Bethel Lutheran Church**

President Nancy Vehrs welcomed everyone and called the meeting to order at 7:30 pm. Nancy acknowledged Nancy Arrington and thanked her for organizing the Plant Sale, which was a success.

Nancy Vehrs introduced our Speakers, Tom Reiner, President of Dark Skies International; they have been spreading the word about light pollution since 1988. There are chapters all over the world. Eileen Kragie, Founder of Dark Sky Friends and Dark Sky NOVA. Eileen is committed to educating people about responsible outdoor lighting at night.

Dark Skies International started out as an astronomers' organization in Tucson. They noticed light pollution was impacting what they do as astronomers, and they thought they should bring attention to this. But this issue has only become known to people in the last several years. Reiner became active with astronomy groups, but really it is the environmental impact, the impact on

other living organisms and human beings. Manassas has horrible light pollution — the Manassas movie theater all lit up, warehouses. In Virginia they have really bad light pollution because of state universities with sports lighting that is poorly designed; the lighting stays on too long. Elsewhere excessive safety lighting is being used instead of effective safe lighting.

What is light pollution? Basically any artificial light. Light should be controlled in a reasonable way.

Light pollution is growing exponentially. Causes are increase in population and residential/commercial patterns. Rural areas are worse because populations are spread out more. Automobiles are also a big problem. Families own multiple cars, which add more street lights and parking lots.

Light pollution has an impact on biodiversity. Practically every species is negatively impacted. Messes with all species' circadian rhythms, including people. Can cause hormonal cancers, depression, diabetes, sleep disorders. Same with 90% amphibians, 69% mammals, 60% invertebrates (crucial), and 30% birds. The bird's migratory season is disrupted because they don't know

that it's actually not daytime which causes many bird strikes. Plants: excessive light at night disrupts the plants' growing season (stresses). This can reduce agriculture yields. Insects are severely affected.

Light Pollution is controllable; good lighting is about usefulness and should have a purpose. Targeted shielding, to keep light on what you want it to light. Without shielding, light is going up into the atmosphere and causing glare. Intensity, really bright light is bad for our night vision. Using lower intensity lighting allows the ability to see in shadows or even beyond the light. Also motion detectors, light controls, and timers are very useful for homeowners as well as businesses. Lights for security do not prevent crime. The best solution for light pollution is a midnight-to-6 am curfew. Find out what your county codes are, and talk to your HOAs. Spread the word.

Nancy announced the Bee Festival is coming up next month. Door Prizes — six prizes were given out. The meeting was adjourned at 8:55 pm.

~ Janine Lawton,
Secretary



**MONARDA -
BEEBALM, BERGAMOT,
OR
OSWEGO TEA**

By Marion Lobstein
PWWS Botany Chair

Many aromatic perennial species of *Monarda*, the Lamiaceae or Mint Family, have a long and interesting history of medicinal and culinary uses. There are four native species in the genus *Monarda* found in our area: *M. didyma* (Beebalm, Oswego tea, Indian flaming flower, Indian's plume); *M. fistulosa* (Wild bergamot), *M. clinopodium* (Basil balm), and *M. punctata* (Horsemint). These four common species bloom from late May through September and range from southern Canada or New England south to Georgia and west to Missouri. *M. didyma* is found in moister habitats than the other three species, which can be found in drier woods, thickets, and along roadsides.

The genus name *Monarda* is in honor of Nicolas Monardes, a Spanish botanist and physician who in the late 1500s published a book on Indian uses of American plants. The species epithets or names of our four species of *Monarda* are as follows: *didyma* refers to the paired stamens of the flowers of this species; *fistulosa*, meaning tubular, refers to the shape of the flowers; *clinopodium* (an ancient name for basil) refers to the basil-like fragrance; and *punctata* refers to dots on the corolla of the flower of this species.

