

May 2022 Newsletter

SOUTHEASTERN PENNSYLVANIA CHAPTER

May Meeting Highlights

Chapter Business.

- Chapter membership stands at 138.
- Fifteen members participated in the spring bulk plant purchase from North Creek Nursery, ordering 54 flats containing over 1800 plugs of native plants going into the ground.
- Our chapter will be launching a Homeowner Rewilding Assistance program to advise property owners who want to plant more natives.
- Our chapter coordinated with other WO chapters in PA and the Pennsylvania Native Plant Society to encourage a ban on the propagation and sale of more invasive ornamental plants in PA. At their April 20 meeting, the Controlled Plant and Noxious Weed Committee received 169 comments from members of the public on this issue, the highest number of comments ever received. The coalition will be asking members to repeat this show of support for the Committee's July meeting, with a goal of having five additional plants banned this year. Thanks to everyone who took the time to email the committee with your concerns!

Presentation: How To Design and Plan Your Home Landscape, by Marc Radell, Master Gardener Emeritus, Penn State Extension of Montgomery County.

Traditional landscape design starts with what the homeowner wants; design for habitat focuses on creating native plant communities to maximize plant health and create valuable wildlife habitat.

> Recordings of past meetings are available on our <u>youtube channel</u>. Visit us on <u>Instagram</u> and <u>Facebook</u>.

The goal for native plant landscapers is ecosystem restoration -- creating plant communities with multiple layers of tightly packed plants that provide continuous canopy and ground cover with few bare spots. Choosing the right plants for the existing site conditions and soil, without soil amendments, reduces areas of high maintenance, such as supplemental watering and weeding.

Some plants are naturally short-lived and less competitive. Plant succession is a natural process. The goal of plant succession in our ecosystem is mature forest -- Penn's woods. If we want to stop this process at a certain point, to maintain a meadow or shrub/scrub habitat, we must be prepared to remove plants from the next succession level, or edit out aggressive plants to halt natural succession.

The new measure of success in garden design is biodiversity. How many species of native insects, birds, and mammals can your landscape attract? Planting a diversity of natives can achieve this goal, and your landscape can be aesthetically satisfying as well, with attention to some principles of design.

The elements of design are color, line, form, texture, and visual weight.

• <u>Color</u> is usually what most homeowners look for first in a plant. However, it is the most temporary part of the landscape, because plants

| WO-SEPA 2022 Meeting Schedule |
|-------------------------------------------------------|
| June 9: Specialist Pollinators |
| July 6: Bondsville Mill Park |
| Aug. 11: Native Plant Guilds for Four-Season Interest |
| Sept. 7: Native Trees for Your Home Landscape |
| Oct. 13: To be announced |
| Nov. 9: Native Shrubs for Four-Season Interest |
| Dec. 1: Collecting Native Seeds |

May meeting highlights, continued from page 1

change color with the seasons. Color is expressed in flowers, and also in a plant's leaves, fruit, seeds, and bark. Working with straight species of natives means using unaltered flower and leaf colors. If we want a purple flower, we choose a plant whose flower is naturally purple rather than a cultivar that's bred to have purple flowers.

- <u>Line</u> is any edge between planes. Lines create shapes and patterns, leading the eye to an object or space. Lines can be created by plants (height creates vertical lines) or by hardscaping (walls, walkways).
- <u>Form</u> is a shape enclosing an area. Forms stop the eye and are the dominant visual elements that organize a landscape. Like lines, forms can be created with plants or with hardscaping. Forms can attract wildlife by imitating what they need in nature. Vertical forms define different areas. Horizontal forms create width and openness.
- <u>Texture</u> is the most lasting aspect of garden design because leaves are more persistent than flowers or fruit. Leaf size and branching habit define the overall texture of a plant. A fine texture allows the eye to move past the form. A coarse texture signals the eye to stop and look. Textural variety creates interest.
- <u>Visual weight</u> is created by large mass or unusual form -- e.g., large leaves, or a distinctive object or plant used as a focal point.

