

notes VOLUME 22 NO.1 2020

FEATURED PLANT

Dwarf-crested iris

2020 Featured Plant at the Central PA Native Plant Festival: Iris crestata. Complete event details on page 11. We want to thank Mt. Cuba Center in Delaware for the poetic description below and North Creek Nursery in Landenburg, PA for the care instructions.

The colorful blooms and easy culture of dwarf-crested iris make it a valuable addition to the shady native woodland garden. In midspring, this attractive perennial groundcover is a mass of pale to deep violet blooms that reach 4-6" in height. Its 5-6" sword-like leaves arise from small rhizomes that quickly spread, to form impressive colonies with a unique textural quality. *Iris cristata* does well in average; well-drained woodland soils in shade to partial shade and, once established, is dependably drought-tolerant. It complements other woodland plants such as *Phlox divaricata*, *Uvularia sessilifolia*, *Geranium maculatum*, *Hydrastis canadensis*, and *Trillium luteum*. – *Mt*. *Cuba Center*



GROWING & MAINTENANCE TIPS

Prefers rich, well-drained soils in full to partial shade. If grown in full sun, the soil must remain consistently moist. Benefits from the addition of lime and rich, organic materials. Is rhizomatous and can be propagated by division after flowering is done with a sharp spade or pulling apart entangled rhizomes (which actually give rise to healthier plants). Best used as a seasonal groundcover, in rock gardens, or added for woodland color. – North Creek Nursery

PRESIDENT'S NOTE



Hello!

I'm thrilled to be gearing up for my second year as president! The more we travel throughout the state and talk to people, the more great events we learn about.

Calendar

There is so much momentum for the use of

native plants — both within PNPS and in

other organizations. With the common goal of educating the public about the benefits of native plants, I would like to encourage any organization that is sponsoring a native plant event to send us their information. We can add it to our calendar which will also be published in our newsletters and e-newsletters. Also, you can post it on our Facebook page.

Chapters/Local Events

The good news is that many people are interested in having more local events. The not-so-good news is people are also very busy with other commitments making it difficult to take on leading a chapter. We will continue to support groups wanting to start chapters but will also support members who would like to plan a PNPS event in your area. Ideas for hosting a local event:

- Invite a speaker and/or plan a workshop
- Host a native plant info table at a local event
- Organize a garden tour
- Check your local library to get involved with their speaker series

Grants

We're excited to be able to offer grants this year to groups or organizations installing educational native plant gardens! Our new Board member Prabhani Kuruppumullage Don set up an online application form this winter that was circulated through our e-Newsletter. The application deadline this year was Mar 1st and we have received 8 applications. The Executive committee of the board is reviewing the application and will be notifying recipients by March 25, 2020. We will share a summary of the supported projects in the fall newsletter.

If you missed it, look for the announcement next winter. The amount of the grant and number of recipients will vary each year, depending on the budget (your annual membership dues at work!)

Danielle Lanagan President

WHAT DOES YOUR MEMBERSHIP MONEY DO?

A huge thank you, to all our members! This is not an organization that gives many material benefits to our members. We are an organization that focuses on educating the public about the benefits of using native plants in the landscape. Your membership dues allow us to:

- Host information tables at various events throughout the state, giving handouts and free seeds to interested people.
- Offer grants to groups/organizations to buy plants for use in educational native plant gardens.
- Sponsor conferences and talks, that promote the use of native plants.
- Send information to our members through newsletters, a website and annual meeting.

Please remember to renew your membership, or join as a new member to keep the work going!

SEEKING VOLUNTEERS

Be a PNPS Ambassador!

We are seeking volunteers to help represent PNPS at two outreach events this spring. We would like to have a table at these native plant sales. As an ambassador for PNPS, you will have an opportunity to share your enthusiasm for native plants, talk to attendees about our mission, give out native seeds, sell memberships and t-shirts. We will provide our outreach display and materials. To learn more, email with the subject line to PNPS Ambassador, info@panativeplantsociety.org.

