

**Plant This Not That -- Shrubs** Nonnative invasive ornamental plants can 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. The leaves, flowers, berries, nuts, and seeds of the native shrubs listed below provide food and habitat for insects and birds.

Instead of These Nonnative Shrubs	Plant These Native Shrubs
<b><i>Berberis thunbergii</i> (Japanese barberry)</b> Brilliant red fall foliage	<b><i>Itea virginica</i> (Virginia sweetspire)</b> Fragrant white spring flowers, long-lasting brilliant red to purple fall foliage <b><i>Rhus aromatica</i> (fragrant sumac)</b> Red to purple fall foliage and red berries (female plants)
<b><i>Buddleia</i> (butterfly bush)</b> Fragrant purple or white flowers all summer, rampant annual growth, spring maintenance required to keep growth in check	<b><i>Clethra alnifolia</i> (summersweet)</b> Fragrant pink or white summer flowers, good fall leaf color, low maintenance <b><i>Fothergilla gardenii</i> (witch alder)</b> Fragrant white spring flowers, good fall leaf color, very low maintenance <b><i>Viburnum dentatum</i></b> White spring flowers, blue or black fall berries, good fall leaf color, very low maintenance
<b><i>Eleagnus umbellata</i> (autumn olive)/<i>Eleagnus angustifolia</i> (Russian olive)</b> Tiny fragrant white spring flowers, red or olive-green berries in fall	<b><i>Myrica pennsylvanica</i> (bayberry)</b> Semi-evergreen foliage, waxy silver berries (female plants) <b><i>Rhus typhina</i> (staghorn sumac)</b> Red fruit, red fall foliage <b><i>Corylus americana</i> (American hazelnut)</b> Fall nuts
<b><i>Euonymus alatus</i> (winged euonymus, burning bush)</b> Bright red fall foliage and red berries	<b><i>Itea virginica</i> (Virginia sweetspire)</b> Fragrant white spring flowers, long-lasting brilliant red to purple fall foliage <b><i>Aronia melanocarpa</i> (black chokeberry)</b> Fragrant white spring flowers, black fruit, brilliant red fall foliage <b><i>Physocarpus opulifolius</i> (ninebark)</b> White or pink flowers early summer, red fruit, colorful peeling bark
<b><i>Forsythia x intermedia</i></b> Bright yellow spring flowers, no fall color, very fast growing, maintenance required to keep growth in check	<b><i>Lindera benzoin</i> (spicebush)</b> Pale yellow spring flowers, red berries (female plants), bright yellow fall foliage <b><i>Hamamelis vernalis</i> (Ozark witch hazel)</b> Fragrant yellow early spring flowers, yellow fall foliage
<b><i>Nandina domestica</i> (heavenly bamboo)</b> Red berries and foliage in fall	<b><i>Aronia melanocarpa</i> (black chokeberry)</b> Fragrant white spring flowers, black fruit, brilliant red fall foliage <b><i>Rhus aromatica</i> (fragrant sumac)</b> Red to purple fall foliage and red berries (female plants) <b><i>Ilex verticillata</i> (winterberry holly)</b> Red berries fall/winter (female plants)
<b><i>Lonicera mackii</i>, <i>L. morrowii</i>, <i>L. tatarica</i> (bush honeysuckle)</b> White summer flowers, red berries in fall	<b><i>Ilex verticillata</i> (winterberry holly)</b> Red berries fall/winter (female plants) <b><i>Aronia arbutifolia</i> (redchokeberry)</b> White spring flowers, red fruit, brilliant red fall foliage <b><i>Symphoricarpos albus</i> (snowberry)/<i>Symphoricarpos orbiculatus</i> (coralberry)</b> Tiny pink flowers in spring, pink or white berries fall and winter
<b><i>Spirea japonica</i> (Japanese spirea, bridal wreath)</b> Sprays of pink or white summer flowers, no fall color	<b><i>Clethra alnifolia</i> (summersweet)</b> Fragrant pink or white summer flowers, good fall leaf color, low maintenance <b><i>Spirea splendens</i> (rose meadowsweet)</b> Fragrant pink flowers all summer <b><i>Spirea tomentosa</i> (steeplebush)</b> Pink flowers all summer

**Plant This Not That -- Trees** Nonnative invasive ornamental plants can 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. The leaves, flowers, berries, nuts, and seeds of the native trees listed below provide food and habitat for insects and birds.

