



NATIVE PLANTS, NATURAL LANDSCAPES

SOUTHEASTERN PENNSYLVANIA CHAPTER

March 2025 Newsletter

sepa.wildones.org

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Spring Garden Tasks

Live Staking

Would you like to create more plants from shrubs you have in your yard? You might be able to propagate them using a technique called live staking.

A live stake is simply a dormant stem cut from a woody plant and planted in the ground. Variations include live-staking in pots and in water.

Late February to mid-March is the ideal time to start live stakes in our area. You want to cut stakes after the ground has thawed, but while plants are still dormant and focusing on root growth, not on leaf development.

Live stakes require consistent moisture to establish roots after being planted. Stream banks and rain gardens are two great locations for live stakes. If planting in drier areas, access to water will be necessary.

Here's how to cut and plant your live stakes:

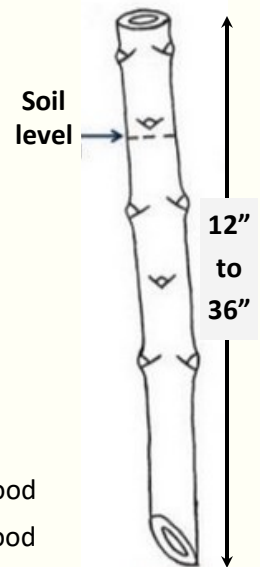
- Cut stakes from stems that are 1/2" to 2" thick and at least 2 feet tall. Each stake should have 3 to 5 leaf nodes. Cut the bottom of the stake at an angle, just below a leaf node. Cut the top of the stake straight across, just above a node.
- Plan to plant your stakes right after cutting. If you can't plant right away, the stakes can be stored for as long as 2 weeks outdoors in a bucket of cool water, angled end down.
- To plant a stake, push it into the ground, angled end down, so that 2/3 of the stake is in the ground. Use a length of rebar or a long drill bit to make a pilot hole. The pilot hole should be slightly smaller in diameter than the stake.

- Keep stakes watered to prevent drying out. Painting the top end of the stake can help.

Live stakes can also be started in water or in pots. Pot up stakes started in water once roots have formed. Keep potted live stakes watered all summer, and plant them out in the fall when the weather is cooler, after fall rains have started.

Best natives to live stake:

buttonbush	silky dogwood
red osier dogwood	gray dogwood
sandbar willow	pussy willow
silky willow	red elderberry
ninebark	nannyberry viburnum
spicebush	arrowwood viburnum
smooth alder	speckled alder



WO SEPA 2025 CALENDAR

Apr. 3 [Backyard Wilderness](#). Film screening & panel discussion, Musser Auditorium, Penn State Valley Conference Center, 30 East Swedesford Rd, Malvern, PA, 7:00 p.m.

Apr. 25 Meet-up, Jenkins Arboretum, 631 Berwyn Baptist Rd, Devon, PA, time TBA

May 3 Garden tour in Perkasio, Bucks County

June __ TBA

July __ Tour of Bondsville Mill Park

Sept. 18 Garden tour in Pottstown, Chester County

Oct. 16 National Wild Ones webinar TBA

Nov. 20 Chapter elections; webinar TBA

Leave Stems for Pollinators

When and how we tidy up spent stems can make the difference between habitat creation and habitat destruction for native stem-nesting bees and wasps. Perennial stems provide nesting and overwintering habitat for several species of solitary native bees. Some native bees nest in stems that are naturally hollow. Others tunnel into the pith of previously cut or damaged stems to create nesting spaces. Bees do not generally use healthy, living stems, so leaving spent stems for them is important for their survival.

A study conducted by North Carolina State Extension found that the previous year's spent stems were used by solitary native bees during the following year. Stems were not occupied during their first winter, because they had been live stems until they were winter-killed. When these stems were left standing through the following growing season, they became available for nest sites.

Starting in spring, native bees seek out stems that have broken off during the winter, making them accessible for nest building. Trimming spent stems to a height of 12" to 24" over the winter creates ideal nesting sites for bees during the following season.

If you choose to trim your stems lower than 12" because they're draping over the sidewalk, you can bundle the trimmings together with string and leave them standing upright in a sheltered spot -- standing among a shrub's lower branches, or propped up in an out-of-the-way place -- so they can be used by bees during the coming year.

