



NATIVE PLANTS, NATURAL LANDSCAPES

SOUTHEASTERN PENNSYLVANIA CHAPTER

# June 2024 Newsletter

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## Grow Beyond No-Mow May

For the last several years, homeowners have been encouraged to stop mowing their lawns for the month of May to allow spring-flowering plants growing in the lawn to bloom, in order to benefit early-emerging pollinators. The goal of “No Mow May” was to provide food, habitat, and biodiversity for bees and other pollinators, and to reduce air pollution caused by gas-powered mowers and trimmers.

No-May May has been successful in encouraging homeowners to understand the importance of providing early-season resources for pollinators and rethinking whether a lawn is the best way to do that. However, research has shown that allowing your lawn and its attendant weeds to grow may not help pollinators as much as we think.

“No-Mow May” originated in the United Kingdom, where lawn inhabitants like henbit, speedwell, chickweed, and dandelion are natives that support honeybees, which are also native to Europe. In the U.S., most native bees emerge from hibernation much later than honeybees. Research has shown that our native early-emerging pollinators feed on the blossoms of spring-flowering trees such as cherry, birch, maple, and tulip poplar.

### Grass and Weeds Are Not Good Nutrition

Most lawns contain some clover (nonnative, but a source of nectar) and violets (native and important for early-emerging pollinators). These beneficial plants can be allowed to flower simply by mowing your lawn at 3” or higher.

Most lawns also include early-blooming nonnative “weeds” such as dandelions, bitter cress, ground ivy (a.k.a. creeping Charlie) and lesser celandine. These

common lawn weeds don’t provide an adequate food source for bees and other pollinators. Allowing these plants to bloom and set seed doesn’t really benefit pollinators and allows these weeds to spread into adjacent areas.

### Pernicious Weeds Should Be Controlled

Pollinator conservation is not about letting dandelions and clover run riot in your lawn. Some nonnative lawn “weeds” actually inhibit the growth of other plants. Chemicals in dandelion roots and leaves may suppress nearby plants, and dandelion pollen, when moved to other plants by pollinators’ visits, can reduce the seed set of other species.

A month may be too long to forego mowing. Instead, adapt No-Mow May to your local climate, and be aware of the emergence and spread of undesirable weed species.

### Manage Your Yard for Pollinators Instead

In an ideal world, lawns would be replaced with meadows and pocket prairies, sunny wildflower-rich habitats that support an abundance and diversity of native bees, butterflies, and other wildlife. But many homeowners want some lawn area for recreation and socializing. You can satisfy both these goals by planting a flower-filled lawn, avoiding the use of fertilizers and herbicides, raising the cutting height of your mower, and mowing less frequently. Less frequent mowing means you can forego watering your lawn, because longer grass helps protect soil from drought. It will also reduce emissions from gas-powered lawn equipment.

### Beyond No-Mow May

Move beyond No-Mow May to “Slow-Mow Summer,” because mowing less -- rather than not at all -- is the goal. In May, many bees come out of hi-

bernation and need flowers to feed themselves and their developing larvae. “No Mow May” encouraged gardeners to let spring flowers bloom in the lawn, to provide food for pollinators. However, pollinators need food all summer too. Some native bees don’t emerge from hibernation until summer, when self-heal (*Prunella vulgaris*), violets, and clover happily bloom in the lawn below mower height.

Lawns cover over 40 million acres of ground in the U.S. Two-thirds of this acreage is private lawns. Lawns that contain flowers have been shown to support significantly greater numbers of bee and butterfly species than all-grass lawns. Some studies indicate that mowing every 2 weeks all season long can significantly increase your yard’s bee population.

Lawns are highly managed spaces that require many inputs. Simply not managing your lawn for one month does not help pollinators all year and does not greatly reduce your maintenance inputs, especially when you consider the added effort to get your lawn back after a month of not mowing. To truly benefit pollinators, you can reduce the size of your lawn and replant those areas with native plants that will benefit pollinators year-round.

### **Natives That Can Co-Exist with Lawns**

In addition to white clover (not native to the U.S. but common in lawns) and violets, a few other natives will grow happily in your high-mowed lawn as long as you don’t use insecticides and herbicides.