Instead of These Nonnative Trees	Plant These Native Trees
<b><i>Pyrus calleryana</i> (Bradford or Callery pear)</b> Asian native widely planted 50+ years ago for its flowers, neat oval form, fall color, and adaptability to heat, drought, poor soil.	<b><i>Amelanchier arborea</i> (downy serviceberry) or <i>Amelanchier canadensis</i> (shadblow)</b> White flowers in spring, small red berries attractive to birds, excellent fall color <b><i>Prunus serotina</i> (black cherry)</b> White flowers in spring, fruit attractive to birds; important host plant for insects <b><i>Chionanthus virginicus</i> (fringe tree)</b> Fragrant white spring flowers, fruit attractive to birds
<b><i>Acer platanoides</i> (Norway maple)</b> Large tree with broad rounded crown; yellow fall color	<b><i>Acer saccharum</i> (sugar maple) or <i>Acer rubrum</i> (red maple)</b> Large-crowned trees with brilliant fall foliage
<b><i>Eleagnus umbellata</i> (autumn olive) and <i>Eleagnus angustifolia</i> (Russian olive)</b> Large shrub or small tree planted to revegetate strip mines, create shelter belts, and provide winter food for native birds and mammals	<b><i>Myrica pennsylvanica</i> (bayberry)</b> Clump-forming semi-evergreen shrub, silver berries (female plants) for birds <b><i>Rhus typhina</i> (staghorn sumac)</b> Clump-forming shrub, red fall foliage, clusters of red berries attract birds <b><i>Corylus americana</i> (American hazelnut)</b> Clump-forming large shrub, nuts attractive to wildlife <b><i>Viburnum lentago</i> (nannyberry)</b> Small tree or large multi-stem shrub, white spring flowers, fall leaf color, edible fruit <b><i>Viburnum nudum</i> (possumhaw)</b> Small to medium shrub, white flowers in spring, edible fruit, good fall color <b><i>Viburnum trilobum</i> or <i>V. opulus</i> var. <i>americanum</i> (cranberry viburnum)</b> but NOT <i>V. opulus</i> , European cranberry bush) Tall
<b><i>Albizia julibrissin</i> (mimosa)</b> Small ornamental tree native to China. Highly adaptable; fragrant, attractive pink flowers in summer	<b><i>Cercis canadensis</i> (redbud)</b> Single trunk or multi-stem tree, dark pink flowers in spring, yellow fall color <b><i>Cornus florida</i> (white dogwood)</b> White flowers in spring, red berries attract birds in fall, good fall leaf color <b><i>Cotinus obovatus</i> (American smoketree)</b> Single-trunk or multi-
<b><i>Cornus kousa</i> (kousa dogwood)</b> Small to medium tree, white flowers in summer, large red fruit in fall, some fall leaf color	<b><i>Cornus florida</i> (white dogwood)</b> White flowers in spring, red berries attract birds in fall, good fall leaf color <b><i>Cornus alternifolia</i> (pagoda dogwood)</b> Small to medium tree, white flowers in spring, tiered branch structure, berries attract birds, red fall foliage
<b><i>Acer palmatum</i> (Japanese maple)</b> Small ornamental landscape tree, mounded shape, red to purple fall foliage	<b><i>Cornus alternifolia</i> (pagoda dogwood)</b> Small to medium tree, white flowers in spring, tiered branch structure, berries attract birds, red fall foliage <b><i>Cotinus obovatus</i> (American smoketree)</b> Medium tree, airy pinkish-purple flowers summer to fall, orange to red fall foliage

**Plant This Not That -- Groundcovers** Nonnative invasive ornamental plants can 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. The leaves, flowers, berries, and seeds of the native groundcovers listed below provide food and habitat for insects and birds.