These elements of design are the building blocks for the design principles of proportion, order, repetition, and unity.

- <u>Proportion</u> is the size of objects in relation to one another. Objects larger than people inspire awe and are less intimate. The impact of la arger object can be minimized by grouping smaller plants or objects around it. Trees and many shrubs will mature to be larger than people. Keep this in mind when using them in your design.
- Order is the organization or layout of a design. A balance of design elements creates order. The view from one area to another is called a view axis. Balance the plants either symmetrically or asymmetrically on each side of a view axis. Symmetry is the more conventional choice, whether applied to color, texture, size,

etc. Symmetry creates a more formal, rested look. Asymmetrical balance gives equal visual weight using nonequal forms, colors, or textures on either side of the view axis, creating a less formal and more dynamic look.

- <u>Repetition</u> of line, form, color, or texture creates harmony. Simple repetition of a color or shape at uniform intervals creates a more formal look. Repeating the same elements using different plants or patterns creates a more naturalistic look.
- <u>Unity</u> expresses how the objects fit together. You can choose one visually dominant object or plant to focus your design. You can design around a theme -- a color scheme or a function (pollinator garden, rain garden, cutting garden). Planting in groups of 3, 5, or 7 prevents the eye from subdividing the group of plants and helps focus on the entire group.

Putting your design on paper. Prepare a base map using an aerial view of your property. Include structures and plants too large to move. Mark which plants to keep and which to change. Document soil conditions, sun/shade patterns, and drainage. Consider points of view; each line of sight is a view axis to be designed around. Draw up a plan and a wish list of plants for each set of soil and site conditions.

Creating plant communities. Wider shaped natural areas provide better habitat than narrow areas, and curved areas provide more entry points for wildlife than straight edges. Incorporating plants of different heights allows you to fit more plants into a space and provide more structure for wildlife to use. Plant multiples of a species in interconnected drifts to create continuity.

Your anchor trees and shrubs are the bones of your garden, along with hardscaping. Create and link spaces using repetition of design elements. Planning for four-season interest creates better habitat.

Smaller areas of prime habitat are more valuable to wildlife than larger areas of mediocre suburban habitat. Think of your yard as part of a larger ecosystem.

Every native plant has value; if it's native and it grows, let it! Some creature will need it and use it.

The complete <u>presentation</u> can be found on Marc's <u>website</u>, along with links to related resources and design templates.

Thought of the Month -- Native Grasses and Sedges

Native grasses and sedges serve important functions in the landscape. They provide height, texture, color, and movement, as well as habitat and food for wildlife. Their extensive root systems improve soil health, retain excess water, and prevent erosion. Unlike turf grass, they require no fertilizer or watering.

Their seeds are important food for songbirds and small mammals. Their leaves and flowers support a wide range of native caterpillars. Deer leave these plants alone, but rabbits and groundhogs might nibble young plants.

Sedges are great fillers between perennials and provide a groundcover layer under shrubs and trees. *Carex blanda*, common wood sedge, tolerates a wide range of soils -- clay, rocky, wet, and alkaline.



Clump-forming *C. blanda* thrives under the loose branching structure of aromatic sumac (*Rhus aromatica*).

Carex pennsylvanica, oak sedge, forms large colonies in well-drained, dry woodlands. It can be used as a lawn replacement under trees and in shade.



C. pennsylvanica mixes with wood poppy (Stylophorum diphyllum) and Penstemon digitalis at the edge of a woodland garden.

Grasses, whether tall or short, are the backbone of a meadow, providing a tapestry of texture and structure through which perennial and annual flowers can grow.

Elymus hystrix, bottle-brush grass, gets its name from its delicate, white seed heads, which resemble a bottle brush rising above the 3' tall leaves in summer. One of the few grasses that thrives in part shade, it is useful as an accent in a mixed



planting with other shade-loving plants.



Chasmanthium latifolium, northern sea oats, is an aggressive clump-forming spreader that can fill a space quickly. It thrives in moist soil with full sun. It also naturalizes well in dry shade, where its growth might be more restrained. Wide green leaves 3' to 4' high are topped with golden seedheads in fall.