Spring beauty (*Claytonia virginica*) is a Midwest native that blooms early and then disappears for the summer, so it’s a perfect addition to spring lawns. It prefers relatively moist soil and part shade.

Self-heal (*Prunella vulgaris* var. *lanceolata*) is in the mint family, so it’s predictably tough and adaptable. It blends happily with turf grass and is a host plant for the clouded sulphur butterfly.

Wild strawberry (*Fragaria virginiana*) spreads by runners to interweave with other natives among the turf grass. As a bonus, it has small, edible berries, if the birds don’t get them first. This is not the nonnative mock strawberry (*Potentilla indica*). Look carefully before you pick any berries; the berries of mock strawberry aren’t edible. You can distinguish the two by the color of the flowers -- our



native strawberry flowers are white (right); the nonnative has yellow flowers (above).



Dwarf cinquefoil (*Potentilla canadensis*) spreads by runners, similar to wild strawberry, but with five leaflets instead of three. Its flowers are yellow, and it tolerates drier soil than wild strawberry.

Self-heal (*Prunella vulgaris*, right) grows well in lawns with adequate moisture.



### **Keep Only the Lawn You Use**

Many lawns include areas that aren’t used for recreation, pets, or pathways. Here are some ideal places to reduce your lawn and plant natives instead:

- Next to the road where you don’t want the kids to play
- Around your mailbox
- Edges and corners
- Areas that stay soggy/muddy or are erosion-prone
- Areas under trees where it’s difficult to grow grass

*Traditional lawn care is a perpetual fight against biodiversity, a war conducted with mower blades and chemicals. All the numbers — gallons of water wasted, tons of pollution generated — tell us to just stop.*

### **Resources**

[Planting and Maintaining a Bee Lawn](#)

[No Mow May: A Gateway To Better Landscape Management for Bees](#)

[Lawn Replacement](#)

[The Best \(and Fastest\) Ways To Replace Your Lawn](#)



## Tree of the Month -- A Year of Oaks

Oaks are our most essential native tree, according to University of Delaware Professor of Entomology and Wildlife Ecology Doug Tallamy. The genus *Quercus* provides food for more caterpillar species than any other genus of plants in North America. Because so many native species rely on oaks for their survival, oaks have been dubbed one of the “keystone species” that play a pivotal role in the food chain.

Logging and land clearing for agriculture, homes, and commercial development have contributed to the loss of oaks in eastern forests. Diseases such as sudden oak death syndrome, bacterial leaf scorch, and oak wilt are also culprits in the decline of oaks.

Oaks native to Pennsylvania can be divided into two main groups: the red oaks (ten species), which have bristles at the end of their leaf tips or lobes and acorns that take two years to mature, and the white oaks (six species), which lack bristles on their leaf tips and have acorns that mature in one growing season. Some common red oak species include northern red, black, scarlet, and pin oaks. Common white oaks include white, chestnut, and swamp white oaks.

Different species of oak thrive in habitats ranging from dry soil to swamps. Many can grow to be 80-foot giants, but some oaks can also be pruned to stay small and adapt to smaller yards.

### Resources

*The Nature of Oaks*, D. Tallamy

*The Little Things That Run the World*, E.O. Wilson

## Northern Red Oak

Northern red oak (*Quercus rubra*) dominates the canopy in many Pennsylvania forests, from drier middle and upper slopes and ridgetops to mesic lower slopes and hollows. It is one of the fastest growing oaks and is easily transplanted, hardy in urban conditions, and long-lived.

The tree flowers in spring before or as the leaves emerge. Flowers are wind-pollinated, and acorns take two years to develop.

The leaves are 4” to 8” long and moderately lobed with pointed tips. They emerge rose colored in



spring (left) before changing to bright lime green and then to a leathery darker green (below). Fall leaf color ranges from dark red to the occasional bright red.

The bark of mature trees is dark, furrowed, and often laced with broad shiny strips (below).



Oak wilt disease was identified in southeastern Pennsylvania in 2021. It is caused by a fungus spread by insects. The infection spreads rapidly in members of the red oak group. Trees can die in a matter of weeks, and once a tree is infected, there is no treatment. In red oaks, oak wilt typically starts at the top or outer portions

of the crown and quickly moves downward. Leaves wilt and begin to turn brown from the tips and margins toward the midrib and base. Some will remain green but will take on a dull appearance. Intense defoliation accompanies wilting and discoloration.

