

June 2022 Newsletter

SOUTHEASTERN PENNSYLVANIA CHAPTER

June Meeting Highlights

Chapter Business.

- Chapter membership stands at 149.
- Jessie reported on the chapter's recent tour of The Bower, a 36-acre native garden and sculpture park in Shermans Dale, PA. Recent art installations include dry laid stone walls (one with a walk-through arch), a stone pile that is a legacy of the property's former agricultural use, a stumpery, and several commissioned works.

Video Tour of Member's Garden

For a change of pace, chapter members were invited to gather at a member's garden in the Phoenixville area. The meeting was a hybrid of zoom and in-person. The highlight was a video tour to showcase all the rewilding work being done on the property.

We'd like to thank all those who attended the garden tour last week. It was a beautiful evening, from the weather, to the company, and of course the plants! Thanks also to our members participating via zoom, who persevered through all our technical difficulties. We so appreciate your patience, help, and kindness through what must have been a frustrating experience for you at home. We will work on improving things for next time. We are grateful to everyone who took part!

WO-SEPA 2022 Meeting Schedule

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

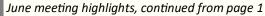
Dec. 1: Collecting Native Seeds



A hedgerow along the property line includes American persimmon (Diospyros virginiana) and nannyberry (Viburnum lentago) in the tree tubes, and coral honeysuckle (Lonicera sempervirens) and raspberry (Rubus idaeus) growing along the fence. This area is an extension of a hedgerow that includes elderberry (Sambucus canadensis), red chokeberry (Aronia arbutifolia), pawpaw (Asimina triloba), serviceberry (Amelanchier canadensis), spicebush (Lindera benzoin), cranberry viburnum (V. trilobum), and black chokeberry (Aronia melanocarpa, inset).

Recordings of past meetings are available on our <u>youtube channel</u>.

Visit us on <u>Instagram</u> and <u>Facebook</u>.





This large area between the house and the driveway is planted with small trees and shrubs, including fringe tree (Chionanthus virginicus), black chokeberry (Aronia melanocarpa), fragrant sumac (Rhus aromatica), New Jersey tea (Ceanothus americanus), common ninebark (Physocarpus opulifolius), buttonbush (Cephalanthus occidentalis), red-osier dogwood (Cornus sericea), low-bush blueberry (Vaccinium angustifolium), and inkberry (Ilex glabra). In early summer, perennials including purple coneflower (Echinacea purpurea), Coreopsis lanceolata, wild lupine (Lupinus perennis), and



gloriosa daisy (*Rudbeckia hirta*) provide nectar for butterflies, bees, and wasps.





June meeting highlights, continued from page 2



A bumblebee with full pollen sacs hangs from an elderberry (Sambucus canadensis) flower cluster.





Insects have been busy feeding in this clump of *Viola sororia. Viola* is the prime caterpillar host plant for many of the fritillary butterflies.



American cranberry bush (*Viburnum trilobum*), part of a hedgerow along the property line with the neighbor.

Thought of the Month --

Our thought of the month focuses on the specialness of fleeting moments in our gardens, and how each day can bring beauty and meaning just by paying attention to the small details of what's happening all around us. Enjoy this showcase of spring in the garden!

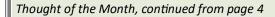


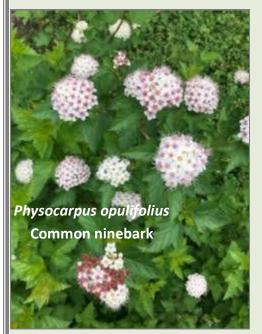










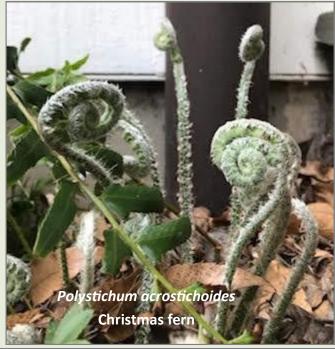












Pledge To Rewild -- Planting To Support **Pollinators**

In January, we invited readers to start off 2022 with a pledge to rewild. 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. This month, we're focusing on planting to support pollinators. Certain pollinators, whether they are bees, wasps, beetles, flies, moths, or butterflies, rely on just a handful of native plant species. Those plants in turn rely on these particular insects for pollination. If these insects, called specialists, cannot find enough of their host plants, they won't be able to reproduce.