Some of the plants whose stems provided good nesting habitat during this research project include:

- rue anemone
- dogbane
- purple coneflower
- tall boneset
- sunflower
- rose mallow
- hydrangea
- blazing star
- bee balm
- wild rose
- cutleaf coneflower
- blackberry/raspberry
- elderberry
- sassafras
- aromatic aster
- rough goldenrod
- ironweed

Don't Trash Butterflies

Most butterflies and moths overwinter as eggs, caterpillars, or chrysalides. Right now, these overwintering insects are still hiding in our yards, often in areas that we think we should "neaten up" in spring.

The first warm weather of the season might draw us out into the yard, but most pollinators aren't ready to join us yet. Even though we'll see bumble bees and ground-nesting bees emerge as trees and shrubs start to flower, these insects still need cover during cold nights and heavy spring rains. Mining bees, mason bees, carpenter bees, and bumble bees could be out by early April, but other species like sweat bees are still waiting for the warmer days in May.

As spring arrives, last year's fallen leaves are still providing protection for both plants and invertebrates. Butterflies in their chrysalides still cling to dried stems and twigs, waiting for the right time to emerge as adults. If we rake up fallen leaves, cut down spent stems, and throw them in the trash, we're destroying overwintering insects before they've had a chance to become adult butterflies and moths. Even composting this material packs it down and could smother insects before they can emerge.

Fallen leaves on the lawn can be raked up and spread out in the woods or on beds that are planted with natives. As the native plants emerge, you can move the top layer of fallen leaves off the emerging plants, but don't uncover them completely, because they still need protection from the weather.

Gardening in harmony with nature means a lot less spring cleanup, because fallen leaves and dried stalks aren't trash that needs to be removed; they're habitat that needs to be protected.

Resources

[Butterflies in Snow](#)

[Don't Spring into Garden Cleanup Too Soon!](#)

[Garden Cleanup for Pollinators](#)

Keystone Tree of the Month

A few genera (family groups) of native trees and shrubs have been shown to support a very high number of species of native insects by providing food and habitat. These keystone species form the backbone of a local ecosystem and are critical to maintaining the diversity and stability of that ecosystem.

Keystone plants are not always the most abundant species in the ecosystem, but their existence has a big impact on the local food web. One [study](#) found that 90 percent of all caterpillar diversity is centered around just 14 percent of plant species.

Trees are major components of the list of keystone plants, in part simply because a tree has more leaves and flowers than herbaceous plants or grasses occupying the same ground. Another contribution is the amount of pollen and new leaves a tree provides early in the season, when native insects are emerging.

One native oak tree can support the caterpillars over 500 species of butterflies and moths. Those caterpillars are a critical food source for over 96 percent of our native songbirds. For example, a pair of Carolina chickadees needs 6,000 to 9,000 caterpillars to successfully raise just one brood of young.

By planting just one keystone tree, you can help restore native biodiversity.

Resources

[National Wildlife Federation Native Plant Finder](#)

[Keystone Trees & Shrubs](#)

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

Red Maple, *Acer rubrum*

Red maple is a large, fast-growing tree, topping out at 60 to 90 feet. Red maple, also called swamp maple, is a wetland species native to the eastern deciduous forest. However, due to its adaptable root system, it can tolerate a wide range of conditions, from sunny to shady, dry to wet soil, and high to low elevation.

Red maple is one of the most abundant and widespread trees in eastern North America. It is an early

successional species that germinates quickly in open areas following fires or hurricanes. With its rapid growth habit and adaptability to a range of conditions, red maple can become a dominant species. Its spread is kept in check by moose, deer, and rabbits, which enjoy red maples as a favorite treat. Red maple is relatively short-lived at 80 to 100 years and is eventually succeeded by slower growing but longer lived native trees.



Photo: [directnativeplants.com](#)

Maples' early bloom time makes them an essential nectar and pollen source for pollinators as they emerge in the spring. The flowers (below), new leaves, and seeds of red maple are all tinged with red. Red maple is also known for its brilliant scarlet fall foliage.

Red maple seeds are a staple food supply for many birds and mammals.