Bacterial leaf scorch is another systemic disease affecting oaks as well as maples. It typically progresses slowly over several years. Environmental stressors such as drought can exacerbate the problem and speed the tree’s decline. The disease appears to affect primarily red and pin oaks but has also been identified in white oaks.

### Quick Facts -- Northern Red Oak

**Size** 75 to 100 feet tall x 70 feet wide

**Sun** full sun

**Soil** average well-drained soil; prefers acidic soil

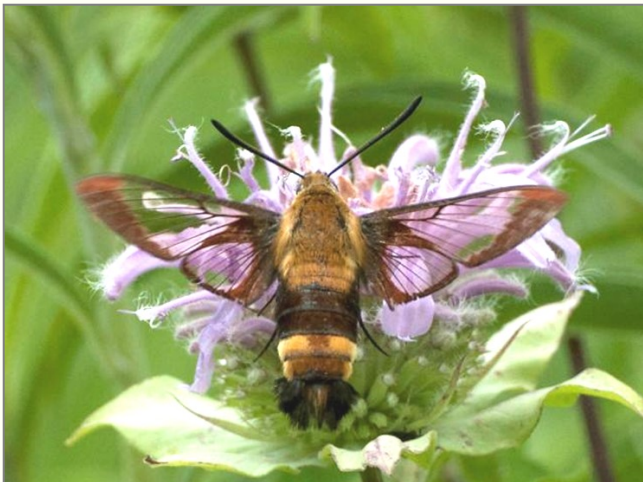
**Water** intolerant of drought

**Habitat Value** Oaks support hundreds of butterfly and moth species, including their caterpillars. Acorns are an important food source for birds and mammals.

## Creature Café - Clearwing Sphinx Moths

This summer you may see ruby-throated hummingbirds feeding at your monarda, but you might also see a smaller hummingbird look-alike, the clearwing sphinx moth. Two clearwings native to our area are the hummingbird clearwing and the snowberry clearwing. Only half the size of a hummingbird, these insects are members of the sphinx moth family, with heavy bodies and long front wings. Their wings mostly lack scales, except for a black or brown border, making the wings almost invisible when the moths fly.

Most sphinx moths are active at night, but clearwing moths feed during the day. Like hummingbirds, they hover while sipping nectar from flowers with long floral tubes, such as honeysuckle (*Lonicera* and *Diervilla*), *Phlox*, *Monarda* (below), *Liatis*, milkweed (*Asclepias*), and *Salvia*.



Planting these flowers isn't enough to ensure the survival of clearwing moths, though. To provide the necessary habitat for their caterpillars, you'll want to plant coralberry, snowberry, honeysuckle, hawthorn, highbush cranberry, plum, and cherry. Females lay eggs singly on the undersides of the leaves of their host plant.



Mature caterpillars are fairly large, usually green or yellow (but occasionally

reddish-brown) with a horn or tail on the last segment of their body. Caterpillars feed on the leaves of their host plant throughout the season then drop to the ground in fall, spin a cocoon, and overwinter in the fallen leaves that accumulate at the base of the plant. In warmer climates, there may be two generations. What better reason to forego fall "cleanup" and leave the leaves in place than to provide shelter for these beautiful pollinators!

Hummingbird clearwing moths have similar coloration to hummingbirds (olive green, scarlet, and cream), but in a different arrangement. The hummingbird clearwing (above) can be identified by its olive green back, dark red-brown belly band and wing edges, and tiny flared tail (on males).



The snowberry clearwing moth (left) is yellow and black, possibly mimicking a bumblebee.

A less common clearwing moth is the diervilla clearwing, whose larvae specialize on northern bush honeysuckle (*Diervilla lonicera*). Adults are similar in appearance to the snowberry clearwing. *Diervilla* are easy to grow, but several cultivars have been developed with different color foliage (e.g., Kodiak® Orange, Kodiak® Red, Kodiak® Black, and Nightglow™), which could affect their desirability as host plants for the diervilla clearwing.