- Saturday, April 25 Lancaster Native Plant and Wildlife Festival
- Saturday, May 9 York County Native Plant Sale

PNPS FACEBOOK GROUP — HOW TO JOIN

Our Facebook group has grown into an active community of over 9,300 members. We welcome anyone interested in sharing photos or activities related to native plants, or learning more about them. This is a closed group but you can join by submitting a request.

Here is the link: www.facebook.com/groups/panativeplantsociety

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ast November, Girl Scout leaders Tara Henry and Sharon Zelem lead Girl Scout Daisy Troop 46502 of Hollidaysburg, in a special activity to complete their Daisy flower garden journey. This activity was called *Welcome to a Daisy Flower Garden; It's your world, change it.* During this six week lesson the girls met flower friends that teach them the girl scout law, the learned about *helpers in gardens* such as worms and lady bugs, and we used the seed bombs to help teach others to "make the world a better place," so we taught them about pollinators and how native plants help the helpers they learned about help everything grow.

The Daisy troop, consisting of first graders and Kindergarteners dove into the project with gusto. They enjoyed learning about planting native plants and the important role they plan in nature. They loved that sneezeweed seeds were part of the Daisy family just like them. But mostly they loved getting their hands in the mud.



Above: The troop distributed the seed bombs to friends, family, and folks visiting the library where they hold their meetings. *Top:* The activity was making seed bombs, also known as seed balls. This gathering soil, water, and seeds

Seed Ball Recipe

INGREDIENTS:

- 2 parts potting soil
- 5 parts pottery clay mix from your local art store
- 1-2 parts water
- 1-2 parts seeds of your choice

Large tub to mix ingredients

DIRECTIONS:

- 1. Mix the soil, clay and 1 part water thoroughly. There should be no lumps. Slowly add more water until the mixture is the consistency of the toy store molding clay that comes in a can.
- 2. Add seeds. Keep kneading the dough until the seeds are well mixed in. Add more water if necessary.
- 3. Take small bits of the clay mixture and roll into ball about one inch in diameter. The balls should hold together easily. If they're crumbly, add more water.
- 4. Dry seed balls for 24-48 hours in a shady place before sowing or storing. They store best in a cardboard box. Do not use plastic bags.
- 5. The last step in how to make flower seed balls is sowing them. Yes, you can place them carefully over the area to be planted or you can gently toss them one at a time, which is a lot more fun.

energy and the second s

By Sarah Chamberlain, Associate Research Professor, Penn State University; curator of the Penn State (PAC) Herbarium

Take a walk during any season along the 4.4-mile trail winding its way along Spring Creek Canyon and you'll be rewarded with a dizzying array of plants. Known locally as a botanical "hot spot" by amateur and seasoned botanists alike, Spring Creek Canyon boasts a mixture of mature forests and successional communities, cultivated areas and unique ecological communities each contributing to the botanical richness of the area. Although proximity to developed areas has overwhelmingly shaped the flora of Spring Creek, primarily through the invasion and spread of non-native plant species, native plant communities remain intact in many areas of the canyon, giving the intrepid visitor an authentic experience of riparian habitats in Central Pennsylvania.

The Spring Creek Canyon trail is more aptly characterized as a broad gravel path that follows Spring Creek. At the Fisherman's Paradise trailhead, the path hews closely to the creek's edge, separated only by a steeply sloped swath of riparian habitat. In this section, the tree canopy is dense, providing abundant shade from a mixture of sycamore (*Platanus occidentalis*), tulip poplar (*Liriodendron tulipifera*), basswood (*Tilia americana*), black willow (*Salix nigra*), black cherry (*Prunus serotina*), red maple (*Acer rubrum*), box elder (*Acer negundo*), flowering dogwood (*Cornus florida*), white pine (*Pinus strobus*), and black walnut (*Juglans nigra*) — the fruits of which litter the path in late summer.

The understory is dominated by shade-loving plants common in Pennsylvania forests including rattlesnake root (*Prenanthes* *alba*), Christmas fern (Polystichum acrosticoides), and wild geranium (*Geranium maculatum*). Crowded stands of scouring rush (*Equisetum hyemale*), one of our oldest living plants, although much reduced in stature from its tree-sized ancestors, occur in spots along the trail's edge. The pencil-straight stems of this ancient plant, dark green and rough to the touch due to the presence of silica, were used in colonial times to scour pots and pans.