Photo: [capecod-nativeplants.org](#)

Quick Facts -- Red Maple

Size 60-90 ft tall

Sun Full sun to part shade

Soil Prefers deep, moist, acidic soil but widely adaptable

Water Grows in swamps and on dry ridges

Habitat Value Maples are a keystone species that serves as a host plant for the larvae of over

Matrix Planting

Matrix planting refers to a method of designing and planting that originated in Germany after World War II and is used today by many native plant designers. The goal of matrix planting is to reflect the way native plants grow together in the wild.

Matrix planting can also address a common complaint of gardeners that their tall plants often flop. Lack of support from neighboring plants is one reason for this behavior. Soil that's too rich for natives is another possibility. Interplanting grasses and sedges with forbs helps support taller plants, because the grasses' extensive root structure interweaves with the roots of the forbs to provide additional support.

Matrix planting takes advantage of every square foot of space. Increased plant density -- two to three plants per square foot of ground -- helps prevent weeds from getting started and can provide continuous bloom throughout the season, to support the entire life cycle of pollinators.

Using groundcover plants and spacing plants closer together removes the need to mulch every year. Denser plantings help insects feed more efficiently by minimizing their need to expend energy searching for food.

The groundcover layer, which can be up to 70% of the design, creates an interwoven matrix that encourages roots to grow deeply, increasing each plant's ability to access water and nutrients. Many sedges and grasses are ideal groundcover plants.

Plugs make dense planting more affordable and are easier to plant in quantity than individual potted plants. Avoid annual mulching, which keeps plants separated and prevents them from spreading and self-sowing freely, and don't use soil enhancements, which encourage fast but weak growth.

Design Tips

Successful matrix planting incorporates the concept of plant sociability. Some species naturally grow in discrete clumps that spread slowly. Other species spread easily to form large colonies. Planting aggressive spreaders together with slow growers will result in the spreaders crowding out the rest and decreasing the diversity of the planting.

Plants can be grouped for sociability into four categories.

Level 1 plants grow alone or in small clumps, e.g. *Allium cernuum* and wreath goldenrod

Level 2 plants form small masses or groups, e.g. *Penstemons* and some sedges

Level 3 plants spread to form multiple clumps, e.g. anise hyssop and blue mist flower

Level 4 plants spread to create large drifts or colonies and can take over smaller landscapes, e.g. grass-leaved goldenrod and common milkweed

Plants with the same sociability level are likely to grow well together. The slow growers will not out-compete each other, and the aggressive growers will compete at an equal level.

For a successful matrix planting, group different species that have compatible sociability levels. In small areas, stick with plants in levels 1 and 2. For larger areas, you can add plants in levels 3 and 4. Keep level 1 plants well separated from level 4 plants, so the slower growers aren't overwhelmed.

How can you determine a plant's sociability level? There isn't a list, and in any case plants can behave differently depending on the growing conditions. An aggressive spreader in sun with adequate moisture can behave more tamely in a dry, shady location.. Study plant descriptions from different sources, and observe native plants on your own property and in other gardens.

You can also use environmental conditions to your advantage. If you want to incorporate an aggressive spreader into your design, choose a plant that's outside its preferred growing conditions. A level 4 plant that prefers sun and moisture will be less aggressive in a dry shady location. However, instead of trying to fit a plant into growing conditions that aren't ideal, focus on plants that have evolved in your site's growing conditions, as they will be the most likely to succeed. The goal is to plant densely to support pollinators. Matrix planting is one way to accomplish this.

Resources

[Matrix Landscape Design with Benjamin Vogt](#)

[Modular Matrix Design](#)

[How To Use Matrix Planting in Your Garden Designs](#)

The Importance of Native Planting on Private Land

From a [webinar](#) by Professor Doug Tallamy

"It is necessary to save half the Earth for nature in order for all life to survive." [Half-Earth](#), E.O. Wilson, 2016

Food production already claims half of Earth's land area. Residential, commercial, and industrial development consumes the other half. There is no third half to reserve for nature. The solution -- change the assumption that humans and nature cannot coexist. Not only is living with nature an option, it's the only viable option we have.