One well-known specialist insect-plant relationship is monarch butterflies and milkweed (Asclepias spp). Monarch butterflies are dependent on milkweeds to complete their lifecycle. Monarchs not only love the nectar of milkweed species, they also lay their eggs on the underside of the leaves, where the emerging caterpillars devour the foliage to gain protection from the milkweed's toxic latex sap. If monarchs cannot locate milkweed plants to lay eggs, their caterpillars have little chance of survival.



Eastern carpenter bee foraging on Joe Pye weed (Eutrochium purpureum).

Specialist pollinators emerge at the same time their host plants begin to flower. Thev may have shorter flight period, corresponding with the bloom period of their host plants.

Other insects, known as generalists. thrive and reproduce using many different species of plants. Generalpollinators ist are active over a long season and forage on a variety of plants.

Around 25% of bees native to the eastern United States are specialists that depend on the pollen of specific plants or species to survive. Specialization can benefit both pollinators and flowers due to improved foraging efficiency, but this also makes specialists vulnerable to threats such as habitat loss, pesticide damage, and invasive species.

A 2020 survey showed that nearly 60% of pollen specialist bees in the eastern United States were listed as rare. Conservation practices to benefit these native specialists include protecting native field borders, hedgerows, meadows, and riparian buffers, and planting more of their host plants.

Native plants that support specialist bees include spring beauty (Claytonia virginica) and sunflowers (Helianthus spp). Host plants that support the greatest number of generalist and specialist bees include asters, goldenrod (Solidago spp), sunflowers (Helianthus), Rudbeckia, Coreopsis, willows (Salix), and Vaccinium. This website lists over 230 species of native host plants that support pollen specialist bees in the eastern United States.

Beyond Bees

Many plants rely on wasps, flies, beetles, moths, butterflies, and hummingbirds to transfer pollen as they feed on the nectar, pollen, or even the insects hidden in the flowers.

A definitive reference for native pollinators is Heather Holm's website, Pollinator Native Plants. Holm is a National Honorary Director of Wild Ones and a recognized expert on native pollinators. Her website includes comprehensive lists of native plants that benefit various pollinators.

Insect-Specific Favorites

Wasps: Simple white flowers with easy landing areas (Aster, Eupatorium, Achillea, Solidago, Pycnanthemum)

Long-tongued bees: Plants with long narrow nectaries or spurs (Monarda, Penstemon, Lonicera, Agastache, Aguilegia, Liatris, Lobelia)

Short-tongued bees: Simple open flowers with daisy, ball, spike, or umbel flowers (Baptisia, Amsonia, Aster, Hibiscus, Helenium, Coreopsis, Rudbeckia, Heliopsis, Allium)

Flies: Darker colored purple or brown flowers with complex or funnel-like traps (Asarum canadense, Asimina triloba, Coreopsis, Solidago, Aster)

Moths: Light-colored trumpet-shaped blooms, es-

pecially those opening at dawn/dusk or night (Lobelia, Liatris, Gaura, Delphinium, Hibiscus, Oenothera)

Butterflies: Bright flowers (pink, orange, yellow) in clusters with landing platforms (*Phlox, Liatris,* Asters, *Solidago, Rudbeckia, Helenium, Heliopsis, Ratibida, Asclepias, Agastache, Achillea, Pycnanthemum, Eupatorium*)

Creating a Pollinator-Friendly Garden

In planning your garden to support native pollinator species, keep in mind that native insects evolved together with the native plants of our local region. Using locally sourced native plant seeds or plants is optimal. Horticultural cultivars with double flowers, novel colors, or colored leaves have been selected for reasons other than to provide food for native insects. These crucial energy and nutrition resources are often bred out of the cultivar when breeders select for aesthetic qualities.

Research is showing that hybridized native varieties (aka nativars) often have less nectar, less sugar in the nectar, less pollen, or lower pollen quality than the straight species. For example, the hybrid of the native cardinal flower, *Lobelia x speciosa*, contains 20% less nectar than the native species, *Lobelia cardinalis*.

Studies have also found that nativars often have a lower abundance of native bees than the straight species. Double or multi-tiered flowers make it difficult or impossible for certain pollinators to land or feed. Cultivars with different colored leaves (gold, purple, or red) may be overlooked as food by hungry insects, or may not provide the same nutrition as the leaves of the straight species.



Specialist bee feeding on New York ironweed (Vernonia noveboracensis)

Keystone Plants

Native plants have evolved in a close relationship with insects and other wildlife, providing food, cover, and nesting habitat. When choosing native plants to support pollinators, make sure to include keystone plants -- those that feed the young caterpillars of butterflies and moths (Lepidoptera), and those that feed specialist bees and wasps that eat only the pollen of specific plants. Keystone plants for specialist bees will also support generalist bees.