The upslope side of the trail in this area of the canyon presents perhaps the best example of mature forest within the riparian corridor of Spring Creek. Many of the same species that occur adjacent to the creek also are found in upland forests where they mix with plants indicative of high-quality habitat. Here the canopy also includes Eastern hemlock (*Tsuga canadensis*), a denizen of Penn's Woods and the state tree of Pennsylvania. Hemlock trees in central Pennsylvania have been hit hard by the woolly adelgid in recent years, a non-native insect pest introduced to the Commonwealth in the 1960s, and much effort has been expended to save remaining trees.

Hikers who explore this part of the trail in spring should look out for early-blooming "spring ephemerals" including toothwort (*Dentaria laciniata*), red trillium (*Trillium erectum*), rue anemone (*Thalictrum thalictroides*), early meadow rue (*Thalictrum dioicum*), Virginia saxifrage (*Micranthes virginiensis*), mayapple (*Podophyllum peltatum*), miterwort (*Mitella diphylla*), and bloodroot (*Sanguinaria canadensis*) — easily recognizable by its reddish stems and oddly-lobed leaves [see photo 2] — that emerge with the first suggestion of warm weather and will reward those who dare venture out in potentially frigid temperatures.



. Kattlesnake root (Prenanthes alba) Photo: S. Chamberlain

2. Bloodroot (Sanguinaria canadensis) <u>Photo: Wiki</u>media Commons

 Wild ginger (Asarum caudatum) <u>Photo: Wa</u>lter Siegmund

As spring fades into summer, these plants are soon eclipsed by a myriad of woodland wildflowers, ferns, and grasses such as Solomon's seal (*Polygonatum pubescens*), Jacob's ladder (*Polymonium reptans*), black cohosh (*Actaea racemosa*), horsebalm (*Collinsonia canadensis*), white wood aster (*Eurybia divaricata*), hayscented fern (*Dennstaedtia punctilobula*), white grass (*Leersia virginica*), mountain ricegrass (*Piptatherum racemosum*), false Solomon's seal (*Maianthemum racemosum*) and wild ginger (*Asarum caudatum*). Although tempting, passersby entertaining the idea to take wild ginger root home to spice up their next meal would do well to resist the urge. Though once used by Native Americans as a seasoning, our wild ginger [**see photo 3**] — fully unrelated to the culinary variety (*Zingiber officinale*) — has been shown to have carcinogenic properties.

Continuing down the path, steep cliffs arise along the left side of the trail. The rock faces of these towering megaliths support several plants that thrive in calcareous (limestone) soils. Common cliff-dwelling species observed include wild columbine (*Aquilegia canadensis*), early meadow rue (*Thalictrum dioicum*), and rock polypody (*Polypodium virginianum*).

Upstream of the cliffs, the floodplain broadens and the canopy opens giving way to an assortment of both sun and shade-loving plants. While the overstory trees are familiar - black walnut, basswood, black cherry, white pine, tulip poplar, and red maple - the understory offers up a new bouquet of plants to explore. To the left, dense stands of flowering raspberry (Rubus odoratus) are visible along with wood nettle (Laportea canadensis), bottlebrush grass (Elymus hystrix), wild ryet (Elymus canadensis), smooth brome† (Bromus inermis), orchard grass† (Dactylis glomerata), reed canary grass (Phalaris arundinacea), chicory† (Cichorium intybus), burdock† (Arctium minus), brown-eyed Susan (Rudbeckia triloba) [see photo 4], and dame's rocket† (Hesperis matronalis). († indicates non-native plant) Many of these plants owe their place in our flora to the colonists who brought them here as livestock forage (smooth brome, orchard grass), for culinary purposes (chicory, the dried roots used as a substitute for coffee), or as garden favorites (dame's rocket).

