

February Meeting Highlights

Chapter Business:

Chapter membership has increased to 116. Two seedling chapters have recently sprouted in Pennsylvania -- Northeastern and South Central -- in addition to our sister chapter, Western Pennsylvania.

Our chapter is in need of a Treasurer. Please contact the President if you can volunteer.

Presentation -- Identifying and Managing Invasive Plants. Presented by Wild Ones SEPA.

Invasive plants are those that are not native to an area, spread aggressively, and cause economic or environmental harm, or harm to human health. For example, *Ailanthus altissima*, tree of heaven, is an aggressive spreader and also a host plant for the spotted lantern fly, which attacks food crops that are important to Pennsylvania's economy.

Gardeners are responsible for the spread of some invasive plants known for their attractive foliage or flowers and their ease of growth.

Pennsylvania maintains a Noxious Weed List of banned invasive plants. Last fall, Pennsylvania added its first two ornamental invasives to that list: Japanese barberry and callery pear.

New York has banned certain invasive ornamental plants since 2015, and Ohio since 2018. Delaware's ban on certain invasive ornamental plants goes into effect in July 2022.

Some of the impacts of invasive plants:

 Norway maple leafs our earlier, grows aster, and holds it leaves longer than native trees. Its dense, shallow root system and heavy canopy discourage many natives from growing underneath it.

- Japanese barberry escapes easily from gardens to invade fields and woodlands. Thick stands of this plant provide ideal habitat for the black-legged tick, a lyme disease vector.
- Orange daylily's hardiness and vigorous root system allow it to quickly form dense colonies in fields, displacing native plants.

Here are some methods of controlling invasives on residential-scale properties:

<u>Hand pulling</u> can work on smaller plants without extensive root systems. Disadvantage: soil disturbance can expose more weed seeds.

<u>Digging</u> can work for plants with larger root systems. Disadvantage: soil disturbance can expose more weed seeds.

<u>Mowing or weed-whacking</u> can work if done before plants flower. Follow-up is required to control re-growth.

<u>Smothering</u> with heavy cardboard and a layer of mulch can work on shorter plants or areas that have been mowed.

<u>Burning</u> can work for plants with roots buried between pavers. Be aware that some invasives thrive on burning because of their ability to recover and colonize quickly.

<u>Spraying</u> is problematic because systemic products designed to kill plants are toxic to soil organisms and can enter the groundwater. Nonsystemic products are less toxic; some are approved for use on organic operations.

Know Your Foe -- Garlic Mustard. Starts as a rosette of heart-shaped toothed leaves in part to full shade and moist soil. Rapidly colonizes disturbed soil. Identify by purple-tinged stem at soil level and unpleasant leaf odor. Flower stalks grow 1 to 2 feet tall with arrow-shaped toothed leaves. It is a prolific seeder. February meeting highlights, continued from page 1

- <u>Native look-alike</u>: Golden ragwort, *Packera aurea*. Same growing conditions, but the undersides of *Packera* leaves are purple. *Packera* has purple flower buds and bright yellow flowers. Reseeds freely and spreads to form carpets of bloom.
- <u>Species-specific control</u>: Traditional method is to pull or cut rosettes at ground level, or mow plants before they flower. Don't compost any plants with flower heads.
- <u>Another approach</u>: Garlic mustard is a RUDERAL species -- it takes advantage of disturbed sites to colonize rapidly. Use *Packera aurea*, an aggressive native, to control it by planting *Packera* into garlic mustard colonies.

Know Your Foe -- Lesser Celandine. Shiny dark heart-shaped leaves, forms a low-growing mat in early spring in sun to shade and moist soil. Bright yellow rayed flowers. Goes dormant in summer, allowing other invasives to colonize the space.

- <u>Native look-alike</u>: Marsh marigold, *Caltha palustris*. Similar leaves and flowers, but forms distinct clumps, not mats. Flowers several weeks later than lesser celandine.
- <u>Species-specific control</u>: Digging not practical due to extensive tuberous roots. Smothering can work, but new plants will appear from seed.
- <u>Another approach</u>: Could its native look-alike, or another quick-spreading native, control it?

Know Your Foe -- Bishop Weed. Twice-compound leaves, 2-foot stalks with white flowers in umbels. Spreads rapidly by root runners and seed.