How can you tell the difference between a grass and a sedge? Remember this rhyme:

Sedges have edges; rushes are round. Grasses have knees that bend to the ground.

Resources:

https://edgeofthewoodsnursery.com/native-sedges https://edgeofthewoodsnursery.com/species-spotlight -the-native-grasses-part-two

https://edgeofthewoodsnursery.com/species-spotlight -the-native-grasses-part-three

Tree of the Month -- White dogwood (Cornus florida)

Dogwood is an understory tree that prefers to grow at the edges of woodlands. It typically grows to about 25 feet and blooms from April through May. What look like white or occasionally pink flower petals are actually modified leaves, called bracts, which lure pollinators to the tiny yellow flowers in the center of the bracts.



Dogwoods prefer moist, rich, slightly acidic welldrained soil in part shade. Filtered shade is ideal, with exposure to morning sun rather than hot afternoon sun. Because of their shallow roots and salt intolerance, avoid planting dogwoods near roads or sidewalks.

Dogwoods benefit from an underplanting of spring ephemerals, grasses, sedges, or perennials to keep their root system from drying out. They should be planted in sites with good air circulation, as they are susceptible to powdery mildew and anthracnose.

Fall leaf color is a beautiful red-orange to burgundy. Clusters of red berries may persist through late winter.

Flowering dogwoods can be found growing with oak, sassafras, tulip poplar, sugar maple, beech, pine, and persimmon. Shrubs for underplanting include *Calycanthus floridus*, *Kalmia latifolia*, *Leucothoe fontanesiana*, and *Virburnum acerifolium*.

Dogwoods support many native insects, including aphids, leaf beetles, sawflies, borers, and spittlebugs. Native bees and pollinating flies are attracted to the dogwood's blooms. Dogwoods are a larval host for spring azure butterflies. Ruffed grouse, quail, turkey, squirrels, chipmunks, mice, skunks, fox, raccoons, and beavers enjoy the berries. Deer and rabbits will browse the twigs and foliage of young trees, so protection is needed.

This beautiful understory tree is a bit challenging to grow successfully due to its susceptibility to disease, but finding the right spot for it will reward you with a spectacular display of flowers in spring, dramatic fall foliage, and bright red berries in winter.



White Dogwood -- Quick Facts

Height: 15-25 feet Growth rate: Slow

Shape: Short trunk, spreading crown, nearly horizontal branches

Flowers: Four showy white or pink bracts surround a cluster of tiny flowers

Fruit: Clusters of red berries

Leaves: Opposite veined leaves with wavy margins; red to burgundy fall color

Habitat: Part shade, slightly acidic, loamy, welldrained soil; sensitive to deicing salt; provide good air circulation to avoid disease

Wildlife value: Fruits eaten by birds and mammals; host plant for spring azure butterfly; twigs browsed by white-tailed deer

Zone: 5-9

Pledge To Rewild -- Fill Every Open Niche with Plants

In January, we invited readers to start off 2022 with a <u>pledge to rewild</u>. This initiative by the Wild Seed Project aims to meet the challenge of biodiversity loss head-on by restoring a minimum of 70% of native plant biomass to support healthy populations of butterflies, bees, birds, and insects that are crucial to a functioning ecosystem.

The pledge to rewild includes 10 action steps to help you get started. In April, we talked about the importance of knowing your soil and avoiding pesticides. This month, we're diving deeper to understand how to create a native landscape.

We've all seen landscaped planting beds with a couple of trees, shrubs, and perennials in a sea of mulch. That's not the way nature does it. If there is space, light, water, and soil, however little there may be, a plant will show up to fill that space.

Fill every open niche with a wide diversity and abundance of plants

Be generous with your plantings. Every layer and corner of the landscape is a space that can be filled with plants, from groundcovers to knee-high perennials, shrubs, understory trees, and mature trees. Use a wide diversity of plants to provide maximum food and habitat for wildlife.

