

May 2023 Newsletter

sepa.wildones.org

Visit us on Instagram, Facebook, and Telegram

SOUTHEASTERN PENNSYLVANIA CHAPTER

May Meeting Highlights

Chapter Business

- Membership stands at 125, with 6 new members.
- The chapter's native plant swap last weekend distributed over 100 native plant plugs to visitors to the Mill Grove Audubon center.

Program -- Native Edibles and Companion Planting

Presented by Ben Kessler and Ben Patterson of <u>Little</u> <u>Bluestem Nursery</u>

Most edibles are not native to North America, or if they are, they have been so intensely bred (e.g., corn) that they scarcely resemble their native ancestors. Companion planting with these plants is more about supporting the food crops we're planting.

Permaculture is a design strategy based on observations of how your garden environment already functions. It's about incorporating patterns into your design which are already there.

A guild is a suite of different species that benefit each other. For example, plants with different sizes and types of aboveground and underground (root) systems can grow well together. Consider the botanical and practical relationships between plants in your guild garden. For example, you wouldn't plant something under an apple tree that would prevent you from harvesting the fruit, and you wouldn't plant an apple tree in the middle of a lawn, because the densely rooted turf grass would compete with the tree roots and retard its growth.

Pay attention to bloom time -- if you're growing plants to produce edible fruit, flowers, or seed, you want to attract the pollinators to these plants just as they are beginning to flower.

The concept of a food forest has its roots in permaculture and the collected wisdom of many indigenous traditions whose philosophy advocates managing agricultural landscapes in harmony with nature. Before modernization, food forests were a staple of indigenous communities in Africa, the Middle East, South Asia, and beyond. These plant communities evolved so that useful plants were cultivated. Trade introduced edible nonnative plants., and domesticated animals were added.

The food forest model originated in a tropical forest, so it's difficult to replicate the complexity and variety of species in a temperate zone where the light levels are lower. Adaptations are required -for example, providing more space between plants.

In a food forest, plantings are ecologically designed to mimic how nature grows in multiple layers within a forest. Plants are chosen carefully to produce food, enrich the soil, and attract pollinators.

We can't replicate early permaculture because today's soil, water, and air are different than they were centuries ago. Instead, permaculture practitioners use the elements of permaculture as design criteria to apply to the creation of a landscape.

Resources

<u>The Dawn of Everything: A New History of Humanity</u>, David Graeber and David Wengrow

Philadelphia Orchard Project

Northeast Farmers of Color Land Trust

Native Plant Agriculture Vol. 1

Tending the Wild, M. Kat Anderson

The Holistic Orchard: Tree Fruits and Berries the Biological Way, Michael Phillips

Thought of the Month -- Moving Beyond "No Mow May"

No-Mow May originated in the U.K. and spread to North America. It's billed as an effort to help the declining bee population and decrease water usage , fertilizer, and pollution from lawn maintenance equipment. Initially, research showed that the number of bees, butterflies, and other insects increased, lawns were watered less frequently, and fewer herbicides were used by homeowners who adopted the No Mow May program.

Not cutting the lawn and letting dandelions flourish for a month is touted as an easy way to help bees. But one-size-fits-all solutions don't work for conservation. Lawns consisting of turf grass and its associated weeds don't support native plant and insect populations. As our April program explained, the interdependent relationships between native plants and insects are highly evolved. Relying on unmown nonnative turf grass to sustain native insects just doesn't work.

Research shows that nonnative clover and dandelions have lower quality pollen than natives that bloom at the same time. When given a choice, bumblebees bypass nonnative clover blossoms in favor of the pollen from native spring bloomers.

In addition, mowing at the end of May will just destroy the creatures that have populated the lawn while it wasn't being mown. Feeding these insects for one month will not sustain their population. Planting natives instead of lawn will provide a permanent home for these insects and animals.

Honeybees are generalist feeders, meaning they will harvest pollen and nectar from a wide variety of plants, both native and nonnative. Planting natives will still benefit honeybees, but it's critical for native bees that are specialist feeders and have evolved to require pollen and nectar from certain species of native plants.