- <u>Native look-alike</u>: Golden alexander, *Zizia aptera*. Bishop weed has bright white thread-like roots; *Zizia* has brown clumping roots. Bishop weed stems are individual; *Zizia* stems form a clump. *Zizia* flowers are yellow umbels.
- <u>Species-specific control</u>: Weed-whack or cut plants to the ground as they leaf out in spring, to starve the roots. Smothering and replanting with natives can work in defined areas. Don't compost the roots as they can re-sprout.

Know Your Foe -- Yellow Archangel. Variegated arrow-shaped toothed leaves, yellow hooded flowers. Forms a low-growing mat or climbs over nearby plants. Grows in full sun to full shade. Spreads by seed, stem fragments, and root nodes. <u>Species-specific control</u>: Hand-pull, cut, or dig; don't compost stems or roots. Plants will resprout from root fragments in the soil, so keep removing throughout the season. Smothering and replacing with natives can work in defined areas.

Know Your Foe -- Oriental Bittersweet. Vines climb up to 60 feet and strangle trees by wrapping tightly around branches and trunks. Spreads via seeds and root suckers.

- <u>Native look-alike</u>: The flowers and bright orange berries of American bittersweet occur only at the ends of branches; fruit capsules are orange. Berries of oriental bittersweet occur all along the stems; fruit capsules are yellow.
- <u>Another native look-alike</u>: Seedlings resemble spicebush (*Lindera benzoin*). Leaves of *Lindera* have a sharp, spicy odor when crushed. Roots of oriental bittersweet are bright orange.
- <u>Species-specific control</u>: Seedlings can be hand-pulled. Larger plants can be dug out. Vines in trees should be cut close to the ground and also as high as possible. Don't pull vines out of trees as this may damage the tree's branches. Seedlings will continue to sprout as long as there are plants in the area; keep after them.

Know Your Foe -- Canada Thistle. Perennial plant with deep clonal root network. Long, spine-tipped leaves, purple to white flowers on 1- to 5-foot-tall plants in summer. A ruderal plant and serious agricultural pest, commonly found in abandoned fields and disturbed ground. Shade-intolerant. Spreads rapidly via seeds and root network.

- <u>Native look-alikes</u>: Several native biennial thistles can look similar; consult a field guide if in doubt.
- <u>Species-specific control</u>: For light infestations, cut plants repeatedly just below soil surface to starve the root network. Mow larger infestations closely twice per growing season <u>before plants flower</u>. Do not mow once plants develop flowers. Bag and dispose of seed heads and roots. Smothering can work in defined areas. Plant infested areas thickly with tall, highly vigorous natives to shade out Canada thistle: Canada wild rye, *Zizia aurea*, slender wheatgrass, purple prairie clover, and *Monarda didyma*.

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Know Your Foe -- Japanese Honeysuckle. Fastgrowing semi-evergreen vines twine around stems and saplings. Opposite, oval leaves are either smooth-edged or slightly lobed. Forms large tangles of vegetation that smother and kill native plants. Grows in full sun to part shade. Spreads by seed and vigorous root runners.

- <u>Native look-alike</u>: When vining on the ground, Japanese honeysuckle can resemble runners of coralberry (*Symphoricarpus orbiculatus*). Both have opposite pairs of leaves on long thin stems, but coralberry runners originate from a mature shrub; Japanese honeysuckle is a vine.
- <u>Species-specific control</u>: Pull seedlings and vines on the ground. Allow to dry out before composting. Clip vines growing up trees as necessary to unwrap them from the host. Cut vines at ground level and as high as possible; do not pull vines out of trees.

Know Your Foe -- Sweet Autumn Clematis. Small fragrant white flowers in late summer on vines growing up to 20 feet in one season. Dense foliage blocks sunlight to plants underneath.

- <u>Native look-alike</u>: *Clematis virginiana* also has small fragrant white flowers in late summer on long vines. The leaves of *C. virginiana* are toothed; those of the invasive are smooth.
- <u>Species-specific control</u>: Cut plants back in late August before seeds develop. Repeated cuttings over several years will starve the roots. Seedlings can be hand-pulled or cut off below soil level. Plant will re-sprout from roots left in the soil, so keep cutting it back to starve the roots.