Any areas not covered with hardscape -- asphalt, concrete, bricks, or pavers -- are places that can be planted. Even the gaps between pavers and the crevices in stone walls can offer spaces for plants that have evolved to thrive in this type of environment.



Wild violet (*V. sororia*) and wild ginger (*Asarum canadense*) volunteer in the crevices of this walkway made of native stone.

In *Planting in a Post-Wild World*, authors Thomas Rainer and Claudia West urge us to treat plants as related populations instead of isolated individuals. Multiple plants can share the same vertical space -the area under a canopy tree can accommodate one or more understory trees, shrubs of various heights, non-woody perennials, and groundcover plants.

The lower layers of plants act as living mulch, removing the need for any mulching other than allowing fallen leaves to remain in place. This layer retains and filters water, and distributes nutrients to every plant in the vertical layer by facilitating the decomposition of plant material into the soil.



Redbud (*Cercis canadensis*), an understory tree, and red buckeye (*Aesculus pavia*), a tall multistem shrub, grow under a young northern red oak (*Quercus rubra*, a canopy tree), along with sweet fern (*Comptonia peregrina*, a shorter woody shrub), golden ragwort (*Packera aurea*), wood poppy (*Stylophorum diphyllum*), and *Penstemon digitalis*. Sedges (*Carex blanda, C. pennsylvanica, C. appalachia, C. muskingumensis*) and moss phlox (*P. subulata*) form the groundcover layer. Fallen leaves fill in any spaces between the plants.

Once your garden gets started, many of the perennials will spread on their own where they are happy (e.g., *Penstemons*, sedges, *Packera*, wood poppy), which will help to fill any gaps. The most important task, according to Rainer and West, is to understand how plants fit together. Plants should be matched with the site's soil, light, and rainfall characteristics. The chosen plants also need to be compatible in terms of their competitive strategies -- how they grow together.

Native plant communities are great reference points for designing our yards, because plants that grow together in the wild will likely also be compatible in a landscaped setting.

Essential Native Trees and Shrubs for the Eastern United States, by Tony Dove and Ginger Wooldridge, is a useful reference not only for its detailed information on many natives, but because each entry includes a description of plants that grow in the same habitat.

Cinnamon clethra (C. *acuminata*), a tall woody shrub, is listed as thriving with sugar maple (a canopy tree), sweetbay magnolia (an understory tree), spicebush and smooth hydrangea (tall woody shrubs), azaleas (smaller woody shrubs), ferns, and wild ginger. This list encompasses all the vertical layers, from canopy to groundcover, and provides a ready-made plan for a design that will create beauty as well as valuable wildlife habitat.



Baltimore orioles arrive in southeastern Pennsylvania when redbud (*Cercis canadensis*) begins to bloom.

Planting a Meadow

Some areas may not include all the vertical layers. For example, a sunny meadow will not have canopy trees, which would create too much shade to allow sun-loving plants to thrive. Start with your tallest layer -- for a meadow, that would be the tall perennials and grasses -- and work down the vertical ladder to include shorter shrubs, non-woody plants, and groundcovers.

A meadow planting in an area with seasonally wet soils might include some shorter shrubs, such as

buttonbush (*Cephalanthus occidentalis*) and steeplebush (*Spirea tomentosa*). Pair these with nonwoody perennials and groundcover plants that thrive in the same soil and moisture conditions.

A meadow in a sunny, dry location could include smaller shrubs like New Jersey tea (*Ceanothus americanus*), St Johns wort (*Hypericum prolificum*), and lead plant (*Amorpha canescens*), together with perennials and groundcovers that prefer the same habitat.



