Upcoming Field Trip to the Heights at VMI in Lexington
By: Mary Lee Epps, Chapter President

An April field trip is planned to the Heights at Virginia Military Institute. The area and adjacent bottomland are a delight for anyone who loves spring wildflowers. Both are exceptionally rich in in a wide variety of natives with a number of species that either haven't been found in Albemarle or are very unusual here.

The area is botanically special for several reasons. It boasts two different habitats—an elevated bluff with thin, rocky soil that descends extremely steeply with a north-northeast exposure to a floodplain with deep sandy loam. This steep descent discourages deer browsing and logging, resulting in mature forest on the slope. In addition, the entire area is at an elevation of roughly 900 to 1000 feet, much higher than Charlottesville. Finally, the underlying rock also contributes to the different flora. It is part of the Edinburg Formation with alternating layers of limestone and shale, so that the soil is much less acid than that of the Charlottesville Area.

Plants found on the bluff include twin leaf (*Jeffersonia diphilla*), Hoary puccoon (*Lithospermum canescens*), Yellow pimpernel (*Taenidia nigomcrassa*), and many others.

You’re Invited! Spring Potting Party & Annual Plant Sale
By: Phil Stokes, Plant Sale Chair

You’re invited to join us Wednesday at 1:30 PM on March 29 (rain date March 30th) to help prepare for the Jefferson Chapter’s Annual Native Plant Sale. No special skills required, volunteers will be trained in potting plugs and bare root wildflowers. This is an opportunity to help provide affordable, native plants to the local community while raising funds for the chapter. Please join us for this annual tradition, and don’t hesitate to bring a friend.

We’ll be hosted by Chapter Member, William Hamersky at the beautiful Full Tilt Farm (70 Taylors Gap Rd., Charlottesville, VA 22903. Only 2.0 miles west of the I-64 Ivy Exit #114). The event is casual, with volunteers free to tailor their schedule around other commitments.

Other ways to contribute to the success of the sale include donating plants, potting supplies, and volunteering on the weekend of the sale (April 29th and 30th). Donations of popular natives like Celandine Poppy, Green and Gold, Robin’s Plantain, Golden Ragwort, Wild Petunia, Allegheny Spurge, White Wood Aster, Pussytoes, and Purple Cone Flower are welcomed.

Thinking about getting involved? Have questions? Contact Phil Stokes, Plant Sale Chair to learn more (philipfs@embarqmail.com | 434.293.4217).
Chapter Events & Opportunities

The Jefferson Chapter invites you to attend our Wednesday Chapter Meetings and join an upcoming field trip and plant walks hosted throughout the spring and summer. Chapter meetings are held at the Ivy Creek Natural Area Educational Buildings. For plants walks at Ivy Creek, meet at the kiosk.

Field Trips
March 18 - Ivy Creek native plants led by Dot Carney
April 8 - The Bluffs at VMI in Lexington led by Mary Lee Epps & Ruth Douglas
April 12 - Walton Tract at Millboro, VA Postponed
April 15 - Ivy Creek native plants led by Ruth Stornetta
April 12 - Walton Tract at Millboro, VA Postponed
April 15 - Ivy Creek native plants led by Ruth Stornetta
May 13 - Little Bluestem Nursery in Afton hosted by Ben Kessler
May 20 - Ivy Creek native plants led by Tana Herndon
June 17 - Ivy Creek native plants led by Mary Lee Epps
July 1 - Milton Airfield (UVA) grassland led by Devin Floyd

Email jeffvnps.com if you are interested in attending a field trip. Additional 2023 field trips and outings will be announced in the coming months. Future opportunities will include farm visits, area parks and trails, and several Virginia Natural Heritage Sites. Walk with us to see native plants, improve your identification skills, network with others on worthwhile areas to visit. Each outing reveals diverse treats ranging from tiny miner bees pollinating spring beauties to over-arching tree canopies.