Know Your Foe -- English Ivy. An evergreen perennial vine with dark green triangular lobed leaves when vining on the ground. Mature plants climb trees and flower; leaves lose their lobes but have wavy edges. Kills trees by blocking sunlight to tree leaves. Forms dense mats on the ground which choke out other plants. Spreads by seed and vines.

• <u>Species-specific control</u>: Hand-pull vines on the ground; lift up matted vines and cut at the roots. Smothering works in defined areas. Cut climbing vines at ground level and 1 foot up on the tree trunk. Cut all the way through just to the tree bark; pull off the cut section of root. Don't pull vines from trees. Allow clippings to dry out before composting.

Know Your Foe -- Chinese Silver Grass. Densely bunched grass, 5 to 10 feet tall. Blades have silvery midrib. White fan-shaped flower heads in late summer. Spreads by underground roots and seeds.

- <u>Native look-alikes</u>: Indiangrass and bottlebrush grass do not form huge clumps. Consult a field guide if in doubt.
- <u>Species-specific control</u>: Repeated close mowing or weed-whacking throughout the growing season will kill *Miscanthus* in two seasons if done <u>before seed heads form</u>. Do not cut back in late fall or winter. Burning increases this plant's vigor; do not burn off infested areas.

Know Your Foe -- Winged Euonymus/Burning Bush. Bright red fall color; small red fruit; seeds spread by birds. Grows in a wide range of exposures and soil types. Responds to cut-back with vigorous new growth; re-sprouts from roots. Corky edges on mature stems are an identifying feature.

- <u>Native look-alikes</u>: Eastern wahoo (*Euonymus atropurpureus*) has <u>purple</u> flowers; burning bush flowers are greenish. Strawberry bush (*E. americanus*) has green four-sided twigs with <u>no</u> corky ridges.
- <u>Species-specific control</u>: Remove plants by cutting at soil level. Remove new shoots and root sprouts (can be as far as 20 feet away) during the season to starve the roots.

Know Your Foe -- Japanese Stiltgrass. Annual grass with thin green leaves and slender stems that root at nodes. Can sprawl or grow 1 to 3 feet tall in sun to part shade. Forms dense mats that choke out other plants. Considered one of the most damaging invasives in the country.

- <u>Species-specific control</u>: Hand-pull small infestations <u>before</u> flowers form in late summer. If pulled in late summer just before flowers form, new plants will not have time to form flowers before frost. Mow closely or weed-whack to the ground in August before seeds set.
- <u>Another approach</u>: Smothering works in defined areas. Seed annual rye directly into the mulch; follow up with aggressive native perennials to recolonize the site. Certain natives may be able to out-compete stiltgrass: white avens, enchanter's nightshade, Canadian black snakeroot, Virginia wild rye, and bottlebrush grass.

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Follow-up after removal of invasives is critical. Plant natives to out-compete returning invasives. Lists of native plants to provide quick cover and native alternatives to common invasive ornamentals can be found on our website.

Fact sheets on many invasive plants are published by <u>Blue Ridge PRISM</u> and the <u>Pennsylvania Depart-</u> ment of Conservation and Natural Resources.

Pictures of the invasive plants and native lookalikes in this article are in the <u>presentation</u>.

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

Pennsylvania Native Plant Society

The <u>Pennsylvania Native Plant Society</u> advocates conservation of native plants and their habitats and promotes the increased use of native plants in the landscape.

PNPS is an all-volunteer member-based nonprofit organization. It originated in State College and has added two regional chapters in the Lehigh Valley and Lancaster. The focus is on advocacy and policy.

PNPS initiatives include support or Keystone 10 Million Trees and a solar pollinator project being designed in State College.

PNPS has also developed the <u>Dirty Dozen</u>, a list of twelve invasive plants frequently found at nurseries and landscape retailers which should be avoided. Instead, gardeners are encouraged to plant more from the <u>Birdy Dozen</u> — native plants that provide essential food for birds and insects.

PNPS is now accepting applications for its 2022 native plant community grant program. The society will be awarding four grants to organizations working on projects that are focused on outreach, education, and research related to native plants.

The application deadline is midnight on March 1. More information on the application process is available <u>here</u>.

