## **NATIVE NOTES**

The Newsletter of the West Virginia Native Plant Society

### New members in 2023

We'd like to extend a huge welcome to the newest members of the West Virginia Native Plant Society!

The interest in native plants keeps growing and growing! And of course, thank you to all our other dedicated members that continue to support the WVNPS.

- Eliza Siefert
- Christine Campe-Price
- Philip Crim
- Pamela Cubberly
- Kathleen Curry
- · Lisa deGruyter
- Kate Didden
- Ruth Eisenhour
- Robert Helfer
- Randy Kesling
- Michelle LaFrance
- Mary and Peter Palmer
- Cynthia Lions
- Pamela Puppo
- Jani Niner

# Connect With Us



Our Facebook page continues to grow and grow! We now have over 27,000 followers. It's a great place to learn about native plants and see what is blooming in your region. Many thanks to our dedicated Admins for keeping things under control.

#### facebook.com/groups/wvnps

Be sure to visit our webpage for much more information, photos and links to native plant resources. www.wvnps.org



### Native Roots, Inc. — A New West Virginia Plant Nursery

Story and photos by Emily Grafton

As of May 2022, Native Roots West Virginia Native Plant Nursery Inc. and Native Roots Lawn Services opened for business in Mineral Wells. Jen Johnson, coowner of the nursery, came to the establishment and operation of this Mineral Wells nursery by a circuitous route.

Jen hails from Ohio and came to West Virginia to work as an engineer in the chemical industry in 2011. However, before leaving Ohio, Jen and her sister Sonia established the first Native Roots Inc. Nursery in Richfield, Ohio, in early 2011.

The primary mission of the business, both here in West Virginia and Ohio, is to propagate

native plants from wild seeds collected locally for ecosystem restoration projects. They saw a growing interest of homeowners, schools, and businesses to establish native plants beneficial to wildlife and ecosystem diversity.

Although Jen got her first college degree in chemical engineering, she has always loved nature and growing plants. After several years working as a chemical engineer, Jen realized that her greatest passion was ecological restoration and left her job to pursue science teaching and growing Native Roots, Inc. in Mineral Wells. She and her sister are co-owners of the business, each managing their respective nurseries.

# Native Roots, Inc. — A New West Virginia Plant Nursery continued from page 3

Story and photos by Emily Grafton

Jen is an active follower of entomology professor Doug Tallamay and his research team. Tallamay's years of observations of the relationships between native insects and native flora demonstrated the great need to introduce critical native plants into our human environments to enhance the biological diversity of plants and animals critical to the northeastern forest ecosystem. One of the primary results of his research was the identification of "keystone" plants which provide the greatest benefit to pollinators and other wildlife species in our northeastern ecosystems.

Native plants restored to our urban and suburban landscapes can reduce or eliminate the need for fertilizers, pesticides, and watering.

Establishing native plants in our local landscapes will provide

corridors through which our native wildlife will find access to their essential native food and cover during migrations and breeding seasons.

The following quote from the Native Roots website summarizes the mission of Native Roots, Inc. "We strive to build a community as a native plant supplier and service provider and as educators and collaborators working with our customers, nonprofits, park systems, government entities and even our competitors to improve biodiversity.

Most of the 100 plus species of perennials, shrubs and trees which are available at either nursery include plants which bloom from early spring and well into fall. The plant selections include those that grow in full shade to full sun. Jen has a wonderful program on the



importance of native plants, which she uses to fulfill her service mission of educating the public about the value of native plants.

I invited her to speak at the Ohio River Islands National Wildlife Refuge Visitors Center. In just over an hour, Jen covered most of the concepts we covered in the three-hour Master Naturalist Improving Habitat for Wildlife workshop. If you wish to visit the nursery, contact Jen at 304-210-3966. Jen is very much looking forward to meeting the wonderful botanists in the West Virginia Native Plant Society, as I am sure you will enjoy meeting her.

# SAVE THE DATES: WVNPS 2024 Field Trips

Three dates and locations have been selected for field trips in 2024. Details will be finalized, and a complete itinerary will be sent several weeks prior to each event.

**April 27, 2024:** Hawks Nest and Cotton Hill. We will meet in the morning at a shelter at Hawks Nest State Park, followed by field trip.

June 28-30, 2024: Field trips will be in the Brush Creek Falls/Pipestem area. Travel to the site may require arriving on June 27.

**August 24-25:** Nicholas County, the annual meeting will be held in the morning of August 24 at Nicholas County Park followed by a field trip. This trip will probably require travel to or near the site on August 23.