Further down the trail, carpenter's square (*Scrophularia marilandica*) is a treat for keen eyes as is American spikenard (*Aralia racemosa*), it's branches laden with reddish-purple berries in late summer. Other plants found along this section of the trail include alternate leaved dogwood (*Cornus alternifolia*), maidenhair fern (*Adiantum pedatum*) and two non-native invaders — Japanese

pulchella) Photo: S. Chamberlain

stiltgrass† (*Microstegium vimineum*) and Japanese knotweed† (*Fallopia sp.*) [see photo 5]. The former is the scourge of many Pennsylvania forests, spreading via copious seed along trails and other areas of disturbance. The latter can form dense stands along streams. Once established, both are tough to eliminate and readily outcompete our native flora

Continuing upstream, the trail winds past a modern shooting range to the left and the old axe grinding mill of Mann Axe Works to the right, providing a glimpse into the past when the area was used to produce axes. Another bend in the river reveals relic fish hatchery ponds on the right side of the trail. A few ponds still store enough moisture to provide refuge for a variety of wetland plants including slippery elm (*Ulmus rubra*), narrow-leaved cattail (*Typha angustifolia*), monkey flower (*Mimulus ringens*), soft-stemmed bulrush (*Schoenoplectus tabernaemontani*), green bulrush (*Scirpus atrovirens*), great willow herb (*Epilobium hirsutum*) and soft rush (*Juncus effusus*).

From the fish ponds to Benner Spring, the canopy is more open and includes non-native trees such as tree-of-heaven† (Ailanthus altissima) and European alder† (Alnus glutinosa). Understory shrubs also are largely non-native, invasive species common to riparian habitats including privet† (Ligustrum spp.), multiflora rose† (Rosa multiflora), amur honeysuckle† (Lonicera mackii), Morrow's honeysuckle† (Lonicera morrowii), burning bush† (Euonymus alatus) and autumn olive† (Elaeagnus umbellata). Vines clamoring among the vegetation include native liannas such as hog peanut (Amphicarpaea bracteata), poison ivy (Toxicodendron radicans) [see photo 6], and Virginia creeper (Parthenocissus quinquefolia), as well as the highly invasive oriental bittersweet† (Celastrus orbiculatus).

The herbaceous layer also comprises non-native plants such as garlic mustard[†] (*Alliaria petiolata*), lady's thumb[†] (*Persicaria maculosa*), and dame's rocket, which along with the shrub layer hide myriad botanical gems. One need only look closely to discover such treasures as wild geranium, nodding onion (*Allium cernuum*) and the more diminutive wild ginger whose crimson flowers peak out furtively beneath heart-shaped foliage.

Wetland plants also thrive in this area and are represented by the more common jewelweed (*Impatiens capensis*), its larger cousin pale jewelweed (*Impatiens pallida*), clearweed (*Pilea pumila*), white grass (*Leersia virginica*), and boneset (*Eupatorium perfoliatum*), as well as the somewhat elusive yet stunning blue continued on page 8



5. Japanese knotweed (Fallopia sp.) Photo: S. Chamberlain

6. Poison ivy (Toxicodendron radicans) Photo: Wikimedia Commons

Live Staking: A Trusty Technique for Planting Trees and Shrubs on the Cheap

Ryan Davis, Chesapeake Forests Program Manager, Pennsylvania Office

Ryan Davis is the Alliance's Program Manager for our Chesapeake Forests program. He focuses on forest conservation and restoration within the watershed in Pennsylvania, Maryland, and New York. Ryan, pictured above, poses with a gray dogwood shrub. *Photo by Marlin Graham*.

(Reprinted from the website of the Alliance for the Chesapeake Bay Staff Blog.)

L ive staking (or propagation by cutting) almost seems too good to be true. Cut a stem from certain species of trees and shrubs and drive it into the ground, and a new plant will grow there! This method, if executed correctly, has a high success rate, and can be a very affordable if not free way to plant native trees and shrubs.

How does this work?

To be a woody plant is to be hardy. They live for relatively long periods of time and cannot move (obviously), which means over their lifetimes they will face a barrage of abuse, from browsing herbivores to severe weather (drought, floods, windstorms, ice storms). They also engage in a constant battle for sunlight, and need to respond to space, shade, or the loss of a limb with new shoots and leaves to capture precious photosynthetic potential. As a result, most plants are well-adapted to experiencing frequent tissue damage.