No Mow May has, however, had a positive effect by undermining the conventional lawn aesthetic of unbroken turf grass. The less-groomed look popularized by No Mow May has normalized public acceptance of less-manicured habitats that support pollinators (e.g., beds that include overwintered leaves and standing plant stems). Another benefit is that not running the lawn mower reduces noise and air pollution. Many homeowners understand that manicured, monoculture lawns are pollinator deserts. Wanting to do better, they simply stop mowing the lawn to "see what comes up." Unfortunately, just letting the lawn grow will not result in a meadow that will be attractive to wildlife (or the neighbors). The typical urban or suburban lawn was seeded on soil that was brought onsite after the native topsoil was stripped off and the subsoil compacted by construction equipment. Native asters, coneflowers, and beebalm just aren't in the soil's seed bank. Instead, you will likely see aggressive weeds like ground ivy (a.k.a creeping charlie), crabgrass, Canada thistle, and garlic mustard.

Instead of this approach, rethink your lawn area. Can you replace part of your lawn with native plants? If your property is visible from a public road, consider creating beds of natives connected by mowed grass paths. Plant early-flowering native trees such as willow, red maple and any of the gorgeous native cherry species Add perennials that support pollen-specialist bees, such as native goldenrods, sunflowers, asters and coneflowers.

You can shrink your lawn by adding beds of natives to support wildlife, cut down on your mowing regime, and beautify your property.



For native alternatives to turf grass, sedges are an obvious choice — there are native species that thrive in sun or shade, wet or dry conditions. Sedges provide important habitat for nesting wildlife. A <u>study</u> of native sedges done by Mt. Cuba Center in 2022 includes an evaluation of sedges suitable for a mowed lawn, including *Carex woodii*, *C. eburnea*, *C. socialis*, and *C. pennsylvanica*.

WO-SEPA 2023 Program & Event Schedule

June 7 Backyard Nature Preserve Tour September 14 No More Fall Cleanup October 11 Native Seed Collection Techniques November 16 Chapter Native Seed Swap

Recordings of past meetings are on our Youtube channel.

Tree of the Month -- American Plum

American plum (*Prunus americana*) is a small understory tree often found in disturbed areas in part sun, such as forest edges, old fields, clearings, and fencerows. It's a handsome ornamental with large flowers and relatively big fruit, growing 10 to 35 feet tall. The short, crooked trunk with scaly, black bark supports a graceful, open crown. Fall foliage ranges from electric red to pale yellow.

American plum is drought tolerant once established and adaptable to different soil conditions. Trees spread by suckering and can form dense thickets, providing shelter for birds and small animals. They can be used for erosion control and to crowd out invasives in a large, bare area that gets some sun. American plum can be propagated by dividing young, dormant suckers, or by rooting dormant hardwood, softwood, semi-hardwood, or root cuttings. Semi-hardwood and softwood cuttings taken in summer root easiest. Germination of the seed requires cold stratification.

Fragrant, white flowers with yellow stamens bloom in March to April, before the leaves appear, and attract many pollinators, including native bees. American plum hosts 429 species of native caterpillars, including Eastern Tiger Swallowtail, Red Spotted Purple, Viceroy, Coral Hairstreak, and Striped Hairstreak.



Fruit will form over the summer and mature in August and September. Songbirds relish the 1" reddish-purple yellow-fleshed plums. The fruit is used in jams, jellies, preserves, and even wine. The skin is thick but the flesh is extremely flavorful. Indigenous people ate them raw and also dried them to eat during the winter.



Another plum native to America is the Chickasaw plum (*P. angustifolia*), originally found west of the Mississippi but now naturalized in the south and occasionally found on the East Coast. This species is an abundant fruit producer.

Beach plum (*P. maritima*) is a rounded, dense, suckering shrub that prefers sandy soil near the coast. It was once a common sight along barrier beaches and coastal regions from the mid-Atlantic states to the Canadian maritime provinces. The gnarly branches are covered with showy white flowers in early spring. In late summer to early fall, bluepurple plums cover the plant, but not for long, as they are relished by birds and small animals that don't mind the tartness.

In the wild, beach plum grows as a multi-stemmed shrub, producing shoots from its root system. This suckering habit makes it a great shrub for a native hedgerow.