The tubular nature of both the five-toothed calyx and the colorful corolla with a longer upper lip and a shorter three-lobed lower lip is common to the genus. The sizes of the flowers vary from one to one-and-a-half inches for *M. fistulosa*, *M. clinopodium*, and *M. punctata*, and from one-and-a-half to two inches for *M. didyma*. The flowers of the four species are found in terminal or axillary clusters subtended by a whorl

of colored bracts (modified leaves) in species. The color of these bracts vary from white to yellowish pink for *M. clinopodium* to yellowish with purple spots for *M. punctata* to magenta-purple for *M. fistulosa* to red for *M. didyma*. *Monarda* species have only two functional stamens. Pollination is by bees, butterflies, hawk moths, and ruby-throated hummingbirds (especially for *M. didyma*). Bees seem to be really attracted to members of this genus—thus the name Beebalm. (I have seen bees that appear intoxicated from visiting flowers of *M. clinopodium*. I have not been able to find an explanation for this phenomenon.) The fruit that forms is from the dried tubular calyx, each of which contains four brown nutlets 1/16-inch large; each nutlet contains a single seed.

The square stems of all these species vary from two to six feet tall and from smooth to hairy. All have opposite, ovate scalloped leaves that vary in texture and color. Most have horizontal stems by which new plants may form asexually.

These and other species of *Monarda* are a source of the drug thymol which has antibacterial, antifungal, and anthelmintic (eliminating parasitic worms) properties. American Indians used preparations of species of this genus to treat bronchial and pulmonary problems, digestive system disorders, skin problems, headaches, fevers, colds, sore throats, heart trouble, measles, nosebleeds, and intestinal worms. Many of these preparations were in the form of a very aromatic tea often called "Oswego tea," which is from an Indian term for flaming flower referring to the red color of *M. didyma*, although other species were used to make the tea and other preparations. In addition, various tribes used this group of plants to flavor meat and beans. American colonists used this species primarily as a pleasant-tasting tea, which was especially popular after the Boston Tea Party. A number of species of this

genus were also used by herbalists to treat skin problems, headaches, and digestive problems. Leaves and flowers of this genus also have been used to flavor jellies and salads. In addition to American uses of the genus, *M. didyma* was introduced into Europe in 1656 for its herbal properties. That species and *M. fistulosa* were grown in many old-fashioned gardens.

During the summer and into autumn, enjoy the beauty and aromatic properties of members of this very handsome genus. None of these species are common in our area, but the time spent to find them is time well spent.

Adapted from pages 3-4 of September-October 2016 *Wild News*, https://vnps.org/princewilliamwildflowersociety/wp-content/uploads/filebase/pwvs/pwvs_wild_news/pwvs_newsletters_2016/WILD%20NEWS%20September-October%202016.pdf



Monarda fistulosa and *M. didyma*, J. Endes, Revue horticole, série 4, vol. 88: fig. 1 (1916), accessed at www.plantillustrations.org; *Monarda fistulosa*, Zorn, J., Oskamp, D.L., Afbeeldingen der artseny-gewassen met derzelver Nederduitsche en Latynsche beschryvingen, vol. 4: t. 316 (1800), accessed at www.plantillustrations.org.

Plant it and they will come . . .

Native Plants for Small Native Bees

Nancy Arrington

There are about 4,000 native bee species in North America and over 450 in Virginia. Although bumblebees and carpenter bees are important pollinators, this article deals with small bees (most are around a quarter of an inch long) with names such as cellophane, cuckoo, digger, leafcutter, long-horned, mason, and sweat. They live only a few weeks as adults and come in a jewel box of colors – metallic-green, bottle blue, gold, brown and glossy black.

Various species are active from early spring, in weather too cold for our non-native honeybees, through late fall. Most are solitary – a single female performs all the tasks of a colony: she builds the nest, lays the eggs, and provides for the young. According to Sam Droege, a biologist at the U.S. Geological Survey Patuxent Wildlife Research Center and native bee expert, during his presentation at the February Native Plant Symposium, only five percent are cavity nesters (nest boxes, hollow stems of plants), and the rest live in underground tunnels.

Most are generalists and gather nectar and pollen from many plant species; however, around 20 percent are rare specialists that have coevolved with a specific plant species or genus and gather its pollen to feed their young. These specialists are the ones we need to save, and Sam stresses the importance of growing plants that support them. Of course, generalists also use these plants.

As pollinators, these tiny creatures certainly punch above their weight. In farm fields, natural areas, meadows, and backyard flower and vegetable gardens, they are two to three times more effective than European honeybees. Like all insect species, their numbers are declining due to habitat loss, pesticide use, and

climate change. As gardeners, we can help ensure the survival of these fascinating and essential pollinators by providing nectar and pollen plants and nesting support.