This sunny meadow features *Echinacea purpurea* and *E. pallida*, plains coreopsis (*C. tinctoria*, a great annual for filling in gaps as you develop your meadow), ox-eye sunflower (*Heliopsis helianthoides*), switchgrass (*Panicum virgatum*), little bluestem (*Schizachyrium scoparium*), big

bluestem (Andropogon virginiana), anise hyssop (Agastache foeniculum), Indian blanket (Gaillardia aristata), wild quinine (Parthenium integrifolium), Amsonia hubrichtii, several mountain mints (Pycnanthemum spp), grey-headed and cut-leaf coneflower (Ratibida pinnata and R. laciniata), black-eye Susan (Rudbeckia hirta), New England aster (A. novae-angliae), and several goldenrods (Solidago canadensis, S. odora, and S. speciosa).

Close spacing allows the early emergers to cover the ground, preventing spring weeds from germinating until the warm-season plants fill in. Fallen leaves and spent stems are the only mulch needed, providing habitat for overwintering insects and ground-nesting native bees. Plant densely and allow the plants to determine their places, as they do in nature. **Plant This Not That -- Foundation Plants** Many homeowners rely on a limited palette of plants to soften and define the foundation of their home. These are invariably nonnatives, and some of them are invasive, escaping residential gardens and taking over our woods, fields, and wetlands. Why not use your foundation areas to plant more natives to provide food and habitat for insects and birds, as well as to beautify your home.

| Instead of These Nonnatives | Plant These Natives |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Ilex crenata</i> (Japanese holly) Dense evergreen shrub with tiny leaves and small black berries. Spreads by seeds; becoming invasive in natural areas in the Lower Hudson Valley. | <i>Ilex opaca</i> (American holly) Glossy evergreen foliage, red berries on female plants; can reach 30 feet in height but can easily be pruned to any height and shape. |
| Buxus sempervirens (boxwood); B. microphylla (Japanese boxwood) Small shrubs prized for their dense foliage; often pruned into geometric shapes. | <i>Ilex glabra</i> (inkberry) Evergreen shrub; small white flowers attract pollinators; black or white berries eaten by birds; responds well to pruning. |
| <i>Taxus baccata; T. cuspidata</i> (yew) Soft-needled evergreen commonly pruned into geometric shapes. Foliage is toxic to animals and humans. | Juniper communis var. depressa (common juniper) Low, spreading evergreen with silver-frosted blue to black berries. Taxus canadensis (American yew) Evergreen shrub for cool, shady locations. Bright red berries attract birds. Foliage is toxic. |
| <i>Hydrangea macrophylla</i> (bigleaf hydrangea) De- ciduous shrub featuring large clusters of pink, blue, or white flowers in summer. | <i>Hydrangea arborescens</i> (smooth hydrangea) Large clusters of snow-white flowers in summer attract pollinators; attractive exfoliating bark. |
| Berberis thunbergii (Japanese barberry) Deciduous shrub with small leaves, sharp spines on stems, and red berries in fall. Highly invasive in natural areas. | <i>Ilex verticillata</i> (winterberry holly) Deciduous shrub with bright red berries (female plants) that persist into winter. <i>Physocarpus opulifolius</i> (ninebark) Deciduous shrub with small, dark green leaves and attractive exfoliating bark. |
| Chamaecyparis spp. (false cypress) Soft-needled evergreen with finely dissected foliage. | <i>Chamaecyparis thyoides</i> (Atlantic white cedar) Evergreen conifer with soft blue-green needle-like leaves. <i>Juniperus virginiana</i> (eastern red cedar) Evergreen tree or shrub with scale-like green, blue-green, or grey-green foliage; large grey-blue berries on female plants attract cedar waxwings. |
| Rhododenron spp. (rhododendron) Mostly ever- green shrubs with small or large leaves, sometimes leathery; clusters of pink, red, or lilac flowers in spring. | Rhododendron maximum (rosebay rhododendron) Evergreen, thicket-forming shrub with large leathery leaves and clusters of white to pink flowers in spring. Kalmia latifolia (mountain laurel) Broadleaf evergreen shrub with clusters of pink or white flowers in spring. |
| Pieris japonica (Japanese andromeda) Shiny dark green foliage, clusters of red flower buds in winter, trusses of fragrant white flowers in early spring. | <i>Pieris floribunda</i> (mountain fetterbush) Deep leathery ever- green leaves, clusters of fragrant bell-shaped flowers in spring. <i>Vaccinium corymbosum</i> (highbush blueberry) Deciduous shrub with small white to pink bell-shaped flowers in spring, edible blue berries in summer, bright red to burgundy fall foliage. |
| Juniperus chinensis 'Pfitzeriana' (Pfitzer juniper) Hardy, low-maintenance evergreen shrub with soft gray-green needles. | Juniperus horizontalis (creeping juniper) Easily grown ever- green shrub. Foliage color can range from lime to medium green to grey-green. Dark blue cones on female plants. |
| <i>Spirea japonica</i> (Japanese spirea) Dense, broadly mounded deciduous shrub with clusters of pink flowers in early summer. Invasive in eastern U.S. | Clethra alnifolia (summersweet) Densely branched deciduous shrub with spikes of fragrant white or pink flowers in summer which attract butterflies and hummingbirds. |
| <i>Spirea prunifolia</i> (bridal wreath) Deciduous shrub with upright, arching branches; thick sprays of white flowers in mid-spring. | <i>Itea virginica</i> (Virginia sweetspire) Deciduous shrub with sprays of fragrant white flowers in mid-spring which attract bees and butterflies. Long-lasting brilliant fall leaf color. |