### WVNPS Board Meeting Sept. 2023

The meeting began at 10:02 am and the following members attended in person: President - Luanne McGovern, Kathleen Curry, Board of Trustee - Kevin Campbell, Rome Hughart, Judy Dumke, Steve Mace, Jerry Westfall, and Recording Secretary - Chris Gatens. The following members participated virtually by Zoom: Corresponding Secretary - Sarah Friend, Elaine Matheny, Rodney Dever, Mark Bowers, Philip Crim, Emily Grafton, Board of Trustee - Kathy Gregg, and board of Trustee - Donna rord-wertz

The minutes from the April 29, 2023 meeting were reviewed and approved by the Board.

The Treasurer's Report was shared by Luanne McGovern and had been prepared by Bill Carlon. The thorough report was reviewed by the attendees and the WVNPS is thankful for the efforts of Mr. Carlon.

Sarah Friend reported 40 lifetime WVNPS members and a total of 89 members. Twelve new members were reported for the society this year.

#### **Old Business**

Good comments were received by attendees on the most recent version of Native Notes and the effort was deemed as a huge success.

#### **New Business**

A second Native Notes submittal for 2023 was approved by the Board and discussion began concerning how the newsletter should be received by WVNPS members. Luanne agreed to poll all members and ask it they wanted to receive a paper version or an electronic version. This was approved by the Board.

Several topics were discussed during the meeting for consideration by the WVNPS. These included The Wild and Wonderful Award, Giving Tuesday Day (11/28/2023), and speakers for future meetings.

The updated WVNPS membership brochure was reviewed and received very favorable comments by the members. Luanne agreed to set up a WVNPS display at the West Virginia Highlands Conservancy Fall Review on October 14, 2023 at Canaan Valley State Park.

Facebook discussion and comments from meeting attendees were made and any changes to the existing format was agreed to be held in the committee (Steve, Kathy, Elaine, Sarah, Mark, and Kathleen).

The following herbarium donation amounts were approved by the board: WVU at \$250, Marshall University \$100, and WV Wesleyan at \$100.

#### **ROSTER OF OFFICERS**

President **Luanne McGovern** Lmmcg32@yahoo.com

Vice President

Vacant

Past President

Steve Mace
sdmace@frontiernet.net

Corresponding Secretary
Sarah Friend
friend.sarah.a@gmail.com

Treasurer
Elaine Matheny
ecmatheny@gmail.com

**WVNPS Trustees at Large** 

Kathy Gregg gregg@wvwc.edu

Donna Ford-Werntz dford2@wvu.edu

Kevin Campbell hazwaste99@hotmail.com

Other Key Contributors

Eastern Panhandle Representative **Rodney Dever** rodneydever@comcast.net

Kanawha Valley Representative

Steve Mace

sdmace@frontiernet.net

Tri-State Representative **Romie Hughart** romie5006@yahoo.com

Web Editor Luanne McGovern Lmmcg32@yahoo.com

Newsletter Editor
Emily Grafton
emily.grafton@gmail.com

Managing Editor

Olivia Miller

oliviahmiller@gmail.com



List submitted by Judy White and Kevin Campbell Photos by Kevin Campbell

### Cheat Bridge on Shavers Fork River June 24, 2023

Botanist Asa Grey first explored this area along the Staunton/Parkersburg Turnpike in 1843. The globally rare ice river scour habitat is loaded with rare plants. We only scratched the surface.

- Ward's Willow (Salix caroliniana)
- Northern Evening Primrose (Oenothera parviflora)
- Black Elderberry (Sambucus canadensis)
- Cow Parsnip (Heracleum maximum)
- Ninebark (Physocarpus opulifolius)
- Shrubby St. John's-Wort (Hypericum prolificum)
- Tasselrue (Trautvetteria caroliniensis)
- Water Sedge (Carex aquatilis)
- Northwest Territory Sedge (Carex utriculate)
- Pipestem (Spiraea alba)
- Canadian Burnet (Sanguisorba canadensis)
- Star-Flowered False Solomon's Seal (Smilacina stellata)
- Smooth azalea (Rhododendron arborescens)
- False Hellebore (Veratrim viride)
- Blue-Eyed Grass (Sisyrinchium mucrinatum)
- Wild Sweet William (Phlox maculatum)
- Mountain Holly (Ilex montana)
- Elliptic-Leaf St. Johns-Wort (Hypericum ellipticum)
- Blue Monkshood (Aconitum uncinatum)
- Barbara's buttons (Marshallia grandifolia)
- Yellow Stargrass (Hypoxis hirsute)
- Cynthia (Krigia biflora)
- False Asphodel (Tofieldia glutinosa)
- Cat's Ear (Hypochaeris radicata)
- Indian Hemp (Apocynum cannabinum)
   Fringed Loosestrife (Lysimachia ciliate)
- Water Hemlock (Cicuta maculata)
- Skunk Cabbage (Symphlocarpus foetidus)
- Thyme-Leaved Bluets (Houstonia serpyllifolia)