Animals are mobile -- amphibians travel each year between woodlands and ponds or streams, and large mammals like bears, elk, wolves, and panthers need hundreds of acres of connected habitat to find adequate food and shelter. Migratory birds and insects are the most mobile of all, traveling thousands of miles each year between their summer breeding area and wintering grounds, and they need to be able to find food and shelter along the way.

National parks constitute just 3.6 percent of land in the U.S. This is a small area compared to the 50 percent needed to sustain all life on Earth.

Fragmentation is an additional problem. Large areas of habitat have been reduced by development to small, isolated remnants. Plants and animals that live in isolated habitats are more subject to disease and inbreeding that threaten their survival.

No matter how valuable the habitat is on preserved land and nature reserves, it's not effective if animals can't access that habitat due to highways and other human development. Fragmentation of habitat is one issue we can address by extending conservation work onto private land.

The solution to fragmentation is to connect individual pieces of habitat. Originally these connections were envisioned as corridors -- narrow pathways of protected land that would connect large areas of preserved habitat. We can do better than that. We can rebuild viable habitat between larger preserved areas, providing wildlife with more total area in which to thrive.

Humans own the areas that can connect larger habitats -- they are our homes, schools, workplaces, and places of worship. We need to practice conservation where we live, work, and play. We must develop strategies that allow nature to thrive in human-dominated landscapes.

"We cannot make the world uninhabitable for other forms of life and have it habitable for ourselves."

Edwin Way Teale

A New Perspective on Property Rights

What happens on our property does NOT stay on our property, because every piece of property is part of a local ecosystem. What each property owner does on their property affects the entire ecosystem.

The amount of lawn on a property will determine whether rain infiltrates or leaves as stormwater runoff, whether fertilizers and pesticides wash into nearby streams; and how much carbon is added to the atmosphere by gas-powered lawn equipment. Our plant choices determine how many resources we're providing for pollinators, how much carbon is being sequestered, and ultimately how much life Earth can sustain.

Grassroots Solution to the Biodiversity Crisis

Because so much land is in private ownership, these property owners are now the hope and future of conservation.

More than 75 percent of the lower 48 states and 85 percent of land east of the Mississippi River is privately owned. These private property owners are the future of resource conservation.

An easy way to restore native habitat on private property is to reduce the amount of lawn. In the U.S, lawn now consumes over 44 million acres, yet it provides none of the ecological services needed to reduce flooding, improve water quality, and sustain native populations.

Nature isn't optional, and we are all responsible for sustaining it. Our properties need to support food webs, sequester carbon, clean and manage water, and support pollinators. Native plants accomplish all these goals.

Resources

[Homegrown National Park](#)

[RewildingEarth](#)

Easy Ways To Shrink Your Lawn

Shrinking your lawn might be the simplest way to provide important native habitat on your property, but what's the best way to get it done?

If converting some of your lawn to native plants seems overwhelming, here are several strategies for minimizing lawn.

Break your goal into manageable pieces. If you want to convert half your lawn to native plants, start with the low-hanging fruit -- the edges. Almost everyone has areas of their yard that are already planted with something besides turf grass. Foundation plantings next to a house or fence are one example. The plants are probably typical low-growing ornamental shrubs like azaleas, juniper, and Japanese holly, all well mulched with triple-ground shredded mulch.

If these shrubs haven't been well maintained or don't suit your taste, take the opportunity to dig them out and replace them with attractive native shrubs like winterberry holly (*Ilex verticillata*), witch alder (*Fothergilla*), spicebush (*Lindera benzoin*), summersweet (*Clethra*), and sweetspire (*Itea virginica*).



Non-native hydrangeas planted in a narrow row against a fence (above) were replaced with a mix of native shrubs, evergreens, and groundcover plants (below). The owner took the opportunity to expand the bed into the front lawn, reducing turf grass and providing space for more native plants.



If you like the shrubs you have now, it's not necessary to remove them -- just plant around them.