The epicenter of plant growth is a localized group of undifferentiated cells (somewhat analogous to animal stem cells), called meristematic tissue. Meristematic tissue is concentrated in *Left:* This gray dogwood (*Cornus racemosa*) was staked in March, only eight months before this photo was taken. The reddish-purple stems are all new growth since planting the stake.

regions where a plant needs to grow the most: the apical meristems at the tip of twigs produce growth upwards or outwards, intercalary meristems around the nodes produce new leaves and twigs, lateral meristems produce outward growth in woody stems, and root meristems produce new root tissues.

Plant growth is regulated largely by hormones called auxins. Auxins are responsible for cell elongation and also inhibit lateral buds from growing. If the auxin-rich apical meristem is removed, the intercalary meristems are stimulated to break dormancy, and new branches will quickly grow from there. This is why trimming the top of a hedge makes it bushier; you are removing the apical meristems and distributing the growth throughout the lateral branches.

Many plant species exhibit adventitious rooting, where roots develop from non-root tissues. This can occur in normal conditions (like runners of many herbaceous species), or in response to trauma, like low oxygen levels, darkness, or physical injury. Cutting a stem and driving it into the soil stimulates the trauma response, and auxins and a cocktail of other hormones result in root growth from the meristematic tissue that is now below the soil, while new branches develop from intercalary meristems above the ground. If the new plant receives enough water and sunlight, it will develop into its own happy, healthy tree or shrub.

Live staking technique

Live stakes can be harvested and planted throughout the winter, but late winter (mid-February through March) is ideal. You don't want the stems to dry out, heave out of the soil during frost, or incur any other damage, so it is best to wait until just before spring begins and buds break. Before harvesting, make sure you have permission from the landowner and that you are 100% certain what species you're cutting. Some invasive plants readily propagate from cuttings, and the last thing you want to do is spread something like Chinese privet or a non-native honeysuckle.

What species work best for live stakes?

Wet-loving pioneer species tend to excel at growing from live stakes. You can expect success (30–70% survival) of the following species, and others:

- Black Willow
- Shrub-willows:
- Pussy Willow
- Sandbar Willow
- Narrowleaf Willow
- Shrub-dogwoods:
- Red-osier Dogwood
- Gray Dogwood
- Silky Dogwood

- American Sycamore
- Elderberry
- Smooth/Speckled Alder
- Ninebark
- Buttonbush
- Spicebush

When you're ready to cut, bring a bucket and hand-pruners or garden shears. Cut stakes that are ½–1½ inches in diameter (my rule of thumb is that they should be at least as big around as your thumb) and 2–3 feet long. Thinner and shorter stakes may work well, but cuttings with the best chances of survival are within those ranges. You can usually cut several stakes from one limb; try to have 5–7 nodes per stake. Remove small side branches to maximize the auxin production within the stake. A good practice is to make a flat cut across the top and an angled cut on the bottom. This will help you push the stake into the ground, and will help you tell which side should go up; that's tricky to determine once the stakes are cut! Place the stakes in your bucket with a bit of water to keep the angled cut wet.

The sooner you plant your live stakes, the better. They can last for a few weeks, as long as you keep them as wet and cool as possible. Because these are moisture-loving plants that don't have developed root systems yet, they only have good survival rates in areas that are very wet. Streambanks are excellent places to plant live stakes; the stakes will do well there and you will quickly armor your bank from erosion. Wet spots and the first 10–15 feet from a stream are also perfect places for live stakes, and possibly areas where conventional tree planting isn't feasible or as effective.

Planting live stakes is simple: push the stake into wet soil as deep as you can (preferably about ? of the stake length), perpendicular to the soil surface. If you want to establish a thicket or strong bank protection, plant in a staggered 2 foot grid. You can use a rubber mallet to pound stakes deeper into the ground, but this can sometimes lead to stem damage. A valuable tool to use if you're planting a high number of stakes is a device to make a pilot hole. A piece of rebar is ideal for this, but make sure the rebar has a smaller diameter than your stakes.



Adventitious roots growing from the stem of an elderberry (*Sambucus canadensis*) which was pushed over during a flood. *Photo by Ryan Davis*

A hand holds an elderberry stem demonstrating adventitious root growth.