The National Wildlife Federation's <u>Garden for Wildlife</u> program has lists of top keystone plants for eastern U.S. forests, top 30 keystone plants for butterfly and moth caterpillars, and top 30 native host plants for pollen specialist bees.

Cornell University and Cornell Botanic Gardens have published a <u>guide</u> to creating a pollinator garden for native specialist bees. They include several garden layout templates. Choosing a variety of plants that will bloom from early spring through fall will provide maximum support for pollinators. Large drifts of flowers attract more pollinators than just a few blooms.

Beyond Plants

Here are some other steps everyone can take to create pollinator-friendly habitat:

- Fight back against habitat destruction by cultivating native plants instead of lawn.
- Provide a variety of nesting sites by leaving small patches of bare soil and allowing plant stems to remain standing through winter and spring.
- Turn off outside lights at night; light interferes with migration, feeding, and mating cues.
- Provide a source of water -- a puddle, a hollow in a paving stone, a shallow birdbath.
- Leave fallen leaves, especially under trees, where insects can overwinter safely.
- Minimize soil disturbance; cut weeds at soil level instead of pulling them. Never till the soil.
- Avoid pesticides; no matter how "natural," they can still harm native pollinators.

Resources

<u>Very Specialist Bees and the Flowers They Love,</u> Xerces Society.

<u>Tips for a Pollinator-Friendly Garden</u>, Cornell Botanic Gardens.

<u>Plant This Not That -- Plants for Pollinators</u> Many wildflower seed and plant mixtures are advertised as supporting pollinators, but they often include many nonnative plants that don't provide any food for caterpillars and other insect larvae. Why not plant natives that will support insects through all stages of their growth, and birds as well!

Instead of These Nonnatives	Plant These Natives
Buddleia davidii (butterfly bush) Fast-growing woody shrub native to Asia, 3' to 10' tall, depending on the cultivar. Panicles of fragrant flowers in many colors. No fall leaf color. Reseeds vigorously; can escape from gardens into nearby fields.	Clethra alnifolia (summersweet) Densely branched deciduous shrub. Spikes of fragrant white or pink flowers in summer provide nectar for butterflies and hummingbirds. Itea virginica (Virginia sweetspire) Deciduous shrub with sprays of fragrant white flowers in mid-spring which attract bees and butterflies. Long-lasting brilliant fall leaf color.
Clematis montana (anemone clematis) Vigorous climbing vine native to Asia. Fragrant four-petaled flowers cascade down the vine in early summer.	Clematis virginiana (virgin's bower) Fast-growing vine with clusters of fragrant white flowers in summer followed by silky seed heads. Host plant for clematis clear-wing moth.
Perovskia atriplicifolia (Russian sage) Mounding semi-woody shrub with fragrant silvery foliage and spikes of blue-purple flowers in summer. Can become invasive in certain climates.	Amorpha canescens (lead plant) Deep-rooted drought-tolerant shrub with silvery green foliage and spikes of purple flowers in summer. Leaves support moth caterpillars and beetles. Agastache foeniculum (anise hyssop) Medium-tall perennial with anise-scented leaves and lavender flower spikes all summer. Easily grown, deer resistant, attracts native bees.
Leucanthemum x superbum (Shasta daisy) White or occasionally yellow daisy flowers on mediumheight plants in summer. A hybrid of species native to Europe and Asia.	Boltonia asteroides (false aster) Upright perennial with blue- green foliage; abundant white daisy flowers in late summer. Eurybia divericata (white wood aster) Small, bright white daisy flowers in late summer; thrives in part shade. Important food source for late-season pollinators.
Delphinium grandiflorum (Chinese larkspur) Blue flowers on tall spikes in midsummer.	Delphinium carolinianum (Carolina larkspur), D. exaltatum (tall larkspur) Spikes of showy blue flowers in midsummer.
Salvia hybrids (woodland or meadow sage) Spikes of blue, pink, or bicolored flowers on shorter plants in early summer.	Salvia azurea (prairie sage) Tall spikes of cerulean blue flowers attract scores of native pollinators all summer. Salvia farinacea (mealy-cup sage) Shorter perennial with spikes of blue or bicolor flowers all summer; fragrant leaves.
Nepeta spp. (catnip) Easy-to-grow shorter perennial with aromatic gray-green foliage and spikes of lavender flowers in early summer.	Scutellaria incana (downy skullcap) Adaptable perennial with spikes of blue-violet tubular flowers in summer; attracts hummingbirds, bees, and butterflies.
Rosa spp. (hybrid rose) Some hybrid roses have less fragrance and less nectar than the species. Flowers with dense petals restrict access to pollen.	Rosa carolina (pasture rose), R. virginiana (common wild rose) Fragrant pink single-petaled flowers in summer. Rose hips provide winter food for birds and animals.
Alcea rosea (hollyhock) An Asian native grown for its tall spikes of large, showy flowers. Reseeds readily and can escape cultivation.	Hibiscus moscheutos (hardy hibiscus) Tall woody perennial with large pink to white hollyhock-like flowers. Host plant to over 25 species of butterflies and moths.
Clematis paniculata (sweet autumn clematis) Tiny fragrant white flowers in late summer on vigorous, spreading vines. Invasive in many areas of the US.	Clematis virginiana (virgin's bower) Fast-growing vine with clusters of fragrant white flowers in summer followed by silky seed heads. Host plant for clematis clear-wing moth.
Ajuga reptans (bugleweed) Hardy groundcover forming carpet-like mat, can spread aggressively.	Phlox stolonifera (creeping phlox), P. subulata (moss phlox) Mat-forming groundcovers for shade or sun, respectively.
Paeonia spp. (peony) Medium shrub with large, showy flowers in late spring, sometimes fragrant.	Rosa carolina (pasture rose), R. virginiana (common wild rose) Fragrant pink single-petaled flowers in summer. Rose hips provide winter food for birds and animals.