SAVE THE DATE! PNPS's Central PA Native Plant Festival

Saturday, May 7, 10 a.m. to 3 p.m. Boal Mansion in Boalsburg, PA

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Pennsylvania Bans Three More Invasive Ornamental Plants

The PA Department of Agriculture has added Ravenna grass, glossy buckthorn, and common buckthorn to the list of plants that can no longer be sold or cultivated in Pennsylvania. These nonatative plants spread aggressively into wooded areas and fields, crowding out beneficial native plants and disrupting native ecosystems.

The ban on these three plants takes effect on April 4, 2022. Property owners are encouraged to eliminate these plants and use native alternatives when choosing plants for landscaping.

Last year, Pennsylvania added its first nonnative ornamental plants to the list of noxious weeds. Japanese barberry was added in October and callery or Bradford pear was added in December, both with a 2-year phase-in period.

The Invasive Species Council has developed a list of 25 plants recommended to be banned from the nursery trade by Pennsylvania's Controlled Plant and Noxious Weed Committee. The Committee has the authority to ban plants from the nursery trade. The list can be viewed <u>here</u>. Concerned citizens are encouraged to attend virtual meetings of the Committee and provide comments during the public comment period. The next Committee meeting will be on Thursday, April 21, at 1:00 p,m. Meeting agendas and call-in information are available <u>here</u>.

For more information on Pennsylvania's noxious weed program, visit <u>agriculture.pa.gov</u>.



Callery pear growing along a Pennsylvania highway.

Thought of the Month -- Live Staking

Live staking is an inexpensive and easy way to establish more woody plants in your home landscape. It is one of the simplest bioengineering techniques from the field of ecological restoration. Live staking is often used in streambank and shoreline restoration. It also can be a great way to get the most bang for your buck in your landscape.

A live stake is simply a dormant stem cut from a woody plant and planted in the ground. Late February to early March in our area is the best time for live staking. You want to cut stakes while plants are dormant and focusing on root growth, not on leaf development, but after the soil has thawed.

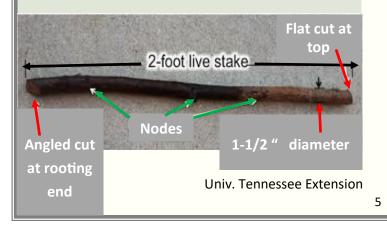
Generally, the best material for live staking is hardwood growth (material that has turned woody) that is just a few years old and is cut from near the base of the plant.

You won't harm the plant by taking cuttings. The plants listed here are well adapted to disturbances and have the ability to re-sprout after being cut.

1. Identify the plant you're cutting, to avoid propagating an invasive species. Here is a guide to identifying plants in winter for live staking:

> https://www.chesapeakeconservancy.org/wpcontent/uploads/2022/01/LiveStakeID_2021-2022Revised.pdf

- Cut stakes 1/2" to 2" thick and 2' tall. Make sure each one contains 3 to 5 leaf nodes. Cut the bottom of the stake at an angle, just below a node, and the top of the stake straight across, just above a node.
- Aim to plant your stakes right after cutting. If you can't plant right away, the stakes will keep up to a few weeks if kept wet and cool in a bucket or jar of water, angled side down.



- 4. Push each live stake into the ground so that at least 2/3 of the stake is in the ground. You can use a piece of rebar to make a pilot hole if the ground is hard. Make sure your pilot hole drill has a smaller diameter than your stakes, because you want your stakes to make good soil contact all the way down. You can use a rubber mallet to gently tap the stakes in, but be careful not to crush or split the tops.
- 5. Painting the tops of the stakes with latex paint will help keep them from drying out.
- 6. After planting, stakes need constant moisture until they develop their own root systems. Survival rates are best in wet areas, such as along a stream bank or in a rain garden.

There's no digging or backfilling with this method -just push the stakes into the ground. You should see good results in just one growing season!