A live stake pilot hole driver pictured alongside a measuring stick to scale. A live stake pilot hole driver (a piece of scrap rebar with a welded handle to help push the rebar in and pull it out). *Photo by Ryan Davis*



Buckets of freshly cut live stakes are stored in the back of a car.

A few hours with a few helpers can get you hundreds of live stakes! These shrub dogwood (mostly gray dogwood, some silky and red-osier) and black willow stakes were planted along streamsides to help reduce bank erosion and augment planted seedlings. *Photo by Ryan Davis*



Jenna Mackley, Alliance for the Chesapeake Bay PA Program Coordinator, plants live stakes along a stream in Lancaster County.

NATIVE PLANT NURSERY

OPENING WEEKEND APRIL 18 AND 19

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Spring Creek Canyon Trail

continued from page 3

lobelia *(Lobelia siphilitica)*. The cheerful flowers of this showy native plant belie its morose botanical moniker, a nod to its historic use as a treatment for syphilis.

Old field habitats are present in this section of the trail as well and provide excellent pollinator habitat. Common plants found in these areas include bee balm (*Monarda fistulosa*), greenheaded cone flower (*Rudbeckia laciniata*), evening primrose (*Oenothera biennis*), purple coneflower (*Echinacea purpurea*) and goldenrods (*Solidago spp.*). These spaces along the trail offer the perfect opportunity to take a break, grab some water and snack, watch the bees and butterflies, and reminisce about all the wonderful plants you've encountered along the way.

While the Spring Creek Canyon trail ends at Rock Road, your exploration of plants in the Spring Creek watershed doesn't have to! Check out these field guides to enhance your botanical experience in Central Pennsylvania:



RESOURCES

- Rhoads, A.F. and Block, T.A. 2017. Plants of Pennsylvania. University of Pennsylvania Press, Philadelphia, PA. 1056 pp.
- Rhoads A.F. and Block, T.A. 2004. Trees of Pennsylvania. University of Pennsylvania Press, Philadelphia PA. 416 pp.
- Newcomb, L. 1989. Newcomb's Wildflower Guide. Little, Brown and Co. New York, NY. 490 pp.
- Hallowell, A.C. and B.G. Hallowell. 2001. Fern Finder. Nature Study Guild Publishers. Rochester, NY. 59 pp.
- Chamberlain, S.J. 2018. Field Guide to Grasses of the Mid-Atlantic. Penn State Press, University Park, PA. 167 pp.
- † indicates non-native plant. Native plants are generally considered to be those found in Pennsylvania prior to European colonization.

Sarah Chamberlain is an Associate Research Professor at Penn State University and the curator of the Penn State (PAC) Herbarium. While her plant expertise is broad, she is especially fond of riparian and wetland plants, particularly grasses, sedges and rushes.

What's on your bucket list?

PNPS is starting a list of gardens and natural landscapes right here in Pennsylvania, that we think are worth adding to your list. This list isn't a ranking as much as a reference guide for places of interest across our state. Do you want to suggest a Pennsylvania gem to add to our list? Email info@panativeplantsociety.org – with subject line bucket list.

Erie National Wildlife Refuge

By Melissa Althouse, Wildlife Biologist, Erie National Wildlife Refuge

Erie National Wildlife Refuge is 8,959 acres of federally protected land, located entirely within the French Creek Watershed (considered to be nationally significant for its ecological integrity). Almost 3,500 acres of forest burst with Spring ephemerals like trillium, trout lily, anemone, and spring beauty through mid-May. Over 5,700 acres are wetlands (which are non-exclusive of those forests) that provide habitat for more than 230 species of birds. Many of the refuge's trails border beaver marshes, swamps, impoundments, and creeks full of rare wetland plant communities. Beaver Run Trail is a great place to visit if you want to see some of these wetlands up close and personal — it borders a terraced series of beaver-built pools bordered by shrub communities and a forested floodplain. If you time your visit right, though, any and all of our trails will offer views of robust native communities (e.g., poa grasses, Engelmann's sedge, scouring rush, St. John's wort). Most of the trails are located just upland of the marshes to keep your feet dry, though, so a pair of binoculars will come in handy if you want a good look at any plants."