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's rewilding project is a suburban yard about 1 acre in size. The lot is long and relatively narrow. When the owners bought the property 9 years ago, the entire property was lawn, with just a few trees. Today's view is very different!

The Projects

The front yard is about 50 feet deep from the house to the street, with one red maple tree toward the middle. The homeowner started by creating a narrow strip around the tree planted with oak leaf hydrangea (*H. quercifolia*) and Salvia. Last year she expanded this bed using cardboard topped with wood chips.



Since the area is dry, she planted *Asclepias* and *Monarda*. Because maples are shallow rooted, digging holes even outside the drip line was challenging. Her solution was to use plugs and 4" pots, and cut small planting holes right through the cardboard.



The finished bed, 3 months later.

In the back yard, the plan is to slowly decrease the amount of lawn by adding beds and merging them into larger planted areas. The owner started a meadow by solarizing a 25'x25' area using plastic sheeting weighted down with rocks. The area was covered for 6 weeks, exposed for 2 weeks to allow the remaining weed seeds to germinate, then recovered for another 6 weeks. The area was uncovered for the last time in November but not sown with a meadow mix until January.

The owner observed that she probably mowed the area too low the first year, which allowed some nonnative grass, plantain, and dandelions to sprout. By the second summer, milkweed and asters started to appear.

A second meadow area was started using a combination of plugs -- golden alexander (*Zizia aptera*), swamp milkweed (*Asclepias incarnata*), queen of the prairie (*Filipendula rubra*) oxeye sunflower (*Helianthus helianthoides*), and Joe pye weed (*Eutrochium* spp) -- and potted shrubs -- pussy willow (Salix discolor), red twig dogwood (*Cornus sericea*), American plum (*Prunus americanca*), golden currant (*Ribes aureum*), and common ninebark (*Physocarpus opulifolius*).



During heavy rains, water runs down both sides of the back yard. The owner created bioswales in these two areas to collect and retain water, using plants that thrive in wet soil. Instead of removing the existing turf grass, she created small beds of plantings, then connected these beds by covering the turf grass areas with cardboard and cutting planting holes where perennial plugs and shrubs would be planted. The cardboard was then covered with leaves rescued from the curb in the fall.



Diary of a Rewilder, continued from page 9



The finished bed was edged with discarded fence railings to keep the leaves in place through the winter. Using plants that are at different stages of maturity (plugs vs pots) can improve the impact of the design. Larger potted specimens can provide some immediate color and structure. Plants that are intended as fillers or ground covers can be planted as plugs because they will grow and spread relatively quickly.

An important part of this gardener's overall plan is creating areas for sitting and enjoying the view. An area in the back yard offers a view of beautyberry (Callicarpa americana) under a maple tree, with Jacobs ladder (Polemonium reptans) and columbine (Aquilegia canadensis) underneath.



A second seating area features a bed that includes *Phlox paniculata*, little bluestem (*Schizachyrium scoparium*), elephant's foot (*Elephantopus carolinianus*), striped maple (*Acer pennsylvanicum*), and bladdernut (*Staphylea trifolia*). *Clematis virginiana* climbs up a repurposed wooden ladder.