The Plants: Generally, small native bees visit the same flowers preferred by other pollinators. They need nectar and pollen from early spring through late fall and are attracted to sweetly fragrant yellow, blue, and white flowers. Many native plants supply nectar and pollen; however, the following support the greatest number of local bee species. In many cases, closely related plant species are equally beneficial. Again, quoting Sam Droege: the greatest diversity of plants will attract the greatest diversity of bees, and every backyard has access to 100 species. Plants that support specialists are in bold type.

Trees and shrubs:

Amorpha fruticosa (False Indigo), *Ceanothus americanus*, (New Jersey Tea), *Cercis canadensis* (Redbud), *Cornus* spp. (Shrubby Dogwoods), *Diospyros virginiana* (Persimmon), *Hypericum prolificum* (Shrubby St. John's Wort), *Prunus americana* (American Plum), *P. serotina* (Black Cherry), *Salix discolor* (Pussy Willow), *S. nigra* (Black Willow), *Vaccinium corymbosum* and *V. pallidum* (**Highbush & Lowbush Blueberry**).

Sun perennials:

Allium cernuum (Nodding Onion), *Blephilia ciliata* (Downy Wood Mint), *Eutrochium* spp. (Joe Pye Weed), *Helenium autumnale* (Sneezeweed or Helen's Flower), *Helianthus* spp. (**Sunflowers**), *Pycnanthemum* spp. (Mountain Mint), *Rudbeckia laciniata* (Green-headed Coneflower), *Solidago/Euthania graminifolia* (Grass-leaved Goldenrod), *Symphyotrichum* spp. (**Asters**), *Vernonia noveboracensis* (New York Ironweed), *Veronicastrum virginicum* (Culver's Root), *Zizia aurea* (**Golden Alexanders**).



Sun/shade perennials:

Cardamine spp. (Toothwort), *Erigeron pulchellus* (Robin's Plantain), *Eurybia* spp. (Wood Asters), *Geranium maculatum* (**Wild Geranium**), *Hydrophylla virginiana* (Virginia Waterleaf), *Lobelia siphilitica* (Blue Lobelia), *Packera aurea* (**Golden Ragwort**), *Penstemon digitalis* (**Beardtongue**), *Polemonium reptans* (**Jacob's Ladder**), *Ruellia caroliniensis* (Wild Petunia), *Solidago caesia* (Blue-stemmed Goldenrod), and *Viola striata* (**Cream Violet**).

A few more important plants:

Claytonia virginica (**Spring Beauty**), *Hepatica acutiloba* (Sharp-lobed Hepatica), *Sanguinaria canadensis* (Bloodroot) and *Thalictrum thalictroides* (Rue Anemone) supply nectar and pollen for early foraging species.

Additional plants for specialists:

Campanula spp. (Bellworts), *Erythronium americanum* (Troutlily), *Heuchera americana* (Alumroot), *Lysimachia* spp. (Loosestrife), *Monarda* spp. (Beebalm), *Oenothera biennis*, (Common Evening Primrose), *Penstemon digitalis* (Beardtongue), *Rhododendron* spp. (Native Azaleas) and *Uvularia grandiflora* (Bellwort).

Nesting help:

Provide bare ground (preferably sloping southeast) for ground nesting bees. Leave stalks of hollow-stemmed plants such as Swamp Milkweed, Joe Pye Weed, Ironweed, and Beebalm intact over the winter, and in early spring cut stems back to 6-12" for use by above-ground nesting species. Check periodically to see if they contain nests (stems will be sealed) and leave until young bees have emerged. Mason and leafcutter bees and possibly others will use nest boxes. (continued on next page)

(Native Plants for Small Native Bees, continued)

For more information:

Internet sources:

Mt. Cuba Native Bee Survey, 2018-2019 (www.mtcubacenter.org). Natural areas and the gardens were included in this extensive survey, which includes a list of specialists and their pollen plants.

Plants for Specialist Bees, (www.vnps.org). Included in Sam Droege's 2015 presentation for VNPS is a list of Virginia native plants for specialist bees.

Books:

Attracting Native Pollinators, Xerces Society Guide, Eric Mader, et al, 2011.

Bees: An Identification and Native Plant Forage Guide, Heather Holm, 2017

Common Native Bees of the Eastern United States, Heather Holm, 2022 (Identification guide).