Diary of a Rewilder

This year, we're focusing on a different step in the rewilding process each month. If you're new to rewilding, you might be thinking -- how does this work in practice? We would like to share with you some personal experiences that could help with your own rewilding projects.

The Site

This month we spoke with a gardener who is rehabbing a 1.5-acre property in Bucks County. The property, purchased 5 years ago, had "good bones" from the previous owners, but had been somewhat neglected in recent years. Much of the owners' energy has gone into removing invasive plants, including lesser celandine, Norway maple, multiflora rose, and oriental bittersweet, and filling those gaps with natives.

The Projects

In sunny areas of the property, the owners created several mini-meadows, with the remaining lawn serving as wide pathways. To remove the grass, the owners first edged out the perimeter of the beds with a shovel to create a barrier against encroaching grass. The lawn was then smothered with cardboard covered with 3" to 5" of compost, leaf mold, and topsoil. In a few smaller areas, the sod was removed manually using a flat shovel.

Sun-loving plants in the mini-meadows include white snakeroot (*Ageratina altimssima*), anise hyssop (*Agastache foeniculum*), lanceleaf coreopsis (*C. lanceolata*), Indian blanket (*Gaillardia pulchella*), pale coneflower and purple coneflower (*Echinacea pallida* and *E. purpurea*), anise-scented goldenrod (*Solidago odora*), and ox-eye sunflower (*Heliopsis helianthoides*).



In the wooded areas of the property, the owners removed the larger woody invasives (oriental bittersweet, multiflora rose, and Norway maple) and then observed what came into the area before replanting. Where the native seed bank proved insufficient, the owners smothered the weeds with at least 4" of wood chips, followed by replanting with natives.

Shade-loving plants in these areas include goldenseal (*Hydrastis canadensis*), columbine (*Aquilegia canadensis*), green and gold (*Chrysogonum virginianum*), several ferns (*Polystichum acrostichoides, Thelypteris noveboracensis,* and *Athyrium filixfemina*), and wild ginger (*Asarum canadense*).



Other projects in the works include installing a gravel garden and regrading/replanting a dry creek bed to improve watershed management.

The Challenges

Lesser celandine (*Ficaria verna*) was wellestablished on more than 50% of the property. The owners planted ostrich fern (*Matteucccia struthiopteris*) and golden ragwort (*Packera aurea*) directly into areas infested with lesser celandine. Both plants are holding their own against the weed; in fact, the *Packera* may be winning in a few locations.



Diary of a Rewilder, continued from page 8

Like many of us, these gardeners struggle with the challenges posed by deer and rabbits. Some useful techniques for protecting plants from damage include interplanting non-palatable plants (e.g., mountain mint, *Pycnanthemum* spp.) with vulnerable plants (e.g., *Phlox paniculata*), and keeping in mind the paths that the animals follow through the property, along with the strategic use of natural deer spray (every 20 to 30 days in the spring when they are looking for food).