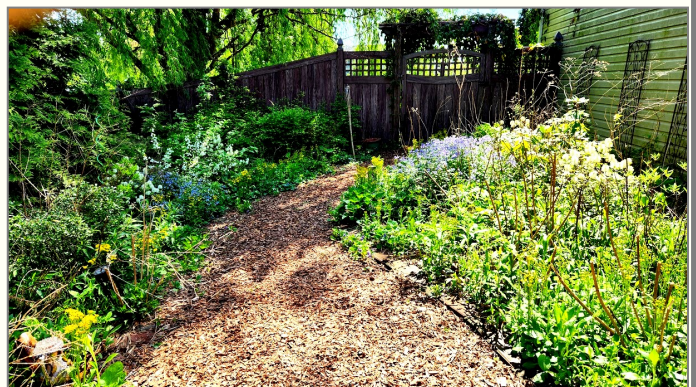
Most foundation plantings, like the hydrangeas against the fence, are islands surrounded by mulch that must be replenished every year. When you plant natives, you can space them much closer together. The plants will cover the ground and remove the need to re-apply mulch every year. The native plants shown in the photo at bottom left were mulched with wood chips their first year, to keep weeds from sprouting as a result of digging up the lawn. The plants have spread to cover the ground, and mulching is no longer needed.

Another way to remove lawn is to dig it up and replace it with beds of native plants.

This homeowner inherited a patch of turf grass that was hard to mow because of the slope, and a row of hostas planted against the house (below).



She rebuilt the path as a gentle curve, covered it with cedar mulch and edged it with pavers, then planted native shrubs, perennials, and grasses on both sides (below).



Resources

[Homegrown National Park](#)

[RewildingEarth](#)

Invasive Species -- Callery Pear

Native to Asia, Callery pear (*Pyrus calleryana*) was introduced as an ornamental tree in the early 1900s. The small to medium-sized tree has a compact, symmetrical, pyramidal or columnar shape that becomes oval with age.

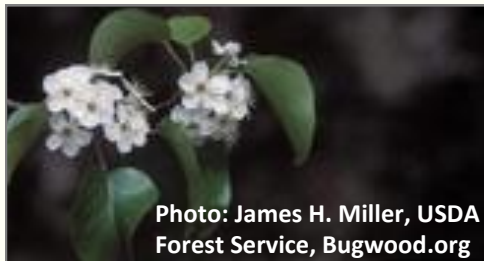
Identification

The leaves are alternate, 2: to 3" long, and shiny dark green with wavy, slightly toothed margins.



Abundant clusters of small 5-petaled unpleasant-smelling white flowers (below) appear in early spring before the leaves.

The inedible fruits resemble tiny, hard apples, ½" in diameter and greenish yellow flecked with whitish spots. After several freezes they soften, darken, wrinkle, and become palatable to birds.



Look-Alikes

Several other trees bloom in spring with white, 5-petaled flowers. The petals of the native serviceberry are brighter white, strap-shaped, and wavy, with a space between them (not rounded and close together). American plum flowers have stamens (threadlike stalks in the center of the flower) that are longer than the petals.

Nonnative apple and crabapple flowers have a slightly pink hue, and apple tree branches are closer

to horizontal and less uniform compared to the vertical, symmetrical branching of Callery pear. The flowers of all these look-alikes smell slight sweet, in contrast to the unpleasant smell of Callery pear flowers.

Effect on Native Habitat

Cultivars of Callery pear, including Bradford pear, were developed over the years to address the tree's tendency to split in high winds and heavy snow. The cultivars, although self-sterile, can hybridize and produce fertile fruit. The fruit of Callery pear is attractive to birds, which then spread the species to new sites.

As a result, Callery pear has seeded out into natural areas, crowding out native species. A single tree can spread quickly, forming dense thickets. The thickets leaf out early, outcompeting native flowers and trees. Callery pear also alters the soil by releasing a chemical that suppresses other plant species.

Mature trees develop stiff woody thorns that can puncture shoes and tires, and which make these thickets impenetrable.

Removal and Control

Remove small trees by hand when the soil is moist, taking care to remove the entire root. Mature trees can be girdled during spring and summer by cutting through the bark around the entire trunk 6" above the ground.

After a Callery pear has been cut down, vigorous sprouts can appear from the stump. These sprouts will grow into the wild, thorny, invasive form of the tree, whose fertile fruits are spread by birds and other animals. To prevent this, sever the tree roots below the stump or follow up during the season and cut the sprouts until no more appear.

Replant with natives such as American plum (*Prunus americana*), white dogwood (*Cornus florida*), redbud (*Cercis canadensis*)| hawthorn (*Crataegus* spp.), and serviceberry (*Amelanchier* spp.).