Some species with the best survival rates for live staking include:

- Buttonbush (Cephalanthus occidentalis)
- Grey Dogwood (Cornus racemosa)
- Silky Dogwood (Cornus amomum)
- Red Twig Dogwood (Cornus sericea)
- Virginia Sweetspire (Itea virginica)
- Ninebark(Physocarpus opulifolius)
- Pussy Willow(Salix discolor)
- Black Willow (*Salix nigra*)
- Elderberry (Sambucus canadensis)
- Arrowwood (Viburnum dentatum)
- Nannyberry (Viburnum lentago)

For more information:

Live Staking: A Trusty Technique for Planting Trees and Shrubs on the Cheap, Alliance for the Chesapeake Bay

<u>Live Staking for Stream Restoration</u>, Penn State Extension

<u>Tree Talk: Live Staking</u>, Alliance for the Chesapeake Bay

Backyard Buffer Program, Philadelphia Water Department

<u>Conservation Landscaping Series</u>, Univ. Tennessee Extension Institute of Agriculture

<u>Live Stakes for Landscaping as Inexpensive Plants</u>, Yourgardensanctuary.com

Tree of the Month -- River Birch

River birch, *Betula nigra*, is an attractive, vigorous, moisture-loving tree. Tolerating heat better than other birch species, its range extends from Minnesota to northern Florida. While it prefers a damp environment, it can grow on higher ground as well.



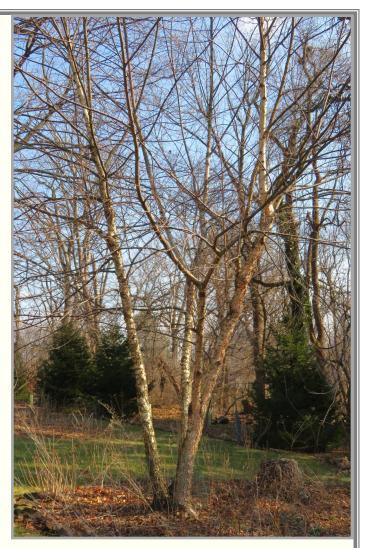
Native Americans boiled sap from the tree to use like maple syrup, and in more recent times it has been used to make birch beer.

The genus *Betula* (birch) supports over 400 species of butterfly and moth caterpillars, including the mourning cloak butterfly (below left) and the majestic luna moth (right).



River birch brings exceptional wildlife value to the landscape. Many species of birds use it to nest and as a food source. Birds will feed on the seeds of the tree as well as on various caterpillars. Woodpeckers and nuthatches will search the loose bark for insects.





River birch is often selected as an ornamental tree in the landscape for its beautiful exfoliating bark and multi-stemmed trunk.



<u>Height</u>: 40' to 70' <u>Light Requirements</u>: full sun to part shade <u>Soil Type</u>: acidic, loamy, well-drained; tolerates clay and sand Soil Moisture: moist to medium

Plant This Not That Each month we will offer a guide to substitutions for various common nonnative ornamental plants that have become invasive, including trees, shrubs, climbers, groundcovers, perennials, slope stabilizers, foundation plantings, and plants for pots. Nonnative invasive ornamental plants easily escape residential gardens and colonize our woods, fields, and wetlands, displacing and altering native plant communities, and degrading wildlife habitat and water quality.

You can help reverse this degradation by replacing nonnative invasive ornamentals with native plants. This month, we focus on native trees whose leaves, flowers, berries, nuts, and seeds provide food and habitat for insects and birds.

You can find <u>more information</u> on native alternatives to nonnative invasives on our website.

Plant These Natives
Downy serviceberry (Amelanchier arborea) or shadblow (Amelanchier canadensis) White flowers in spring, small red berries attractive to birds, excellent fall color. Black cherry (Prunus serotina) White flowers in spring, fruit attractive to birds; important host plant for insects. Fringe tree (Chionanthus virginicus) Fragrant white spring flowers, fruit attractive to birds.
Sugar maple (Acer saccharum) or red maple (Acer rubrum) Large-crowned trees with brilliant fall foliage.
 Bayberry (Myrica pennsylvanica) Clump-forming semi- evergreen shrub, silver berries (female plants) for birds. Staghorn sumac (Rhus typhina) Clump-forming shrub, red fall foliage, clusters of red berries attract birds. American hazelnut (Corylus americana) Clump-forming large shrub, nuts attractive to wildlife. Nannyberry (Viburnum lentago) Small tree or large multi-stem shrub, white spring flowers, fall leaf color, edible fruit. Possumhaw (Viburnum nudum) Small to medium shrub, white flowers in spring, edible fruit, good fall color. Cranberry viburnum (Viburnum trilobum or V. opulus var. americanum, but NOT V. opulus, European cranberry bush) Tall shrub, white flowers in spring, edible red fruit, red fall color.
 Redbud (<i>Cercis canadensis</i>) Single trunk or multi-stem tree, dark pink flowers in spring, yellow fall color. White dogwood (<i>Cornus florida</i>) White flowers in spring, red berries attract birds in fall, good fall leaf color. American smoketree (<i>Cotinus obovatus</i>) Single-trunk or multi -stem tree, airy pink flowers summer to fall, excellent fall foliage.
White dogwood (Cornus florida) White flowers in spring, red berries attract birds in fall, good fall leaf color. Pagoda dogwood (Cornus alternifolia) Small to medium tree, white flowers in spring, tiered branch structure, berries attract birds, red fall foliage.
Pagoda dogwood (<i>Cornus alternifolia</i>) Small to medium tree, white flowers in spring, tiered branch structure, berries attract birds, red fall foliage. American smoketree (<i>Cotinus obovatus</i>) Medium tree, airy