#### Gaudineer Knob Scenic Area

Named in memory of Donald Gaudineer an early Forest Ranger for the Monongahela National Forest. He perished trying to save his children from a house fire in the 1930s. A thick second growth Red Spruce habitat now covers the mountain top.

- Mountain Ash (Pyrus americana)
- Red Elderberry (Sambucus racemose)

- Long-Stalked Holly (Ilex collina)
- Southern Mountain Cranberry (Vaccineum erythrocarpum)
- Wrinkle Leaf Goldenrod (Solidago rugosa)
- Striped Maple (Acer pensylvanicum)
- Intermediate Shield Fern (Dryopteris intermedia)
- Mountain Holly (Ilex montana)
- Southern Jack-in-the-Pulpit (Arisaema triphyllum var. quinetum)
- Red Spruce (Picea rubens)

#### Gaudineer Knob

This is a rare virgin spruce habitat, which provided the seed source for the Gaudineer Knob forest

- Nodding Sedge (Carex gynandra)
- Fringed Sedge (Carex crinata)
- $\bullet \quad \textbf{Hobblebush} \; (\textit{Viburnum lantanoides})$
- Common Bedstraw (Galium aparine)
- Indian Cucumber Root (Medeola virginiana)
- Alpine Enchanter's-Nightshade (Circaea alpina)
   Painted Trillium (Trillium undulatum)
- Partridge Berry (Mitchella repens)
- Wood Nettle (Laportea canadensis)
- Yellow Clintonia (Clintonia borealis)
- New York Fern (Thylepteris novaborarensis)
- Nodding Fescue (Festuca subverticillata)
- **Honewort** (Cryptotaenia canadensis)
- Rattlesnake Fern (Botrychium virginianum)
- Mountain Magnolia (Magnolia fraseri)
- Roundleaf Violet (Viola rotundifolia)
- Shining Club Moss (Lycopodium lucidulum)
- Wake Robin (Trillium erectum)
- Wide-Leaved Joe-Pye Weed (Eupatorium purpureum)
- Curtis' Goldenrod (Solidago curtisii)
- Great Solomon's Seal (Polygonatum biflorum)
- Carrion Flower (Smilax herbacea)
- Wild Ginger (Asarum canadense)
- Lettuce Saxifrage (Saxifraga micranthidifolia)
- Foamflower (Tiarella canadensis)
- Mountain Maple (Acer spicatum)
- Common Polypody Fern (Polypodium virginianum)
- Yellow Birch (Betula alleghaniensis)



#### **Blister Swamp in Pocahontas County**

Situated in a bowl-shaped valley at 4,000 feet in elevation at the headwaters of the East Fork of the Greenbrier River is one of the few circumneutral bogs in West Virginia. This wetland has both acidic and pH neutral zones making for a rich assemblage of flora. At the time of our visit, there were thousands of Jacob's ladder (*Polemonium vanbruntiae*) in bloom. I have never seen more than three flowering elsewhere before. The bog is being protected through an easement managed by The Nature Conservancy.

- Jacob's Ladder (Polemonium vanbruntiae)
- Marsh Marigold (Caltha palustris)
- Pointed Broom Sedge (Carex scoparia)
- Silky Cornel (Cornus amomum)
- Purple-Stem Aster (Symphyotrichum puniceum)
- Sensitive Fern (Onoclea sensibilis)
- · Bog Goldenrod (Solidago uliginosa)
- Steeplebush (Spiraea tomentosa)
- Silky Willow (Salix sericea)
- Glade St. John's-Wort (Hypericum densiflorum)
- Smooth Serviceberry (Amelanchier laevis)
- Purple Avens (Geum rivale)
- · Lowbush Blueberry (Vaccineum angustifolium)
- Wild Holly (Nemopanthus mucronatus)
- Dotted Thorn (Crataegus punctata)
- Bunchberry (Cornus canadensis)
- Large Cranberry (Vaccinium macrocarpon)
- Small Cranberry (Vaccimium oxycoccos)
- Wild Raisin (Viburnum nudum var. cassinoides)
- Goldthread (Coptis trifolia)
- Quaking Aspen (Populus tremuloides)
- Alder-Leaved Buckthorn (Rhamnus alnifolia)
- Swamp Saxifrage (Saxifraga pensylvanica)