Chapter Meetings
Wednesday, March 8, 7:00-8:30 | Chapter Meeting Topic: Propagating native plants from seed
Will Shaw will speak about propagating native plants from seed. Will grows hundreds of natives each year from seed that he has collected locally, which he then plants on his property in Louisa County. He is a former co-chair of our plant sale and has long experience gardening with natives.

Wednesday, April 12, 7:00-8:30 | Chapter Meeting Topic: Protecting Shenandoah Mountain
Representatives from the Virginia Wilderness Committee and the Friends of Shenandoah to speak about the VNPS fundraiser project to protect and preserve four key wilderness areas in the proposed Shenandoah Mountain National Scenic Area of Virginia.

May 10, 2023, 7:00-8:30 via Zoom | Chapter Meeting Topic: Cultivating Local Genotypes
Ben Kessler will present via Zoom about the importance of cultivating local genotype native plants.

Plants Walks at Ivy Creek
Meet at the kiosk at 9:00 AM for chapter member led plants walk.
- March 18, led by Dorothy Carney
- April 15, led by Ruth Stornetta
Spring & Summer Open Garden Events... With Your Help

Our Chapter outings are typically hikes in natural areas. This year some outings of a potentially more social variety will be included. One plant-worthy idea is to offer Open Garden events. A member picks a morning. The chapter is invited to visit that residential garden. It will not be a home tour; no tea and crumpets. It will be an informal, unstructured garden visit. Guests can drop in during the morning at their convenience. There will not be multiple gardens to visit on the same day; just one residence. If you like this idea and would be interested in opening your garden to us one morning this spring or summer, please email dorothy.carney@gmail.com. Your garden does not have to be exclusively native plants. An ideal candidate would be a mix where existing non-native landscape plants are gradually being replaced by natives in the member's garden. Our community has great interest in the aesthetics, scale and economics of incorporating natives into established gardens.

Potting Party

The Potting Party will take place on March 29, 2023 (rain date March 30th) at 1:30 PM. Hosted by William Hammersky, about 10 minutes west of Charlottesville. Easy to get to, only one turn to make after getting off I-64 at Ivy Exit. Volunteers may bring plant divisions for potting but need to be robust enough to be sellable by April 30th.

Time & Location:
Tuesday, March 29 (rain date March 30) 1:30 PM
Full Tilt Farm
470 Taylors Gap Rd.
Charlottesville, VA. 22903

Annual Native Plant Sale

Choose from over 50 species of native perennials, trees, shrubs, wetland plants. Large selection of spring wildflowers and groundcovers including trillium, Virginia bluebells, wild geranium, wild blue phlox, Mayapple, Jacob's ladder, heuchera, spring beauty, toothwort, wild stonecrop sedum, creeping phlox, and wild ginger. Mid/late season flowering species liatris, purple coneflower, mountain mint, wild basil, gray goldenrod, and asters. Woodies include spicebush, red osier dogwood, and red mulberry.

Time & Location:
Sunday, April 30, 2023, 1:00 - 3:00
Ivy Creek Natural Area’s Barn Lawn
1780 Earlysville Road, Charlottesville, VA

VNPS 2023 Annual Workshop

Register now for the 2023 Annual Workshop, “Recent Botanical Exploration and Discoveries in the Eastern US”. Held via zoom on Tuesday, March 7 (Part 1) and Tuesday March 14 (Part 2). Learn more and register at https://vnps.org/events/vnps-annual-workshop-2023/.
The Cumberland Marsh is a Nature Conservancy Preserve near New Kent and about one- and one-half hours from Charlottesville. It offers about three miles of walking trails that are well worth exploring for a naturalist, like me. I go there in all seasons for flora and fauna not found often, or at all, in Central Virginia. In particular, it is a great winter destination.

In 2010, the Nature Conservancy removed two earthen embankment dams within the preserve, creating new wetlands and restoring over 1,000 feet of stream channel, which allowed for the free movement of aquatic plants and animals, including the sensitive joint-vetch.

The vetch is a very rare and threatened plant. This plant is found in only four eastern coastal states. It requires the very upper end of freshwater tidal mud flats with tidal flooding twice a day for habitat.