The Foundation for Sustainable Forests and Erie National Wildlife Refuge are hosting the Third Annual Lynn Firth Wildflower Walk on Sunday, April 26, 2020 at 12–2PM along the Trolley Line Trails, Cambridge Springs, PA — For details visit: www.facebook.com/events/621607648641423 or contact the Foundation for Sustainable Forests foundationforsustainable forests.org



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Central PA Native Plant Festival and Sale

SATURDAY, MAY 2 • 10 AM TO 3 PM

Join us on the wooded grounds of historic Boal Mansionin Boalsburg, PA, to get your native garden on. This sale features _____ native plant vendors, live music, garden talks, expert advice, plant sitting, and delicious local foods all set in a relaxing atmosphere under the trees.

FEATURED TALKS

- **11:00 am** What's Lurking in Your Landscape? Ornamental Invasives and Native alternatives presented by Lisa Schneider
- **1:00 pm** Designing for a Pollinator Friendly Landscape presented by Pam Ford

MEET THE PLANT VENDORS

We will again be enforcing a "No Early Sales" policy this year, BUT you can place ADVANCE ORDERS with most of our vendors, so you can pre-order to ensure you get the plant you want. Visit our website to see a list of available plants and contact the vendor to place your order.

www.panativeplantsociety.org/plant-sale-vendors.html

Fox Hill Gardens • www.foxhillgardens.com

Gino's Nursery • www.ginosnursery.com

Go Native Tree Farm • www.gonativetrees.com

Growin' Native Nursery • www.growinnative.com

Keystone Wildflowers • www.keystonewildflowers.com

Meadowsweet Native Plant Farm

www.meadowsweetnative.com

Natural Balance Aromatherapy • marycarolfrier@gmail.com

Perennial Gardens • http://perennialgardens.name

Spring Haven Nurseries • SpringHaven@pa.net

Tait Farm Native Plant Nursery • dave.hopey@gmail.com

The Rock Garden • www.therockgardennursery.com Note: No Pre-Orders

Wing Haven Nursery • www.facebook.com/winghaven.nursery

Live Staking

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After planting, live stakes will spend most of their energy on root development. You may only see a few leaves during the first growing season, but will likely have some new lateral branches by mid-summer. Species vary in how likely they are to survive, but willows, shrub dogwoods, and elderberry seem to do best; you can expect upwards of 80% stake survival if they are properly planted.

Are you wishing you could see a demonstration of live staking? You're in luck! Our newest "Tree Talk" is all about live staking, and while we were at it, we made a quick spotlight of gray dogwood, *Cornus racemosa*.

For more information, check out forestsforthebay.org or contact Ryan Davis at rdavis@allianceforthebay.org.



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2020 PNPS Facebook Photo Contest

PNPS is hosting its 5th Annual PNPS Facebook Photo Contest as an event in our Facebook group. Look for the contest in our Facebook group opening on May 5. The Contest will be open to entries until August 14.

See entries from past contests here: www.panativeplantsociety.org/facebook-forum.html



Winner of the PNPS 2019 Facebook Photo Contest: Wild geranium (*Geranium maculatum*) Photo: Nancy Hornberger, May 26, 2019 at High Knob in Sullivan County.

CALENDAR OF EVENTS 2020

April 18* Earth Day Birthday at Millbrook Marsh Nature Center, State College, PA

April 25* Lancaster Native Plant and Wildlife Festival, Manheim Township Public Library, Lancaster, PA

May 2 Central Pennsylvania Native Plant Festival and Sale, Boalsburg, PA

May 9* MAEscapes' York County Native Plant Sale York, PA

July 18 Wings in the Park is Back! Snetsinger Park, State College, PA

August 1-2* Festival of Wood, Grey Towers National Historic Site in Milford, PA

September 12 PNPS Annual Meeting – *Details TBA soon.*

November 6-7 PA Botany Symposium (pabotany.org)

Visit our website to learn about more native plant events happening around the state: www.panativeplantsociety.org

* Seeking volunteers for this event please email info@panativeplantsociety.org