Instead of Nonnative Groundcovers	Plant These Native Groundcovers
<p><b><i>Vinca minor</i></b> European native widely planted for its ability to provide a low, thick, semi-evergreen ground cover in part to full shade; cultivars can have silver or yellow variegated leaves; small blue or purple flowers in mid-spring; can form large colonies</p>	<p><b><i>Phlox stolonifera</i> (creeping phlox)</b> Evergreen foliage on creeping plants that form a mat in part to full shade; purple flowers in spring</p> <p><b><i>Phlox subulata</i> (moss phlox)</b> Blue or pink flowers on semi-evergreen needle-like foliage, forms a large mat in full sun</p> <p><b><i>Tiarella cordifolia</i> var. <i>cordifolia</i></b> Semi-evergreen leaves, white or pink-tinged flowers in mid-spring, spreads by runners in part to full shade</p>
<p><b><i>Hedera helix</i> (English ivy)</b> Evergreen leaves (can be variegated) form a thick mat on the ground and climb to smother trees</p> <p><b><i>Euonymus fortunei</i> (wintercreeper)</b> Fast-growing vine or groundcover; leaves sometimes variegated; spreads by seed</p>	<p><b><i>Parthenocissus quinquefolia</i> (Virginia creeper)</b> Climbing vine or groundcover, not mat-forming; brilliant fall foliage; adaptable to sun or shade and most soil types</p> <p><b><i>Gelsemium sempervirens</i> (Carolina jessamine)</b> Evergreen small-leaved vine, can climb or sprawl along the ground; fragrant yellow flowers in early spring</p> <p><b><i>Clematis virginiana</i> (woodbine)</b> Deciduous vine with fine-textured leaves; quickly climbs or sprawls along the ground in full sun to shade; small fragrant white flowers in late summer, silvery seed heads in fall; reseeds and spreads via root suckers</p>
<p><b><i>Liriope muscari</i> (lilyturf); <i>Liriope spicata</i> (creeping lilyturf)</b> Drought-tolerant ground cover, often used as edging plant; lavender or white flower spikes in summer; spreads rapidly</p>	<p><b><i>Tiarella cordifolia</i> var. <i>cordifolia</i> or <i>T. wherryi</i> (aka <i>T. cordifolia</i> var. <i>collina</i>) (foamflower)</b> Evergreen mounds in shade; foliage often variegated, pink or white flower spikes in spring; <i>T. var. cordifolia</i> spreads by runners; <i>T. wherryi</i> forms clumps</p> <p><b><i>Carex</i> sp. (sedges)</b> Clump-forming mounds of grass-like foliage for wet to dry shade or part sun; some species spread by offsets to form a tight-knit groundcover, others form distinct clumps</p> <p><b><i>Sporobolus heterolepis</i> (prairie dropseed)</b> Ornamental grass for full sun; 2-foot mounds of graceful foliage topped with fragrant pink-tan flower spikes in summer, good edging plant</p>
<p><b><i>Convallaria majalis</i> (lily of the valley)</b> Groundcover for part sun to shade; wide, thick leaves and small fragrant white flowers in spring; spreads rapidly via rhizomes</p>	<p><b><i>Maianthemum stellatum</i> (starry false Solomon's seal)</b> Groundcover for part shade with long, wide leaves and spikes of white flowers in spring, red berries in fall; spreads by rhizomes</p> <p><b><i>Tiarella cordifolia</i> var. <i>cordifolia</i> or <i>T. wherryi</i> (aka <i>T. cordifolia</i> var. <i>collina</i>) (foamflower)</b> Evergreen mounds in shade; foliage often variegated, pink or white flower spikes in spring; <i>T. var. cordifolia</i> spreads by runners; <i>T. wherryi</i> forms clumps</p>
<p><b><i>Ajuga reptans</i> (bugleweed)</b> Semi-evergreen rosettes send out runners to form mats in sun to shade; leaves green to dark purple; spikes of blue-purple flowers in spring</p>	<p><b><i>Salvia lyrata</i> (lyre-leaf sage)</b> Semi-evergreen rosettes self-seed to form mats in sun to part shade; spikes of blue to violet flowers in spring; leaves darken in winter; tolerates drought, humidity, clay soil</p>
<p><b><i>Lamium galeobdolon</i> (yellow archangel)</b> Semi-evergreen forms thick mats by rooting at stem nodes and reseeding; yellow flowers in late spring; leaves may be variegated</p>	<p><b><i>Packera aurea</i> (golden groundsel)</b> Evergreen clumps of small rounded leaves send up purple flower buds opening to golden rayed flowers in spring; spreads easily in sun to shade</p> <p><b><i>Fragaria virginiana</i> (wild strawberry)</b> Spreads quickly by runners; white flowers in spring followed by red fruit</p>