American Plum Quick Facts

Height: 10 to 35 feet

Form: short trunk, broad crown

Growth rate: medium to fast

Soil: moist, rich well-drained loam

Leaves: good fall color

Flowers: fragrant white flowers in showy, flat-topped clusters

Fruit: 1" red fruits, edible

Habitat value: early food source for native bees; larval host plant for many native caterpillar species

Ask a Bumblebee

In the past two decades, scientists who study bumblebees have reported widespread declines in the insects' population. Over a quarter of North America's bumblebee species now face some level of extinction risk.

The causes of this problem include habitat loss, pesticides (including backyard mosquito spraying), climate change, and introduced pathogens. The good news is that anyone with access to an outdoor space can provide bumblebee habitat.

Because these bees rely exclusively on flowering plants for food -- nectar for adults and pollen for larvae -- providing bumblebees with enough plants during the season is key to good habitat. But which plants are best? Bumblebees are generalist feeders, meaning they will gather pollen and nectar from just about any plant, if it's the only food available. To really help these insects thrive and recover their population, we need to know which plants they prefer.

<u>Ask a Bumble Bee</u> is a community science project started last spring by the U.S. Geological Survey's Wild Bee Lab. Preliminary results are already indicating mismatches between lists of plants recommended for bumblebees and the plants the bees actually use.

White clover, a nonnative that frequently appears in suburban yards, has a reputation as a plant that attracts bees, especially in the spring, but Ask A Bumble Bee didn't see significant visitation to white clover in the spring. Gardeners often plant blackeyed Susan (*Rudbeckia hirta*) and brown-eyed Susans (*R. triloba*) to benefit bumblebees, but the study found that the bees don't feed on these plants when better alternatives are available.

Some favorite bumblebee plants include mountain mints (*Pycnanthemum* spp), bee balm (*Monarda*



spp), native asters, and goldenrods.

Mountain mint (left) blooms for about 8 weeks in midsummer with clusters of densely packed small flowers that are magnets for a variety of pollinators. The long tongues of bumblebees can reach into the tubular flowers of *Monarda* (right) to reach nectar.

Fall-blooming asters and goldenrods are particularly important for bumblebees as key food sources when many other



plans have stopped flowering.

Bumblebees are active from early spring through late fall, so it's important to provide a variety of flowering plants that bloom throughout that entire period. Supporting bumblebees during only a portion of their active season can lead to starvation if large populations build up over the summer and suddenly have no food available in the fall.

Bumblebees are usually active for one season, starting in early spring when the queen emerges from winter hibernation to feed and search for a nest location. During the spring and summer she will lay several batches of eggs. When the first generation of workers matures, they take over the foraging duties. In a healthy colony, the queen will then start to produce males and next year's queen. With enough late-summer food resources, newly mated young queens can build up their reserves while searching for a place to overwinter.

The information gathered by this project will help backyard gardeners, but the ultimate goal is to assist refuge managers who are responsible for conserving and restoring larger tracts of land. How we manage our large rural landscapes may decide the fate of North America's most vulnerable bumblebee species.

Resources

The <u>Ask A Bumblebee project</u> explores which flowers bumblebees visit and which they don't. Anyone with a smartphone can participate, even if you don't know your bee IDs or floral IDs.

Knowing bumblebees' preferences will improve planting guides, seed mixes, and land management strategies for bumblebees!

Spotlight on Plants with "Weed" in the Name -- Jewelweed

This month you may be seeing a lot of different seedlings popping up in beds and walkways. You might wonder which ones are invasive weeds and whether any of them are might be the good guys. One plant commonly referred to as a weed is actually a great colonizer that can shade out competing invasive weeds. As a bonus, it's known as an effective topical treatment for poison ivy exposure.

Jewelweed (*Impatiens capensis*) is a widespread, common volunteer in semi-shaded areas with average to moist soil. This is also the preferred habitat for invasive garlic mustard. Jewelweed can be an aggressive competitor in its favored habitat and is one of the few native North American plants that has been shown to compete successfully against garlic mustard.

jewelweed is an annual that grows anywhere from 2 to 5 feet tall. The height depends on a number of factors, mainly sunlight and soil moisture.

Seedlings often occur in large clumps and have relatively large, rounded blue-green seed leaves, followed by pointed, serrated true leaves.