Events in the Community and Beyond

<u>Events</u>

- Feb 25-27 -- Philly Home & Garden Show, Expo Center, Oaks, PA. Don't miss the Wild Ones SEPA table!
- Mar 9 -- Deadline to order native tree seedlings, North Penn HS Environmental Action Club
- Apr 17-May 2 -- Perkiomen Watershed Conservancy Native Plant Sale. On-line advance ordering
- May 7-8 -- <u>Perkiomen Watershed Conservancy Native Plant Sale</u>, Peter Wentz Farmstead, 2030 <u>Shearer</u> <u>Rd, Lansdale, PA</u>

Educational Opportunities

- Feb 15 -- <u>Climate Change and Native Plants</u>, Ecological Landscape Alliance. Fee.
- Feb 16 -- Genetic Diversity and Plant Preservation, Wild Ones. Free
- Feb 16, Mar 7, 14, 21 -- Ecology-Based Landscape Design: An Intensive 4-Session Course with Larry Weaner and Ian Caton, <u>New Directions in Landscape Design</u>. Fee.
- Feb 20 -- Innovations in Insect Pollinator Policy. West Cook Wild Ones. Free.
- Feb 20 -- Growing Your Own Bird Feeder Using Native Plants. Bowman's Hill Preserve. Fee
- Feb 22 -- 2022 <u>Monarch Butterfly Conservation Webinar Series</u>. Join Monarch Joint Venture each month at 1:00 CT to explore the latest in monarch conservation topics. Free.
- Feb 23 -- Inviting Biodiversity into Our Gardens. Western Reserve Land Conservancy. Free
- Feb 23 -- Spring in Bloom: A Guide to Our Native Ephemeral Wildflowers. Lancaster Conservancy. Free.
- Feb 23 -- The Front Yard Revolution. Mt. Cuba Center. Fee
- Feb 23/24 -- Ecological Landscape Alliance Virtual Conference. Fee.
- Feb 27 -- <u>Native Plants That Shaped Our History</u>. Bowman's Hill Preserve. Fee.
- Mar 10 -- <u>Growing Bird Food: New Research on Wildlife Usage of Native Hydrangeas</u>. Mt. Cuba Center. \$10.

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Members-Only North Creek Spring Order

Maximize your spring planting with flats of perennial plugs from North Creek Nurseries. Members can email their orders to:

SecretaryWildOnesSEPA@gmail.com. Orders are due **by April 15.** Please include the following information:

- Complete name of plant as it appear on the North Creek <u>AVAILABILTY</u> list, including size (LP32, etc.). Make sure the plants you're ordering are available on or before April 25.
- Quantity of FULL FLATS you are ordering.
- No Excel clips or attachments please.

Price will be calculated once the order has been finalized. Pickup is scheduled for April 28 in Pottstown. There may be additional pickup locations, depending on how many flats are ordered.

Not a member of Wild Ones? Join Wild Ones now.

Join our chapter and help heal the Earth one yard at a time! <u>https://members.wildones.org/join/</u>

WO-SEPA 2022 Meeting Schedule

- Mar. 9 Shrink Your Lawn
- Apr. 7 Edible Landscapes
- May 4 How To Design and Plant Your Home Landscape
- June 9 Specialist Pollinators
- July 6 Bondsville Mill Park Presentation
- 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