If there's any doubt whether you're looking at a ruby-throated hummingbird or a hummingbird moth, look at the head -- moths have antennae, hummingbirds don't.

### Resources

[Restoring the Landscape with Native Plants](#)

[Snowberry Clearwing](#)

[Hummingbird Clearwing](#)



## Invasive Species Alert -- Mugwort

Just when you're thinking the spring weedfest is finally over -- lesser celandine has faded, chickweed and bittercress have either been pulled or gone to seed -- here come the summer weeds.

Common mugwort, *Artemisia vulgaris*, is an aggressive invasive perennial that starts to appear in May and if left unchecked can form large clumps up to 5 feet tall. Like many weeds, it colonizes disturbed areas like roadsides, woods edges, and garden beds.

### Identification

Once you've pulled mugwort, you'll always recognize the smell, a pungent, darker version of chrysanthemum leaves. The plants are easy to spot, with their deeply lobed leaves and whitish, furry undersides and stems.



Although mugwort does spread by seed, cutting off the seed heads isn't enough to deter this persistent plant. It spreads mainly via aggressive underground rhizomes that

form large, spreading patches and break off when pulled, ensuring that new plants can sprout from rhizome fragments left in the ground. Rhizomes can creep for several feet under walkways and brick edging to emerge on the other side.

Stands of mugwort displace native species and can delay or disrupt succession in natural ecosystems. Mugwort produces several allelochemicals that negatively impact soil chemistry and organisms, and deter other species from growing. Decaying mugwort foliage has been shown to inhibit the growth of red clover.

### Control

The first line of defense is hand-pulling young plants in spring and early summer, before they form extensive rhizomes. Even if you don't get all the root, you will set the plant back. Repeated pulling will keep the population in check and prevent establishment of new colonies. Scouting and prompt removal are essential to keep an area free of mugwort once mature plants have been removed.

Removal of mature plants is labor-intensive, but manual removal is still the best option. For solid patches of mugwort, I've used a three-step process: mow, dig, and replant.

Start in the spring or early summer by mowing the area weekly. This will set the plants back by reducing the amount of energy they store in their roots, and will also prevent seed formation.

By fall, you can start hand-digging the area. Sift through the soil to remove any rhizome pieces you see. Don't add the mugwort plants or rhizomes to your regular compost because of the allelopathic chemicals in the plant.

Patches of solid mugwort can also be smothered using cardboard covered with wood chips. Be sure to overlap cardboard edges to prevent escapes.

Whichever method you use, when the area is cleared, plant heavily with all the native plants you've been growing on from your winter-sown seeds. By fall, they're ready to plant and should settle in well. Mark each one with a stick if desired.

Next spring, patrol the area and remove any sprouting mugwort right away. As your native plants fill in, they should crowd out the occasional mugwort that resprouts from leftover rhizomes. Continue to pull any mugwort plants that pop up. By summer you should see very few of them.

Natives that will happily help crowd out mugwort include wild bergamot (*Monarda fistulosa*), New York ironweed (*Vernonia novaboracensis*), blue mist flower (*Conoclinium coelestinum*), ostrich fern (*Matteuccia struthiopteris*) in shadier spots, *Rudbeckias*, common milkweed (*Asclepias syriaca*) in wetter locations), heath aster (*Symphiotrichum ericoides*), wingstem (*Verbesina alternifolia*) and white snakeroot (*Ageratina altissima*). Keep an eye on the last two, as they are prolific colonizers in their own right.

## Native Seed Starting --Potting Up

If you sowed native seeds this winter, you may be looking at a lot of 4" pots or milk jugs crowded with little green seedlings and thinking, now what?



If you just leave your seedlings in their original pots or plastic jugs all summer, you likely won't be happy with the results -- and neither will the plants! Most of the seeds you've sown are perennials, which act differently

from the annual garden plants (tomatoes, squash, zinnias) you may be used to.

For annuals, the guideline for transplanting is when seedlings have two sets of true leaves. Not all perennials develop that quickly, so if you're waiting to see two sets of true leaves before you transplant your natives, you may wait a long time, and the roots can become overcrowded and make separation more difficult.