**Plant This Not That -- Hedgerows** A hedgerow -- a diverse planting of woody plants, from shrubs to small trees -- can serve as a living fence along a property line or a border within a yard. A low hedgerow can enclose a patio or separate a front yard from the street without blocking views. Because of the diversity of plants, a hedgerow can provide a tremendous amount of native habitat in a relatively small space.

Instead of These Nonnatives	Plant These Natives
<p><b>Ligustrum sinense, L. vulgare (Chinese/European privet)</b> Tall semi-evergreen thicket-forming shrub, small fragrant white flowers, black berries in fall. Spreads aggressively via root sprouts and seed.</p> <p><b>L. japonicum, L. lucidum (Japanese/glossy privet)</b> Tall evergreen shrub, small fragrant white flowers small blue-black berries in fall. Spreads via root sprouts and seed.</p>	<p><b>Viburnum nudum (possumhaw)</b> Medium-height shrub (12-15'), white flower clusters, berries turn from pink to deep blue, good fall leaf color, very low maintenance.</p> <p><b>Aronia arbutifolia (red chokeberry)</b> Multi-stem shrub, 6-10' tall, clusters of white flowers in spring, red fruit, good fall leaf color.</p> <p><b>Itea virginica (Virginia sweetspire)</b> Fragrant white spring flowers, brilliant red to purple fall foliage, forms clumps via root suckers</p>
<p><b>Forsythia spp</b> Deciduous shrub with cultivars from 2 to 8 ft tall, bright yellow early spring bloom. Some cultivars have variegated foliage and fall color. Spreads readily via root suckers and tip rooting.</p>	<p><b>Lindera benzoin (spicebush)</b> Fragrant yellow early spring flowers, red berries in fall (female plants), gold fall foliage, spicy scented leaves and bark; host plant for spicebush swallowtail butterfly.</p> <p><b>Hamamelis vernalis (Ozark witch hazel)</b> Very early fragrant yellow flowers, golden fall foliage, spreads via root suckers.</p>
<p><b>Rosa rugosa (shrub rose)</b> Vigorous small shrub, small fragrant pink flowers, large edible orange to red fruits (hips); very thorny; forms thickets.</p>	<p><b>Rosa virginiana (Virginia rose), Rosa caroliniana (Carolina rose)</b> Abundant pink flowers, edible red fruit (hips), colorful fall foliage, host plant for <i>Polyphemus</i> moth.</p> <p><b>Myrica/Morella pennsylvanica (northern bayberry)</b> Semi-evergreen shrub, fragrant leaves, small waxy silver berries (female plants), forms thickets via root suckers.</p>
<p><b>Eleagnus angustifolia (Russian olive), E. umbellata (autumn olive)</b> Tall shrub or small tree, silvery foliage, fragrant flowers, spreads by seeds.</p>	<p><b>Cornus racemosa (gray dogwood)</b> Multi-stem shrub or small single-trunk tree, panicles of white flowers in spring, red to purple foliage in fall, white berries attract birds.</p> <p><b>Prunus caroliniana (cherry laurel)</b> Tall, dense, evergreen shrub, white flowers, black fruit.</p>
<p><b>Euonymus alatus (winged euonymus/burning bush)</b> Large multi-stem shrub or small tree, bright pink to red fall color, orange seeds, spreads via root sprouts and seeds.</p>	<p><b>Itea virginica (Virginia sweetspire)</b> Multistem shrub, fragrant white flowers, long-lasting red to purple fall foliage.</p> <p><b>Aronia melanocarpa (black chokeberry)</b> Multistem shrub, fragrant white flowers, black fruit and brilliant red fall foliage.</p> <p><b>Physocarpus opulifolius (common ninebark)</b> Mound-shaped shrub, white or pink flowers, red fruit, colorful peeling bark.</p>
<p><b>Berberis thunbergii (Japanese barberry)</b> Short shrub, red berries and bright red fall foliage, spreads easily via root suckers and seed.</p>	<p><b>Itea virginica (Virginia sweetspire)</b> Multistem shrub, fragrant white flowers, long-lasting red to purple fall foliage.</p> <p><b>Rhus aromatica (fragrant sumac)</b> Multistem short shrub, red to orange fall foliage, red berries (female plants).</p>
<p><b>Pyracantha coccinea (firethorn)</b> Dense, thorny, fast-growing shrub, white flowers, orange or red berries.</p>	<p><b>Sambucus canadensis (elderberry)</b> Tall multi-stem shrub, white flowers, edible black berries.</p> <p><b>Ilex verticillata (winterberry holly)</b> Suckering shrub, tiny white flowers, red berries.</p>
<p><b>Ilex crenata (Japanese holly)</b> Small evergreen shrub, shiny round leaves, small white flowers.</p>	<p><b>Ilex glabra (inkberry)</b> Mound-shaped colony-forming shrub, glossy evergreen foliage, black berries.</p>
<p><b>Hibiscus syriacus (rose of Sharon)</b> Tall, woody, vase-shaped shrub, large showy flowers, reseeds readily.</p>	<p><b>Hibiscus moscheutos (hardy hibiscus)</b> Tall, fast-growing multi-stem shrub, large colorful flowers.</p>