Their biggest challenge in rewilding is limited time and money. However, these gardeners are enjoying the journey and all the learning acquired along the way. Inspired by Dr. Doug Tallamy, Rick Darke, Piet Oudolf, and Larry Weaner, the owners continue their quest to create an ecologically sound and beautiful garden that benefits wildlife.



Events in the Community and Beyond

May 11 Volunteer Work Day, Climbers Run Nature Center, 6:00 - 8:00 p.m., 226 Frogtown Rd, Lancaster. May 14 Montg. County Master Gardeners Plant Sale, 9:00 a.m. - 1:00 p.m., 1015 Bridge Rd, Collegeville.

May 14 Keystone Wildflowers Native Plant Sale, 8:00 a.m. - 2:00 p.m., 675 Hill Rd, Robesonia. Appt rqd.

May 14 & 15 Hawk Mountain Native Plant Sale, Sat 10-4, Sun 10-3, Hawk Mountain Visitor Center.

May 14 & 15 <u>Chester County Master Gardeners Plant Sale</u>, Saturday 10:00 a.m.- 3:00 p.m., Sunday 10:00 a.m. - 2:00 p.m., E. Bradford Township Building, 667 Copeland School Rd, West Chester.

May 19 Designing with Natives Garden Tour, 6:00-7:30 p.m., Stoneleigh, Villanova. Wild Ones members (any chapter). To register, email wildonesofsepa@gmail.com.

May 20 <u>Hike the Mt Cuba Center to Ashland Loop</u>, Mt Cuba Center, 9:00 a.m. - 1:30 p.m., \$35.

May 28 Bowmans Hill Wildflower Preserve Guided Tour, 12:00 p.m. \$15. RSVP to wildonesof-sepa@gmail.com.

May 31 Spring Life at Welsh Mtn Nature Preserve, 6:00 - 8:00 p.m., 835 Gault Rd, East Earl.

June 3 Guided tour, <u>The Bower</u>, Sherman Dale. RSVP to wildonesofsepa@gmail.com

Educational Opportunities

May 10 <u>Summer Invasive Plant Workshop: Identification</u>, Blue Ridge PRISM webinar, 1:00-3:00, \$10.

May 11 Get the "Dirt" on Soil, Mt Cuba Center, 6:00-7:30 p.m., webinar. \$19.

May 12 The Nature of Oaks, Prof. Doug Tallamy, Mt. Cuba Center. 1:30-3:30 p.m. \$35

May 13 Lesser Known Native Shrubs for Your Garden, Mt. Cuba Center, 10:00 a.m.-noon, \$29.

May 14 The Importance of Protecting Natural Habitats, by Doug Tallamy. Lecture at 2:00 p.m., reception

(\$50) at 4:00 p.m. Media-Upper Providence Free Library. RSVP to info@keepmediagreen.org.

May 21 <u>Knowing Native Plants: Flowering Shrubs</u>, Bowmans Hill Wildflower Preserve, 10:00 a.m. - 1:00 p.m., in person \$30, virtual \$25.

May 24 Can We Grow Crops and Monarchs? Monarch Joint Venture, 2:00 p.m. webinar.

May 26 <u>Rain Garden Design</u>, Bowmans Hill Wildflower Preserve, 7:00-8:00 p.m., webinar, \$15.

June 1 Carex for Every Garden, Mt Cuba Center, 10:00 a.m. - noon, \$29.

June 3 Top 10 Native Vines, Mt Cuba Center, 10:00 a.m. - noon, \$29.

June 4 <u>Knowing Native Plants: Focus on Ferns</u>, Bowmans Hill Wildflower Preserve, 1:00-4:00 p.m., in person \$30, virtual \$25.

June 5 <u>Attracting Wildlife to Small-Scale Gardens</u>, Mt Cuba Center, 1:00-3:00 p.m., \$29.