Native plants put more growth into their roots initially than annuals do. If you turn one of your little pots over, you might see roots popping out the bottom. That's a sign that the plants need to be potted up - they need more room to develop. They don't necessarily need to be divided at this stage, though, particularly if not all the seedlings have true leaves yet. Like all seeds, natives don't necessarily sprout uniformly.

To give these seedlings more time to develop, you can transfer the entire pot of seedlings to a larger container. Fill a larger diameter pot halfway with potting soil and make a well in the center. Hold the pot of seedlings upside down over your palm, tap the entire contents out carefully so it doesn't separate, and flip the ball of seedlings into the soil well of the new pot. Fill in with more soil until the new soil is level with the top of the seedling ball. Water lightly and keep in the shade for few days while the seedlings adjust.

Your potting soil should include compost, to provide microorganisms and nutrients. Coir fiber is a good soil lightener, and screenings (grit) provide good drainage.

Another way to pot up seedlings that are crowded is to turn out the seedling ball, separate it into quarters, and put up each section into a larger pot. This will give the seedlings more room to develop. If a pot isn't crowded with seedlings, it can be left to grow on for a few more weeks.

Faster-growing meadow and wetland plants (for example, milkweeds, asters, coneflowers, bee balm, bellflowers, goldenrods, lobelia, penstemon, lupines, and ironweed) become crowded in their seedling pots pretty quickly once they've sprouted. If these plants start drying out frequently, they should be potted up into larger containers.

If the majority of seedlings in a pot have two or more sets of true leaves, they can be divided and potted up. At this stage, plug trays can be useful if you have them. Use trays with a plug depth of at least 3-1/2". Shallower trays dry out too quickly.

Put a small rock at the bottom of each cell and cover with a spoonful of soil. Turn the seedlings out onto a tray and carefully separate them into individual plants. Hold 1 to 3 seedlings by their leaves (not their stems!) over an empty cell and carefully spoon soil around the roots until it reaches the seedling's first set of leaves (the cotyledon). Don't bury the stem above this set of leaves! Tap the tray on the ground when you finish each row, to settle the soil. Water the seedlings once the tray is fully planted, and keep them in the shade for a few days.

Spring ephemerals go dormant in the summer. If their leaves start to turn yellow and disappear, it doesn't mean they've died. Keep the pots from drying out over the summer, overwinter them with the rest of your winter-sown seeds, and next spring they will reappear as second-year plants. If the pot seems more crowded the second year, transplant the seedling ball to a larger pot and overwinter it again. Some spring ephemerals require several years before the plants are mature enough to plant out in the landscape. When you notice seedlings of spring ephemerals popping up in your garden, you might not realize that they've already been growing there, tiny and unnoticed, for several years.

Continue up-potting your seedlings as they outgrow their larger pots. By fall, they should be ready to plant out. Plug-planted seedlings are ready to transplant to the garden when you see roots popping through the hole at the base of the plug.



## Pollinator Week

June 17-23 is [Pollinator Week](#), an annual celebration of the vital role played by pollinators in our ecosystems, economies, and agriculture. It was started in recognition of the urgent issue of declining pollinator populations.

Birds, bats, bees, butterflies, beetles, and other small mammals that pollinate plants are responsible for bringing us one out of every three bites of food. They also sustain our ecosystems; without pollinators, many plants would be unable to reproduce. Pollinators travel from plant to plant carrying pollen on their bodies in a vital interaction that allows the transfer of genetic material that is critical to the reproductive system of over 75% of flowering plants worldwide.

In addition to helping to pollinate more than 1200 different food crops, pollinators support healthy ecosystems that clean the air, stabilize soils, protect from severe weather, and support other wildlife. This nearly invisible ecosystem service is a resource that requires our attention and support.

Many pollinator populations are in decline. Loss of feeding and nesting habitats, the misuse and overuse of chemicals, disease, and changes in climate patterns are all contributing to shrinking and shifting pollinator populations.

Three decades of research shows that native pollinators prefer native plants, and that adding natural habitat to farm fields and residential, commercial,

and industrial properties is effective in sustaining pollinator populations. Farms that include natural habitat see an increase their crop yield due to higher pollinator populations. Planting native plants on highway rights of way, farms, schools, home gardens, corporate landscapes, and public spaces will make a difference.