**Plant This Not That -- Foundation Plants** Many homeowners rely on a limited palette of plants to soften and define the foundation of their home. These are invariably nonnatives, and some of them are invasive, escaping residential gardens and taking over our woods, fields, and wetlands. Why not use your foundation areas to plant more natives to provide food and habitat for insects and birds, as well as to beautify your home.

Instead of These Nonnatives	Plant These Natives
<b><i>Ilex crenata</i> (Japanese holly)</b> Dense evergreen shrub with tiny leaves and small black berries. Spreads by seeds; becoming invasive in natural areas in the Lower Hudson Valley.	<b><i>Ilex opaca</i> (American holly)</b> Glossy evergreen foliage, red berries on female plants; can reach 30 feet in height but can easily be pruned to any height and shape.
<b><i>Buxus sempervirens</i> (boxwood); <i>B. microphylla</i> (Japanese boxwood)</b> Small shrubs prized for their dense foliage; often pruned into geometric shapes.	<b><i>Ilex glabra</i> (inkberry)</b> Evergreen shrub; small white flowers attract pollinators; black or white berries eaten by birds; responds well to pruning.
<b><i>Taxus baccata</i>; <i>T. cuspidata</i> (yew)</b> Soft-needled evergreen commonly pruned into geometric shapes. Foliage is toxic to animals and humans.	<b><i>Juniper communis</i> var. <i>depressa</i> (common juniper)</b> Low, spreading evergreen with silver-frosted blue to black berries. <b><i>Taxus canadensis</i> (American yew)</b> Evergreen shrub for cool, shady locations. Bright red berries attract birds. Foliage is toxic.
<b><i>Hydrangea macrophylla</i> (bigleaf hydrangea)</b> Deciduous shrub featuring large clusters of pink, blue, or white flowers in summer.	<b><i>Hydrangea arborescens</i> (smooth hydrangea)</b> Large clusters of snow-white flowers in summer attract pollinators; attractive exfoliating bark.
<b><i>Berberis thunbergii</i> (Japanese barberry)</b> Deciduous shrub with small leaves, sharp spines on stems, and red berries in fall. Highly invasive in natural areas.	<b><i>Ilex verticillata</i> (winterberry holly)</b> Deciduous shrub with bright red berries (female plants) that persist into winter. <b><i>Physocarpus opulifolius</i> (ninebark)</b> Deciduous shrub with small, dark green leaves and attractive exfoliating bark.
<b><i>Chamaecyparis</i> spp. (false cypress)</b> Soft-needled evergreen with finely dissected foliage.	<b><i>Chamaecyparis thyoides</i> (Atlantic white cedar)</b> Evergreen conifer with soft blue-green needle-like leaves. <b><i>Juniperus virginiana</i> (eastern red cedar)</b> Evergreen tree or shrub with scale-like green, blue-green, or grey-green foliage; large grey-blue berries on female plants attract cedar waxwings.