### **Cleistogamous Flowers**

#### Story by Romie Hughart

We are all familiar with the diversity and beauty of flowering plants, especially those that open their floral parts to facilitate crosspollination. This means of fertilization of the ovule is called chasmogamy. At a certain time during the growing season, the corolla opens, exposing nectar and floral colors to attract specific pollinators, which inadvertently carry pollen from one flower to another. Also, several genera bearing chasmogamous flowers depend on the wind to move pollen from one flower to another. Overall, most flowering plants bear chasmogamous flowers.

However, along their evolutionary journey, flowering plants developed an alternate route for ovule

fertilization. This alternative is the evolution of cleistogamous flowers. Cleistogamous flowers never open and are produced at the base of the plant or just beneath the soil in summer and early fall. They contain both male and female structures and can self-fertilize, producing numerous viable seeds. These flowers may serve as a backup plan when environmental conditions interfere with pollinator fertilization.

Cleistogamy means "closed marriage" and comes from the Greek language. There are four types of cleistogamy.

Parenthesis Cleistogamy:
 Pollination occurs when the flower is in its bud stage

- and opens during the later stage of life. The genus Cuscuta is an example of this form of cleistogamy.
- Pseudo Cleistogamy: Both kinds of flowers are present, open, and closed flowers, but only the closed flowers exhibit cleistogamy. Ruellia strepens will have chasmogamous flowers one season but may have cleistogamous flowers the following season.
- Complete Cleistogamy: Only closed flowers are present that perform self-pollination.
   Gentiana clausa is a flower species which exhibits complete cleistogamy.
- True Cleistogamy: The open flowers and closed flowers are

### Cleistogamous Flowers continued from page 5

Story by Romie Hughart

morphologically different. The open flowers are large compared to the closed flowers. The genus Viola provides two dissimilar flowers

Some of the advantages of cleistogamous flowers include the following:

- Flowers do not depend on any external factor for fertilization.
- Helps plants produce a specified number of seeds, especially when environmental conditions are adverse.
- The population of plants is maintained even in adverse environmental conditions.

On the downside, a plant that depended entirely on cleistogamy fertilization may not thrive over time. The lack of cross-pollination would lead to a loss of genetic variation that causes inbreeding depression and reduced survival and fertility of offspring-related individuals.

However, flowering plants will continue to evolve and thrive if their relationships with cohort pollinators continue.

# Neighboring States Native Plant Societies

Our neighboring states have robust Native Plant Societies that can provide a lot of information to interested West Virginians. There are reference materials, links to online educational programs, locations for native nurseries, and so much more! So, check them out!

- Virginia www.vnps.org
- Maryland <u>www.mdflora.org</u>
- Pennsylvania <u>www.panativeplantsociety.org</u>
- Kentucky <u>www.knps.org</u>



## WEST VIRGINIA NATIVE PLANT SOCIETY MEMBERSHIP REGISTRATION

Name			
Address  City, State, Zip  Phone Number			Unless you indicate otherwise, all communications from the
			WVNPS will be via Email, Facebook or through our
			webpage, www.wvnps.org - This saves us money!
Email			
Membership Du	es (for calendar y	year J	lanuary 1 to December 31)
Regular Membership: \$12 Student Membership: \$8 Lifetime Membership: \$200			
I would like to make a donation to the	e WVNPS in the a	mount	: of:
Please make your check payable to the Elaine Matheny, Treasurer 11948 Longdale Road, Letart, WV 25	-	lative	Plant Society
Signature:		Date:	
	Regional I	ntere	ests:
Kanawha Valley/Charleston Area Tri-State/Hun		itington Area Eastern Panhandle Area	
	Other Inter	rest A	reas:
Field Botany			Serving in a leadership capacity
Botanical Art			Public speaking/presentations
Photography			Leading field trips
Propagation			Display development
Stewardship or plantings or preserves			Publications

By my signature above, I assume all risk of injury to myself and all risk of damage to and loss of my property arising out of my participation in activities of the West Virginia Native Plant Society (WVNPS). I am in proper physical health and conditioning for activities that I participate in, and release and forever discharge the WVNPS and any private property owners who provide space for activities from any and all liability for any injury, including death, and for property damage or loss which may be suffered by me, arising out of or in any way connected with my participation in WVNPS activities.