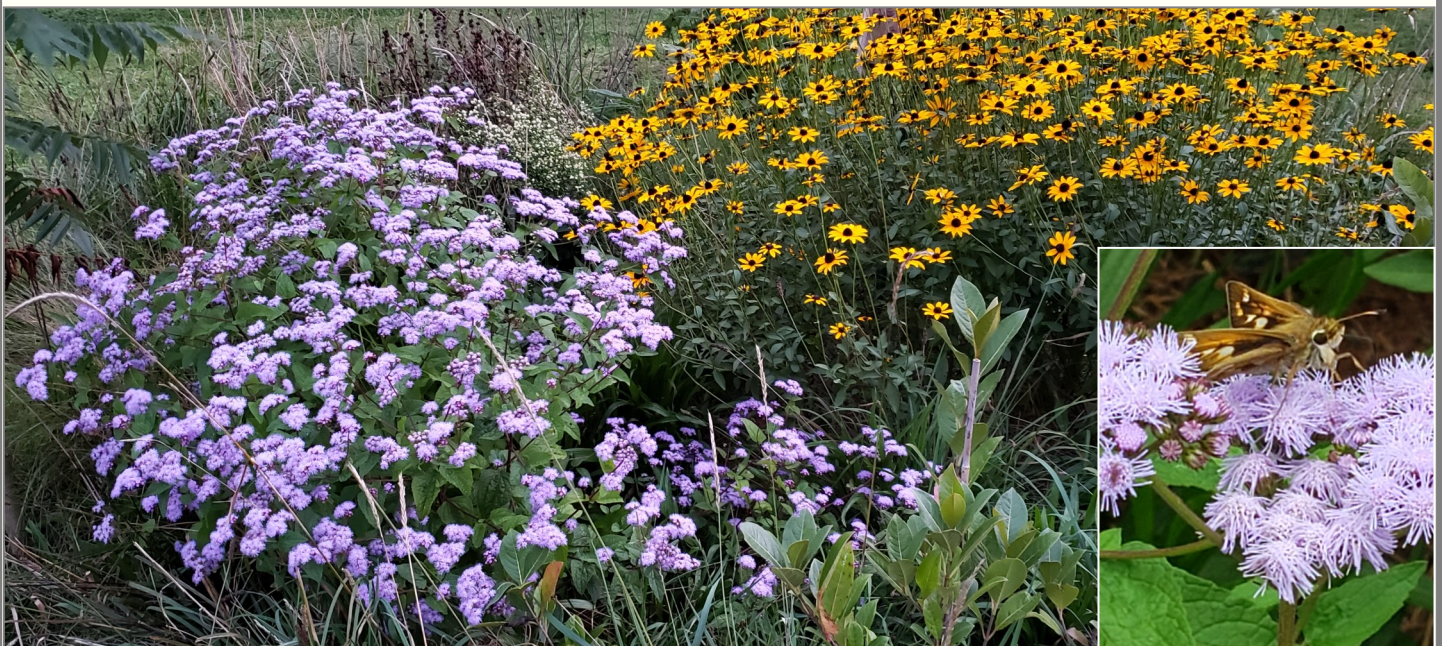
### Container Gardening for Pollinators

Just one pot on the porch or balcony can help support pollinators. Apart from a few species with deep taproots, many native plants will thrive in containers. Native perennials will come back every year with minimal effort and no extra cost.

Choose containers at least 16" deep to allow your natives to build strong root systems. Combine plants with different bloom times and different heights. The classic thriller-filler-spiller design can work with natives too. Little bluestem (*Schizachyrium scoparium*), butterfly milkweed (*Asclepias tuberosa*), and prostrate heath aster (*Symphotrichum ericoides* var. *prostratum*) make a stunning and pollinator-friendly combination.

You don't need to fertilize a container of native plants, but it will need water frequently because plants in containers dry out faster than those in the ground. A compost-based potting soil with grit or sand added to improve draining should work well.

Containers should be protected over the winter with several inches of fallen leaves. If you overwinter them in an unheated indoor space, don't forget to water them a bit every couple of weeks.