<b><i>Rhododendron</i> spp. (rhododendron)</b> Mostly evergreen shrubs with small or large leaves, sometimes leathery; clusters of pink, red, or lilac flowers in spring.	<b><i>Rhododendron maximum</i> (rosebay rhododendron)</b> Evergreen, thicket-forming shrub with large leathery leaves and clusters of white to pink flowers in spring. <b><i>Kalmia latifolia</i> (mountain laurel)</b> Broadleaf evergreen shrub with clusters of pink or white flowers in spring.
<b><i>Pieris japonica</i> (Japanese andromeda)</b> Shiny dark green foliage, clusters of red flower buds in winter, trusses of fragrant white flowers in early spring.	<b><i>Pieris floribunda</i> (mountain fetterbush)</b> Deep leathery evergreen leaves, clusters of fragrant bell-shaped flowers in spring. <b><i>Vaccinium corymbosum</i> (highbush blueberry)</b> Deciduous shrub with small white to pink bell-shaped flowers in spring, edible blue berries in summer, bright red to burgundy fall foliage.
<b><i>Juniperus chinensis</i> 'Pfitzeriana' (Pfitzer juniper)</b> Hardy, low-maintenance evergreen shrub with soft gray-green needles.	<b><i>Juniperus horizontalis</i> (creeping juniper)</b> Easily grown evergreen shrub. Foliage color can range from lime to medium green to grey-green. Dark blue cones on female plants.
<b><i>Spirea japonica</i> (Japanese spirea)</b> Dense, broadly mounded deciduous shrub with clusters of pink flowers in early summer. Invasive in eastern U.S.	<b><i>Clethra alnifolia</i> (summersweet)</b> Densely branched deciduous shrub with spikes of fragrant white or pink flowers in summer which attract butterflies and hummingbirds.
<b><i>Spirea prunifolia</i> (bridal wreath)</b> Deciduous shrub with upright, arching branches; thick sprays of white flowers in mid-spring.	<b><i>Itea virginica</i> (Virginia sweetspire)</b> Deciduous shrub with sprays of fragrant white flowers in mid-spring which attract bees and butterflies. Long-lasting brilliant fall leaf color.

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

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

**Plant This Not That -- Plants for Containers** Some gardeners like to plant in containers, whether for decorative accents or to provide welcome color and ecological benefit in non-soil locations like balconies and rooftops. Many common container plants are nonnatives bred specifically for colorful foliage or a long period of bloom. Below are some native plants that work in containers and also support native insects and birds. You can let these plants overwinter in their pots or just replant them every year, if that's easier. Either way, you can elevate your containers to the next level by planting native! Because nonnative container plants are so different from natives, we won't try to offer native alternatives. Instead, the natives listed here can be used to create container plantings for sun or shade to attract native insects and birds, provide important habitat, and beautify your surroundings.