The latest project, above, is located in a shady area of the front yard. The owner started by digging out nonnative hydrangeas and hostas in the fall. The area was heavily mulched over the winter with rescued leaves and pine needles. In the spring, the owner planted striped maple (*Acer pennsylvanicum*), *Fothergilla*, inkberry (*Ilex glabra*), native azaleas, silverbells (*Halesia carolina*), woodland phlox (*P. divericata*), columbine (*Aquilegia canadensis*), violets, and blue wood sedge (*Carex flaccosperma*).



This is the first area planted according to a design, and the owner is excited to see how the plants will grow and interact. She is open-minded about what she plants -- if a plant is out-competed, or a native volunteers in an unexpected place, she is willing to let the plants sort it out and grow where they want to.



Diary of a Rewilder, continued from page 10

These gardeners are also honeybee keepers, so they make sure to choose plants that support pollinators. Both native and nonnative bees love mountain mint (*Pycnanthemum* spp), so they plant plenty of these easy-to-grow perennials. Beekeepers know that large swaths of pollinator plants tend to attract honeybees, while smaller patches of flowers will draw native bees but are not as attractive to honeybees.

Supporting native pollinators includes planting the native host plants that feed their larvae (caterpillars). These gardeners also make sure to plant for continuous, successional bloom throughout the season, from early spring through late fall. They are fans of golden fleece goldenrod (*Solidago sphacelata*), a compact perennial that thrives in full sun to light shade, tolerates drought, clay, and poor soils, is deer-resistant, and blooms from summer to fall, providing nectar for migrating pollinators. An-

other fall-blooming favorite is asters, including white wood aster (A. divericatus), heath aster (A. ericoides), and New York aster (A. nova-belgii).



Golden fleece goldenrod is compact, droughtresistant, and deer resistant, attracting skippers, sulphurs, and hairstreaks as well as monarchs.

Events in the Community and Beyond

- June 18 Designed for Nature Native Garden Tour, PA Native Plant Society, 9:30 a.m. noon.
- June 25 Phoenixville Summer Garden Tour, 11:00 a.m.- 3:00 p.m. Reserve on line.
- June 25 Native Plant Garden Tour, Abington Bird Town, 10:00 a.m. noon. Free.
- July 30 Bondsville Mill Park Guided Tour & picnic, 11 a.m. RSVP to wildonesofsepa@gmail.com

Educational Opportunities

- June 15 Instant Butterfly Garden, Mt Cuba Center, 10:30 a.m. noon, \$59.
- June 15 Healthy Habitats Contained, Redbud Native Plant Nursery, 5:00 p.m., free.
- June 18 Create a Bog Garden Planter, Edge of the Woods Nursery, 10:00 -11:00 a.m., \$95.
- June 18 <u>Invasive Species ID and Management</u>, Bowmans Hill Wildflower Preserve, 10:00 a.m. 1:00 p.m., members \$15, nonmembers \$20.
- June 20-26 Pollinator Week, coordinated by Pollinator Partnership.
- June 22 American Chestnut Orchards, Edge of the Woods Nursery, 1:00 -2:00 p.m., free.
- June 24 Monarchs & Milkweed for Kids, Bowmans Hill Wildflower Preserve, 10:30 a.m. noon, fees.
- June 25 Build a Backyard Bird Oasis, Mt Cuba Center, 10:00 a.m. noon, \$29.
- June 25 Native Alternatives to Invasive Ornamentals, Mt Cuba Center, 2:00 4:00 p.m., \$29.
- June 28 Monarch Research Review, Monarch Joint Venture, 2:00 p.m., free.
- June 29 Milkweed for Monarchs, Mt Cuba Center, 10:00 a.m. noon, \$29.
- July 14 Ecological Explorations: Pycnanthemum, Mt. Cuba Center, 10:00 a.m. noon, \$29.
- July 16 Planting for Specialist Pollinators, Mt. Cuba Center, 10:00 a.m. noon, \$29.
- July 20 Creating a Backyard Meadow Garden, Mt. Cuba Center, 10:00 a.m. noon, \$35.
- July 20 Instant Hummingbird Garden, Mt. Cuba Center, 10:00 a.m. noon, \$59.
- **July 30** <u>Knowing Native Plants: Meadow Magic</u>, Bowmans Hill Wildflower Preserve, 10:00 a.m. 1:00 p.m., in person \$30, virtual \$25.