Last Summer along with Doug Rogers, the Conservancy Trail Steward for the Preserve, and a fellow Virginia Master Naturalist, we attempted to find and photograph the plant.

Since going on foot would be very difficult and destructive to the sensitive habitats, we decided to take canoes. Going by canoe was a good option at high tide, but still a challenge. There was no easy put in on Holts Creek, and the nearest boat launch was three miles away on the Pamunkey river. After navigating the winds, tides and planning for the round trip, we were ready to start our search!

We carefully explored by canoe for three hours, but never found the vetch! However, we were consoled by the variety of flora and the abundance of pollinators along the banks. With so much to see and explore, we’ll be back to try again.
Those February Feelings
By: Nicola McGoff, Chapter Member

The December holidays have passed, and the long quiet January days are fading. It is February. A short month in days but long in passing. Waiting for the smell of spring with its abundance of levity and fresh flowers. Waiting for warm soils to nurture new seeds. Waiting for the forward momentum that comes from all that daylight driving photosynthetic energy cycles into a whirl. The dark days of winter are lifting as the sunrise, pale orange and pink, reflects off the southern red oak at the back of my yard. The evening light from the west stretches onwards towards six pm, allowing some outside play time after the paid workday is done.

Two celebrations punctuate the month to distract from its lentic nature. Valentines, for the patron saint of beekeepers, celebrated while the honeybees still sleep in their winter bundles. And Carnival, for the god of agriculture, concluding before the fields are even prepped and plowed. Ironic timing maybe, but well placed to remind us, stewards of the land, that the bees will awaken, and the soils will warm, and busy days lie ahead.

Take this time to reflect and rest. I sit at home as if in suspended animation. Seeds for my garden arriving in little paper envelopes. Overwintered stored potatoes sprouting in their tray on the kitchen floor. Future dreams of a new perfect garden layout and how the weeding won’t get out of hand like last year. An extra warm day and the honeybees burst from their hive in search of freedom and nectar. This exuberance is followed by a week of cold rain. Chilled, soggy ground, with scattered remains of acorns from last fall’s mast. The warm days lull you into believing spring is almost here, while the cold wind whispers, “not yet”.

The meadow stands tall and brown, untrodden this year by any snowfall. The seed heads of Indian grass bend gracefully over the feathered upright tops of split-beard bluestem and the cobwebby mess of purple lovegrass below.

Pycnanthemum, Echinacea, and Verbena’s old flower heads strike odd silhouettes, in dusty-grey, intermingled with the grasses. Through this sepia toned image, I squint and see a warm summer’s breeze full of dust particles and buzzing insects. A parade of colors. A space so full of life that for now still slumbers.

One evening out of the blue, I hear a “peep”, and then another and another. Until the sound surrounds my entire being and overflows from my ears. It overwhelms my senses, and my ears buffer the riotous sounds. I try to embrace all the patterned calls. All the varied notes, as they rise and fall and repeat. Spring peepers, oh joy! I mark this day on my calendar annually.

This is the start of my heart’s spring. I play with them, walking towards their call and they fall silent with my approach. Shushing each other like bold school children, caught. If I stay very still, they forget I am there and begin to chatter once again. The resuming chorus astounds me every time. This year they sing a week earlier than expected. I hope this change is not so early as to disrupt the delicate balance of this pond’s life. How many small changes are acceptable?

Once the peepers are calling, I know next up is the arrival of the wood ducks. For a week each spring, they sneak onto the pond to overnight. They have yet to stay in the nest box provided for them. I wonder if the arriving birds are not yet paired with mates. A squadron of bachelors. Flying in from the southwest at dusk with rapid wing beats in close formation. The wood duck’s call is unmistakable above the evening song of the other birds. An upturned cry. A lilting announcement of their arrival. If I manage to get to the pond ahead of them and sit in complete stillness, they throw themselves belly first onto the water surface and noisily skid to a halt unaware of my watchful eyes. They promptly glide into the Juncus and willow fringe and bed down for the night. Their morning departure is, as of yet, unwitnessed from the pond.