Jewelweed's leaves are soft and the stems are easily broken, making jewelweed easy to pull where you don't want it to grow. While it's a great competitor to shade out invasive weeds, it can also outcompete some less aggressive native plants simply by growing faster and taller than the natives do. Those natives might not die out completely, but they won't grow as vigorously as they would without competition. Flowering begins in mid-summer and continues until frost kills the plant. The fruit is an elongated capsule, which, when ripe, bursts open at the slightest touch. Jewelweed resembles the closely-related pale touch-me-not (*Impatiens pallida*), which can be distinguished by its yellow flowers.

Jewelweed features 1" long, rear-spurred, cornucopia-shaped, orange to orange-yellow flowers with reddish-brown spotting. The unscented, inch long flowers are bright orange to orange-yellow with variable amounts of red-orange spots and markings. Occasionally the flowers may be pale yellow to al-



most white, or may be unspotted.

Jewelweed makes a lovely addition to native plant gardens in moist, partially shaded areas. Not only are the flowers aesthetically pleasing, so are the hummingbirds, bumblebees, and butterflies that are attracted to the flowers. Jewelweed can be used to fill in empty spaces in the garden that might otherwise be taken over by non-native weeds. Jewelweed can be propagated easily by direct sowing of fresh seed in early fall. Once established, a patch of jewelweed will maintain itself through annual seed production.

The ruby-throated hummingbird is considered the plant's primary pollinator. hummingbirds routinely stop and feed in patches of jewelweed as they move southward from their breeding grounds. Jewelweed nectar is considerably higher in sugar concentrations than the nectar of many of other plants visited by hummers. Jewelweed is also pollinated by a number of flies, bees and wasps. Occasionally even butterflies, such as the spicebush swallowtail, can be seen on jewelweed blossoms.

HOAs in the Spotlight

Native plant enthusiasts know that unconventional plantings in their front yard might attract the notice of the "weed police." Many municipalities used to have weed ordinances that made it difficult — sometimes impossible — for homeowners to cultivate a native meadow or even a perennial garden that wasn't sufficiently manicured. More recently, municipalities across the country have begun relaxing those ordinances and embracing conservation landscaping.

But in communities controlled by a homeowners' association — where a quarter of the U.S. population now lives — progress has been slower. Many HOAs still aren't on board with conservation land-scaping. and many require residents to have manicured turf grass.

In Maryland, an HOA's insistence that a resident remove her pollinator-friendly garden and plant turf grass in its place resulted in the state passing a law that prohibits HOAs from requiring residents to have turf grass. The law, known as the Low-Impact Landscaping Bill, forbids HOAs from imposing unreasonable restrictions on rain gardens, pollinator gardens, xeriscaping, and gardens designed to attract wildlife. Maryland HOA residents will now be able to opt our of high-maintenance turf lawns in favor of gardens that provide important wildlife habitat.

In other states, HOA residents have successfully protected their native plantings by pointing out the financial benefits of landscaping with native plants. In the southwest, water-wise native gardens are a selling point when a property is listed for sale.

In Colorado, where harsh drought conditions are causing residents and legislators to look for more solutions, a new <u>law</u> will require HOAs to allow residents to install drought-tolerant plantings in place of turf grass.

Resources

What To Do When the 'Weed Police' Knock on Your Door

Butterflies: 1; Bullies: 0

Yes! In My Back (and Front() Yard: Tips for Wildlife Gardening in an HOA Community

Natives in Containers

Here are some ideas for natives that can work in containers. Many native plants grow well in pots. Small shrubs and trees add year-round interest, and the woody branches provide overwintering habitat for small fauna. Some may eventually outgrow their pots and need to be planted in the ground, but in the meantime you can enjoy their presence.

Native perennials can be grown as a mass of a single species or mixed with others with similar requirements.

Right: A pot of starry cerastium (*C. arvense*) on a member's balcony. Like its European relative, snowin-summer (*C. tomentosum*), it prefers dry, welldrained soil in full sun and forms a low mat of starry white flowers in early summer.





This stunning container (left) combines Aquilegia canadensis and Packera obovata for spring color. Myrica pennsylvanica provides a tall accent, with the added bonus that a female plant will have tiny silvery berries in fall. Finally, Physostegia virginiana gives fullness to the design, with the addition of white flowers in early summer.

For more ideas, check out the suggestions for <u>na-</u> <u>tive plants in containers</u> on our <u>website</u> under the Resources tab.