Resources

Invasive.org

Missouri Department of Conservation

Virginia Invasive Species

Support Native Habitat on State Facilities and Roadsides!

State-owned property across Pennsylvania provides a great opportunity to provide native habitat. Many of these properties are now maintained with nothing but mowed lawn, which is the equivalent of a desert for native insects and wildlife.

A bill in the Pennsylvania legislature would prioritize the use of native plants at state-owned facilities. After all, shouldn't the offices of Commonwealth agencies feature plants native to Pennsylvania? Native plantings also save taxpayer dollars because they require less watering and maintenance than lawn. The benefits of native plants include protecting water quality, improving the ability of soil to infiltrate water, preventing soil erosion, and providing food and habitat for native insects and animals.

Ask your state representative to support [HB 426](#)! You can find contact information for your state representative [here](#).

You can also ask your state representative to include roadside habitat programs in transportation budgets this year. Roadside habitat programs minimize mowed grass areas adjacent to state-maintained roads (beyond the zone where mowing is mandated for visual safety) and replaces them with native plants. As a result, mowing costs paid with taxpayer dollars will be reduced and roadsides will be enhanced with wild-life-friendly habitat. Transitioning from turf grass to native roadside habitats also reduces the need to spray herbicides and pesticides. Click [here](#) for more information.

Events and Educational Opportunities

Mar. 26 [Insects of Early Spring](#). Mt. Cuba Center webinar, 6:00 p.m.

Apr. 2, 9, 16, 23, 30, May 7 [Native Plants of Spring](#). Mt. Cuba Center, 3120 Barley Mill Rd, Hockessin, DE. 10:00 a.m.

Apr. 5 [Supporting Backyard Birds with Native Plants](#). Mt. Cuba Center, 3120 Barley Mill Rd, Hockessin, DE. 10:00 a.m.

Apr. 5 [Spring Gardening Saturday](#). Mt. Cuba Center, 3120 Barley Mill Rd, Hockessin, DE. 10:00 a.m.

Apr. 5 [Beneficial Bugs in Your Garden](#). Mt. Cuba Center, 3120 Barley Mill Rd, Hockessin, DE. 11:30 a.m.

Apr. 5 [Decaying Wood Is Good](#). Mt. Cuba Center, 3120 Barley Mill Rd, Hockessin, DE. 1:30 p.m.

Apr. 5 [Lawn-Less Yards](#). Mt. Cuba Center, 3120 Barley Mill Rd, Hockessin, DE. 3:00 p.m.

Apr. 12 [Naturalistic Planting Design](#). Mt. Cuba Center, 3120 Barley Mill Rd, Hockessin, DE. 10:00 a.m.

Apr. 12 [Trillium Treasure Land: Field Trip to Shenks Ferry](#). Mt. Cuba Center. 10:00 a.m.

Apr. 16 [Restoration After Invasive Plant Removal](#). Blue Ridge Prism webinar. 11:30 a.m.

Apr. 17 [Terrific Trillium](#). Mt. Cuba Center, 3120 Barley Mill Rd, Hockessin, DE. 10:00 a.m.

Apr. 23 [The Secret Life of Spring Wildflowers](#). Mt. Cuba Center, 3120 Barley Mill Rd, Hockessin, DE. 1:00 p.m.

Apr 24-25 [Plant Sale](#), Jenkins Arboretum Garden Shop, 631 Berwyn Baptist Road, Devon, PA. 9:00 a.m.

Apr. 26 [Designing Layered Landscapes](#). Mt. Cuba Center, 3120 Barley Mill Rd, Hockessin, DE. 1:00 p.m.

Apr. 27 [Lancaster Native Plant & Wildlife Festival](#). Overlook Park, 2040 Lititz Pike, Lancaster, PA 17601 8:00 a.m. - 1:00 p.m.

May 1, 8, 15 [Managing Invasives](#). Mt. Cuba Center, 3120 Barley Mill Rd, Hockessin, DE. 10:00 a.m.

May 3 Lancaster County Master Gardeners Plant Sale, Lancaster Farm and Home Center, 1383 Arcadia Road, Room 140 Lancaster, PA