While watching the wood ducks each evening surrounded by a frog chorus, I see the bright flash of willow’s new growth. The daffodils slowly open, day by day. The red hue of maple crowns becomes unmistakable. Time creeps slowly onwards. A week or so after the wood ducks depart, I say goodbye to another February. I welcome in March, a lion or a lamb and sometimes both, tumbling me forward into another new spring.
Dark Skies
By: Emily Byerly, Publicity Chair

The little things that we do every day have a huge impact on our natural world. It makes sense that native plant enthusiasts would care about invasives, clean waterways, soil health, the warming climate, more intense weather patterns, even clean air… but what about dark skies? We can make an impact on this serious problem.

Charlottesville residents have the opportunity to have their voice heard by completing the Comprehensive Plan survey. There is a need for stronger light ordinance. The survey asks residents to weigh in on “the desire to mitigate the impacts of light and noise pollution”. You can access the questionnaire at albemarle.org.

Why are we asking you to speak up about this? “Around 80 percent of all humans—and more than 99 percent of people in the US and Europe—now live under light-polluted skies. In addition to direct lighting from urban infrastructure, light reflected from clouds and aerosols, known as skyglow, is brightening nights even in unlit habitats.” (Kwon, 2018) Many, truly do not know what unlit skies look like.

Another reason is that native plants are indirectly impacted by light pollution. Mitigating the impacts of lights by using methods such as light shielding or restricting light intensity help nighttime pollinators and insects. The article “Light pollution is a driver of insect declines” discusses how artificial light serves as an evolutionary trap. Artificial light is a human induced problem. Throughout ecological history, “most anthropogenic disturbances have natural analogs: the climate has warmed before, habitats have fragmented, species have invaded new ranges, and new pesticides (also known as plant defenses) have been developed. Yet for all of evolutionary time, the daily cycle of light and dark, the lunar cycle, and the annual cycle of the seasons have all remained constant. insects have had no cause to evolve any relevant adaptations to artificial light at night” (Avalon et al, 2020).

The good news is that humans can put practices in place to mitigate the impacts of light pollution, especially in the planning processes of county and city planning.

Artificial light has direct effects on plant development. “Trees are dependent for normal growth and development on three aspects of electromagnetic radiation: quality (wavelength or color), intensity (brightness), and duration during a 24-hour period (photoperiod)” (Chaney, n.d.). There is a direct correlation between artificial light and leaf shape, pigment formation, root development, Spring bud formation and autumn leaf drop time (Chaney, n.d.).

The United States has around 160 million public and commercial outdoor lighting fixtures. Thirty percent of all outdoor lighting is wasted in the US. The lights are unshielded and are poorly aimed. This results in three billion dollars a year in wasted energy and fifteen million tons of carbon dioxide per year into the atmosphere. To offset this waste, 875 million trees would need to be planted annually to offset the amount of carbon wasted (Volt, 2022).

In addition to ecological harm, human health can be affected by irregular cycles of light. Problems include obesity, depression, sleep disorders, diabetes, breast cancer and more.

We can all play a part in protecting dark spaces and reducing waste. For Charlottesville residents, don’t miss the opportunity to have your voice heard by completing the Comprehensive Plan survey.
Upcoming Field Trip to the Heights at VMI in Lexington
By: Mary Lee Epps, Chapter President, Continued from Page 1

Heading down toward the floodplain, we will encounter some of the more usual spring wildflowers such as wild blue phlox and downy yellow violet, but there are also special finds here including the broader-leafed Carolina spring beauty (Claytonia caroliniana) and Dwarf larkspur (Delphinium tricorne). When we reach the floodplain we will find a new range of blooms including Blue cohosh (Caulophyllum thalictroides), Toad trillium (Trillium sessile), Jacob’s ladder (Polemonium reptans), and Virginia Bluebells (Mertensia virginica).

A flight of steps eases our return and here, there are some of our more familiar wildflowers such as Dutchman’s breeces (Dicentra cucullaria) and trout lily (Erythronium americanum).