Northern Virginia Native Plants for Homeowners, Julie Borneman, 2024.

Native Plants for Northern Virginia, Virginia Native Plant Society, 2022.

Planting for Wildlife in Northern Virginia, Loudoun Wildlife Conservancy, 2020.

Note: This is a revised version of an article I wrote for Centennial Garden Club in November 2023.

UPCOMING EVENTS

PLEASE NOTE:

For events not scheduled at the time this issue went to press, please continue to visit the PWWS web page: vnps.org/princewilliamwildflowersociety/

July

Our friends at Clifton Institute at 6712 Blantyre Road, Warrenton, a non-profit organization whose mission is to inspire a deeper appreciation of nature, study the ecology of our region, and to conserve native biology, are hosting a number of interesting, informative events in July, August and September. For a suggested donation of \$40, you can become a Friend of Clifton Institute and participate in all the events, but you are welcome to attend an event without having become a member, I was told. Many events — walks, Butterfly ID, Nature Journaling Meet-ups, etc. — are free; others require a small fee. Event info is here: <https://cliftoninstitute.org/events/>

Saturday, July 27, PWWS-sponsored hike led by new member Amber Miller, Bull Run Mountain Natural Area Preserve, "Reading Your Landscape Through the Bull Run Mountains History". Check the PWWS website for hike time.

Sunday, July 28 and August 25, 8 am, Bird and Nature Walk at Merrimac Farm, last Sunday of every month. Join

us! We will 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. We meet at Merrimac Farm, Stone House, 15014 Deepwood Lane, Nokesville. Dress for the weather, bring binoculars and camera. Info and RSVP, alliance@pwconserve.org You can view a bird list here: <http://www.pwconserve.org/wildlife/birds/lists/>

August

Wednesday, August 7, 7 - 8:45 pm, Leopold's Preserve Hike with a Naturalist: Bats & Bugs. 16290 Thoroughfare Road, Broad Run.

Saturday, August 10, 10 am - 12 pm, The Piedmont Chapter is hosting a plant walk on Hogback Mountain in Shenandoah National Forest, guided by Richard Stromberg. There is an entrance fee to enter the national park, but the event is free; for more info, <https://www.eventbrite.com/e/hogback-mountain-plant-walk-shenandoah-national-park-tickets-942814743277>

Sunday, August 11, 11:30 am - 2:30 pm. Veterans Memorial Park, Prince William Conservation Alliance and Green Steeze are hosting a participatory event: "5 Bad Weeds that Gardens Don't Need." Enjoy snacks and drinks under the shade of Vet's Beautiful trees, talk to local experts. Bring loppers, pruners and shovels; wear boots, long socks, etc.

Ice Mountain Field Trip, North River Mills, Hampshire County, West Virginia

This was one for the Bucket List. Like the synchronized lightning bugs of the Smoky Mountains, and the Mexican winter retreat for the Monarch butterfly, Ice Mountain is a natural phenomenon that must be experienced to appreciate.

In 2012 Ice Mountain was proclaimed a National Natural Landmark and fell under the protection of the Nature Conservancy. It is available for small groups of hikers to visit, but the group must be accompanied by a docent from the Conservancy because of the fragile nature of the flora and fauna adapted to the rare boreal climate of the ecosystem; also, the owners of three properties at the beginning of the hike allowed for groups to visit as long as accompanied by the docent.

According to Wikipedia, *“The accumulated rock detritus at Ice Mountain’s base forms a talus that is 50 feet thick in some places. This creates a refrigeration effect: as cold air sinks into the talus pile during colder months, it forms masses of ice and ice vents inside it. The ice vents are in a section about 200 yards in length along the mountain’s southern*

flank. Cool air is expelled from the ice in the warmer months and flows through and out the vents along the trail. The mean annual temperature can be as low as 36 degrees F! The cool air affects surrounding air and soil creating an area of boreal species and plant growth.” Local history tells of past residents of the area collecting ice in the summer to make home churned ice cream and storing meat and perishables in the vents for the winter months.