Invasive Plant Alert -- Japanese Knotweed

Japanese knotweed (*Fallopia japonica*) spreads aggressively and forms dense thickets. It quickly creates a monoculture, crowding out native plants and nearly all other vegetation. It can reach over 10 feet in height. The leaves are alternate and spade- or heart-shaped, approximately 6" long and 3" to 4" wide.

Stems are bright green, smooth, and hollow, often covered with dark spots or streaks, turning reddish brown in the fall. Young stems just emerging in the early spring are reddish/purplish green with furled triangular leaves. Japanese knotweed blooms in late summer with sprays of greenish-white flowers emerging from leaf axils near the end of the stems.

Japanese knotweed spreads quickly via rhizomes to form large colonies. It can tolerate a wide variety of growing conditions, including high saline roadsides. It is a particular threat to riparian and other low-lying areas because it is tolerant of flooding and quickly populates eroded shores and islands. Rhizome fragments can be dispersed along waterways during floods to form new plant colonies. Infestations of Japanese knotweed decrease biodiversity and degrade aquatic habitat and





water quality.

Once established, Japanese knotweed is persistent and challenging to eradicate. Control-

ling Japanese knotweed requires considerable effort and involves both initial eradication and follow-up maintenance.

Resources

https://extension.psu.edu/japanese-knotweed https://www.brandywine.org/sites/default/files/media/

Educational Opportunities

- May 17 <u>Seeding Ecosystems for the Future</u>. Native Plant Society of NJ webinar, 7:00 p.m
- May 18 Mapping Our Impact Together. Jenkins Arboretum webinar, 7:00 p.m.
- May 25 <u>Taking Cues from Habitat: Under-Utilized Native Plants</u>. Philadelphia Botanical Club webinar, 7:30 p.m.
- June 15 <u>City-Dwelling Bees: Urban Ecology and Urban Theory</u>. Jenkins Arboretum webinar, 7:00 p.m.
- June 15 Pollinators in My Garden. PennState Extension webinar. 7:00 p.m.
- May 31 & June 7 Managing Invasive Plants. Mt Cuba Center, 3120 Barley Mill Rd, Hockessin DE 19707. 10:00 a.m.
- June 1 July 6 Native Plants of Summer. Mt Cuba Center, 3120 Barley Mill Rd, Hockessin DE 19707. 10:00 a.m.
- June 2 Summer Container. Mt Cuba Center, 3120 Barley Mill Rd, Hockessin DE 19707. 10:00 a.m.
- June 9 Native Ferns To Know and Grow. Mt Cuba Center, 3120 Barley Mill Rd, Hockessin DE 19707. 10:00 a.m.
- June 10 Instant Rain Garden. Mt Cuba Center, 3120 Barley Mill Rd, Hockessin DE 19707. 10:00 a.m.
- June 15 <u>A Playful Nursery Gets Serious about Pollinator Safety: The Example of Harlequin's Gardens</u>. Xerces Society webinar, 1:00 p.m.

June 17 Tree ID from the Trail. Mt Cuba Center, 3120 Barley Mill Rd, Hockessin DE 19707. 10:00 a.m.

- June 20 Evolutionary Ecology of Interactions. Mt Cuba Center webinar, 6:00 p.m.
- June 24 Gardening with Bees in Mind. Mt Cuba Center, 3120 Barley Mill Rd, Hockessin DE 19707. 10:00 a.m.

Events

- May 17 Native Species Day Planting. Black Rock Sanctuary, 953 Black Rock Rd, Phoenixville PA 4:00 -6:30 p.m.
- May 20 Native Perennial Sale. Woman's National Farm & Garden Assn Keystone Ambler Branch and Upper Dublin Bird Town. Twining Valley Park, 1400 Twining Rd, Willow Grove PA . 11:00 a.m. - 2:00 p.m.
- May 20-21 <u>Spring Native Plant Sale</u>. Hawk Mountain Sanctuary, 1700 Hawk Mtn Rd, Kempton PA 19529. Sat. 10:00 a.m. - 3:00 p.m., Sun. 10:00 a.m. -- 2:-p.m.
- May 27 <u>Spring Hike at Welsh Mountain Nature Preserve</u>. Welsh Mountain Nature Preserve, 601 Gault Rd, East Earl, PA 17519. 9:00 a.m.