The plants I have mentioned are only a small sample of the many wildflowers growing in this special place. This is truly a botanical hotspot and well-worth the drive to Lexington. I hope many of you will join us as we explore this special place.

Local Support for Homegrown National Park
By: Michael Johnson, Chapter Member

Homegrown National Park is a grassroots call-to-action to regenerate biodiversity and ecosystem function by planting native plants and creating new ecological networks (https://homegrownnationalpark.org/about).

I recently transformed my yard in downtown Charlottesville by replacing turf grasses and invasive species with native plants to become apart of this movement. I create a few signs and a box with free resources to spread the word and help educate. I plan to add another sign welcoming people into the yard/garden once spring and the perennials arrive.

If you're interested in learning more about the effort, or would like to display a sign, please contact me (cvillemjj@gmail.com)
My Discovery of the Eastern Prickly Pear (Opuntia humifusa)

By: Emily Byers, Publicity Chair

I enjoy the surprise of blooms in my garden each year and always add new native species. Last Fall, I received two eastern prickly pears, Opuntia humifusa, from a fellow gardener. I planted both cacti in a “problem” area of my garden. The area is shaded, gritty stays dry, and reminds me of a mini “Sahara.” In the past, anything planted there had shriveled and died. The addition of the spiny plant led to many other discoveries.

While taking a walk in July, I noticed a greenish-yellow round bud on the top of my eastern prickly pear. I watched in anticipation, waiting for that ultimate burst of color.

I had seen patches of eastern prickly pears at Blandy State Arboretum but had never seen one in bloom. I was not disappointed when the bud burst open to display a bright yellow flower with seven sepals, one pistil, seven or more petals, and many stamens. The center was an orange hue and the petals were heart-shaped with a single point on each end. I had no idea that the cactus bloom would be so radiant and beautiful. I was interested in learning more about the plant and began to research.

For months there was no growth. I can only guess that it was establishing its root system.

Winter came and my cacti retreated, turning wrinkly and slightly yellowed. I continued to worry that it would not survive the harsh winter temperatures and the snow. But in Spring, it came back to life and was once again bluish green with a matted waxy sheen. It grew taller and added new sessile pads.

The pads have air pores called areoles that are arranged in a diagonal row pattern. Each areole has a small tuft of sharp bristles called glochids that develops a sharp spine. The thorns are deciduous, help to shade the cactus’s flesh, and help the cactus retain water.

In discovering more about the plant, I found that the eastern prickly pear is in the Cactaceae family. The name is pronounced o-pun’shi-a. The origin of the term Opuntia was coined by Pliny (AD 23-79) and it is thought that the name refers to the Greek town of “Opus where a cactus-like plant grew. Humifusa is derived from a fusion of the Greek words “humus” meaning soil or earth and the word “fusus” meaning to spread. To remember the Latin name Opuntia, I visualize the pad of the cactus rounded like the ‘O’ with spines.

The cactus can grow up to two feet tall. The flowers can grow to be 2 to 3 inches wide and bloom from May to July.

The flower is a golden yellow with a bright orange center. After the bloom is spent, it is replaced by an edible fruit full of seeds. The fruits are called cactus figs or tunas.

The prickly pear genus originated in South America. The fruit is often eaten by small mammals that help to disperse the seed. The seeds were carried in the gut of small and large animals when the land was bridged between the two continents around three million years ago. The animals that spread the seed in their dung include deer, squirrel, rabbit, skunk, coyote, fox, turkey, and turtle.

Pollinators are attracted to the plant, particularly, native bees. Both long-tongued and short-tongued bees visit the flowers, including bumblebees, the large carpenter bee (Xylocopa virginica), digger bees (Melissodes spp.), leaf-cutting bees (Megachile spp.), halictid bees (including green metallic bees), and plasterer bees (Colletes spp.). Long-tongued bees suck nectar or collect pollen, while short-tongued bees collect pollen only; the larger bees are more likely to cause cross-pollination.

An amazing adaptation of the eastern prickly pear was noted by Charles Darwin. He recognized that the cacti have thigmotactic anthers that curl over and deposit their pollen when touched. This movement can be seen by gently poking the anthers of an open Opuntia flower.