## Plant It and They Will Come!

Two years ago I came home from the nursery with six little pots of *Antennaria plantaginifolia*, commonly known as pussytoes. They grow well in dry, rocky soil and a sunny exposure. I had just built a new planting bed next to my slate patio, on a slight slope facing south. My soil is nothing if not poor and rocky, so I added screenings (grit) to improve the drainage.

The next season, those tiny plants had spread to form a solid 2'x2' groundcover of attractive fuzzy gray-green leaves. In early May, tight clusters of small white flowers popped up on 10" stems. No sooner had they bloomed than a small orange butterfly started to visit, but it flew so quickly I was never able to identify it.



A month later, some of the leaves appeared to be folded over and wrapped up with white silk. *Antennaria* is a host plant for the American painted lady butterfly. The larvae construct silk tents to hide from predators and feed at night.



I hadn't seen these butterflies in my garden before, but they showed up as soon as I planted their larval host plant. I'm looking forward to seeing the adults this summer!

## Educational Opportunities

- June 7** [Sensational Summer Container](#). Mt Cuba Center, 3120 Barley Mill Rd, Hockessin, DE, 10:00 a.m.
- June 8** [Knowing Native Plants: Focus on Ferns](#). Bowman's Hill Wildflower Preserve, webinar or on-site, 1:00 p.m.
- June 13, 20, 27** [Ecosystems and Plant Communities](#). Mt Cuba Center, 3120 Barley Mill Rd, Hockessin, DE, 10:00 a.m.
- June 14** [Amphibians & Reptiles: The Who, What, and Where of the PA Herpetology Community](#). Brandywine Conservancy, U.S. Rte 1, Chadds Ford, PA, 6:30 p.m.
- June 15** [Sun-Loving Garden Perennials](#). Mt Cuba Center, 3120 Barley Mill Rd, Hockessin, DE, 10:00 a.m.
- June 15** [Great Native Plants for Difficult Sites](#). Mt Cuba Center, 3120 Barley Mill Rd, Hockessin, DE, 1:00 p.m.
- June 20** [Changing Perspectives: From Nuisance Yard to Wildlife Habitat](#). Mt Cuba Center, 3120 Barley Mill Rd, Hockessin, DE, 6:00 p.m.
- June 22** [Knowing Native Plants: Invasive Species ID and Management](#). Bowman's Hill Wildflower Preserve, webinar or on-site, 1635 River Rd, New Hope PA, 10:30 a.m.
- June 22** [Instant Butterfly Garden](#). Mt Cuba Center, 3120 Barley Mill Rd, Hockessin, DE, 1:00 p.m.
- June 28** [Fourth Fridays for Families: Monarchs and Milkweed](#). Bowman's Hill Wildflower Preserve, 1635 River Rd, New Hope PA, 10:30 a.m.
- June 28** [Nature at Night: Focus on Fireflies](#). Bowman's Hill Wildflower Preserve, 1635 River Rd, New Hope PA, 7:30 p.m.
- June 29** [Milkweed and Monarchs](#). Mt Cuba Center, 3120 Barley Mill Rd, Hockessin, DE, 10:00 a.m.
- July 6** [Demystifying Toxic Plants Tour](#). Mt Cuba Center, 3120 Barley Mill Rd, Hockessin, DE, 11:00 a.m.
- July 10** [Milkweed and Monarchs](#). Mt Cuba Center, 3120 Barley Mill Rd, Hockessin, DE, 10:00 a.m.
- July 12** [Dragonflies: Aerial Acrobats](#). Mt Cuba Center, 3120 Barley Mill Rd, Hockessin, DE, 1:00 p.m.
- July 14** [Water Gardens Big and Small](#). Mt Cuba Center, 3120 Barley Mill Rd, Hockessin, DE, 1:00 p.m.
- July 19** [Native Alternatives to Invasive Ornamentals](#). Mt Cuba Center, 3120 Barley Mill Rd, Hockessin, DE, 1:00 p.m.
- July 26** [Fourth Fridays for Families: Insect Safari](#). Bowman's Hill Wildflower Preserve, 1635 River Rd, New Hope PA, 10:30 a.m.
- July 27** [Knowing Native Plants: Meadow Magic](#). Bowman's Hill Wildflower Preserve, webinar, 10:00 a.m.