Again, according to Wikipedia, *“Ice Mountain’s vents provide a habitat for boreal species of plants commonly found in Subarctic regions. The ecosystem exhibits a combination of Appalachian, Canadian, and Subarctic species in a humid subtropical climate. Northern boreal species have survived at Ice Mountain since the last glacial period and became isolated over time as temperatures warmed and relegated the boreal species to the Subarctic regions of North America. Ice Mountain’s boreal species are not only unique because of their isolated location, but also because of their elevation. Boreal species are typically found at elevations 4,000 feet above mean sea*

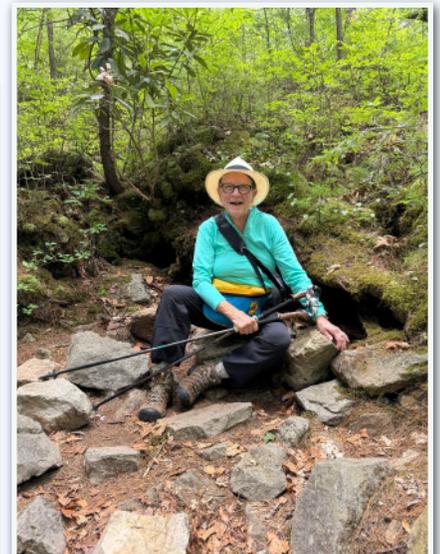
level, but species at Ice Mountain survive at heights around 700 feet above mean sea level.”

As our group moved slowly along the sometimes single-file path, we noticed and photographed a number of native plants. We were disappointed to find few of the anticipated species in bloom, but our list included Canada mayflower (*Maianthemum canadense*), prickly rose (*Rose acicularis*), twinflower (*Linnaea borealis*) in bloom, American rhododendron (*Rhododendron maximum*) in bloom, witch hazel (*Hamamelis Virginiana*), Indian pipe (*Monotropa uniflora*), spotted wintergreen (*Chimiphila maculata*), blue cohosh (*Caulophyllum thalictroides*) and hog peanut (*Amphicarpa bractiata*).

As the day was a hot one, we enjoyed our cool respite sitting in front of the ice vents. We were told that these talus formations that create the Ice Mountain phenomenon are not all that rare and can be found in other places. It is one of the coolest nature adventures I have ever experienced.

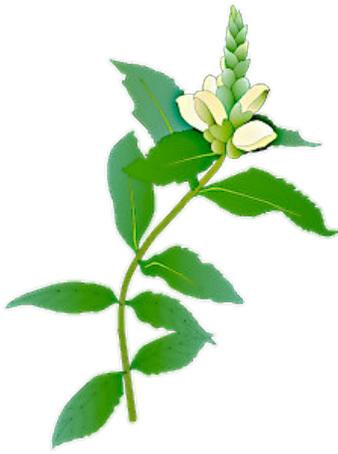
~ Lois Montgomery

A placard at Ice Mountain, a partial group photo at hike’s end, and Lois Montgomery sitting by a talus-produced cold vent.



Prince William Wildflower Society

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



Next Meeting: Monday, July 15 at 7 pm (note time change)

“Up Close and Personal with Invasives”

Bethel Evangelical Lutheran Church, Plantation Lane, Manassas

Library of Things

Stray over the border to a Fairfax County library, and you will notice they have a Library of Things program which allows card-holders to borrow items for various purposes, provided you get yourself a FFX County library card; yes, they have a reciprocal borrowing agreement with Prince William County libraries. Get a card and you can borrow anything from Thermal Cameras to Meters, Nature Packs for young people, Conserve Energy Kits and binoculars. They also have a Light Pollution Monitoring Kit.

“The Light Pollution Monitoring Kits, also known as Dark Skies kits, are part of the citizen science initiative, allowing people from all walks of life to contribute data that can be used in the analysis of a scientific problem. This particular kit allows borrowers to measure light pollution. Light pollution not only affects our view of the stars, but can also waste energy and money, cause sleep disorders in people and disrupt sleeping and breeding habits in animals.” Our members learned as much at our last a membership meeting when we hosted speaker and Dark Skies International president, Tom Reiner.

The kits may be borrowed for three weeks and are renewable if there is no wait list. The kits include a meter and meter case, flashlight, planisphere and backpack.

*A few Ice Mountain botany captures by Society member Janis Stone on our recent visit: clockwise from left, Black Cohosh (*Actaea racemosa*), Rosebay Rhododendron (*Rhododendron maximum*), Blue Cohosh (*Caulophyllum thalictroides*), and a photo of the one single sitting of the rare-in-our-area Twinflower (*Linnaea borealis*).*