Historical literature shows that the plant was used in many ways. There are recipes for jellies, pickled cacti, candies, drinks, and more. The fruit’s taste is reminiscent of watermelon and the plant is rich in vitamin c and antioxidants that are an excellent source of energy for humans and wildlife.

A practical use for the plant includes the use of the spines as needles for sewing.

The prickly pear has proven to be a favorite in my native garden as it is a treasure of ever-unfolding uses and beauty.
Partner Events

Volunteering in the Ivy Creek Pollinator Garden
Do you enjoy gardening with native plants or wish to learn about native plant gardening? The Ivy Creek Pollinator Garden could use your help! This native plant garden is maintained by volunteers who participate in group workdays and/or weekly monitoring where they set their own schedule during their chosen week(s).

Skilled gardeners and gardening novices are welcome. If you might be interested in volunteering in the garden this year, please contact Tana Herndon (tbherndon@gmail.com) to get on the email list for garden announcements.

Historic Garden Week Tours
Celebrating 90 years of Historic Garden Week, April 15-22, 2023, throughout Virginia where visitors will tour inspired private landscapes, public gardens, and historic sites, enjoying our beautiful state at the peak of Spring.

The Albemarle-Charlottesville tour takes place in the North Garden area of Albemarle County and includes two private properties in the preservation neighborhood of Bundoran Farm and one nearby residence, all open for the first time for Historic Garden Week.

Historic Garden Week Albemarle-Charlottesville Tour Dates:
- **Saturday, April 15, 2023** - University of Virginia’s Morven Gardens - $20, day of ticket sales, cash or check
- **Sunday, April 16, 2023** - Bundoran/North Garden Tour - $50, advance ticket sales, online only. https://www.vagardenweek.org/tours/albemarle-charlottesville/

UVA Ground Tour
- **Monday, April 17, 2023** - UVa Grounds tour - FREE and open to the public
  Tour of Carr’s Hill, home of UVa President James E. Ryan, and gardens. Guided tour of Memorial to Enslaved Laborers, and Pavilions tour.

Botanical Garden of the Piedmont
Progress continues! Kudzu mitigation has progressed all winter along the railroad corridor thanks to a team of “kudzu warriors”. Fall of 2022 saw invasive removal and trail work start on the south side of the stream. It is exciting to see this activation begin. In January for the 5th consecutive year Bartlett Tree Experts came out with their tools, equipment, and volunteer labor to support the Garden. They were joined by JW Townsend Landscapes, Public Lands, Great Harvest Bread Company and 50+ other volunteers to remove invasive vines from trees and start creating trails. These efforts will continue when the BGP Garden Guardian Volunteers meet regularly in the Garden on the first and third Wednesday mornings. Garden Guardians accomplish regular and important tasks like weeding existing beds, identifying and managing invasive plants, and maintaining paths. If you are interested in helping, please sign up on the volunteer page of our website. Once the permitting process is complete, the stream restoration should start very soon.

Fifteen architecture firms visited the site in January in anticipation of submitting proposals for the first of the Garden’s buildings. Once the permitting process is complete, the stream restoration will start very soon. To view full schedule of spring events and sign up for the newsletter, visit the website at https://piedmontgarden.org
The Virginia Native Plant Society is dedicated to the protection and preservation of the native plants of Virginia and their habitats, in order to sustain for generations to come the integrity of the Commonwealth’s rich natural heritage of ecosystems and biodiversity for purposes of enjoyment, enlightenment, sustainable use, and our own very survival.

The Jefferson Chapter serves the counties of Albemarle, Fluvanna, Greene, Louisa, Madison, Nelson, Orange, as well as the City of Charlottesville.

Submissions of articles, events, photographs, and other information of interest to the chapter are welcome. Please submit them by email to Annemarie Abbondanzo at: annemarie@ecosystemservices.us with the subject line “Newsletter Submission”.

Photo submission by Rae Kasdan, Chapter Member