<p><b>Thrillers</b> -- These are tall plants or those with large or colorful foliage or flowers that immediately catch the eye.</p>	<p><b><i>Agastache foeniculum</i> (anise hyssop)</b> Tall perennial with anise-scented foliage and lavender flowers spikes all summer in full sun. Stems can be cut back in spring when they reach 1 foot to control the plant's height. Attracts butterflies and native bees.</p> <p><b><i>Heliopsis helianthoides</i> (ox-eye sunflower), <i>Rudbeckia hirta</i> (black-eyed Susan)</b> Bright yellow rayed flowers on stiff, upright stems. Blooms in full sun all summer. Ox-eye sunflower can be cut back in spring when stems reach 1 foot to control the plant's height.</p> <p><b><i>Salvia farinacea</i> (mealeycup sage), <i>S. coccinea</i> (Texas sage)</b> Spikes of blue (<i>S. farinacea</i>) or scarlet (<i>S. coccinea</i>) flowers attract scores of native pollinators all summer. Tender perennials.</p> <p><b><i>Delphinium carolinianum</i> (Carolina larkspur), <i>D. exaltatum</i> (tall larkspur)</b> Dramatic spikes of showy blue flowers in midsummer.</p> <p><b><i>Schizachyrium scoparium</i> (little bluestem), <i>Elymus hystrix</i> (bottlebrush grass)</b> Both add color, texture, and a strong vertical element for sun (little bluestem) or shade (bottlebrush grass).</p>
<p><b>Spillers</b> -- These plants fill in around the edges and can drape over the sides of pots. Trim back as needed during the season.</p>	<p><b><i>Clematis virginiana</i> (virgin's bower)</b> Fast-growing vine with clusters of fragrant white flowers in late summer followed by silky seed heads. Normally a climber, this plant can be trained to twine around the edges of a planter and drape over the sides. Host plant for clematis clear-wing moth.</p> <p><b><i>Phlox stolonifera</i> (creeping phlox), <i>P. subulata</i> (moss phlox)</b> Mat-forming plants for shade or sun, respectively. Purple (<i>P. stolonifera</i>) or blue/pink (<i>P. subulata</i>) flowers in spring. Attractive foliage will spill or drape over pot edges all summer.</p> <p><b><i>Fragaria virginiana</i> (wild strawberry)</b> Bright green trifoliate leaves and small white flowers in spring, followed by small edible strawberries. Keep runners cut back to control draping.</p>
<p><b>Fillers</b> -- These plants are medium height and can be combined to provide continuous color from spring through fall.</p>	<p><b><i>Eurybia divericata</i> (white wood aster), <i>Aster cordifolius</i> (blue wood aster)</b> A profusion of white or light blue daisy-like flowers in late summer to fall. Both thrive in part shade. Important food source for late-season pollinators.</p> <p><b><i>Scutellaria incana</i> (downy skullcap)</b> Adaptable perennial with spikes of blue-violet tubular flowers in summer; attracts hummingbirds, bees, and butterflies.</p> <p><b><i>Asclepias tuberosa</i> (butterfly milkweed)</b> Bushy medium-height plant with clusters of bright orange flowers in summer; nectar source and larval host plant for monarch butterfly.</p> <p><b><i>Echinacea</i> spp., <i>Ratibida pinnata</i> (coneflowers)</b> Purple, yellow, or white rayed flowers on sturdy foliage all summer. <i>R. pinnata</i> foliage is finely cut; <i>Echinacea</i> foliage takes up more space.</p> <p><b><i>Heuchera americana</i>, <i>H. villosa</i> (coral bells)</b> Attractive large scalloped leaves, sometimes with contrasting leaf veins or colorful marbling. Airy sprays of tiny flowers in late spring.</p> <p><b><i>Penstemon digitalis</i> (foxglove beardtongue), <i>P. hirsutus</i> (downy beardtongue)</b> Attractive basal leaves all season, graceful spikes of white or lavender flower in early summer.</p> <p><b><i>Coreopsis verticillata</i>, <i>C. rosea</i> (threadleaf coreopsis)</b> Mounded plants with delicate thread-like foliage and masses of yellow (<i>C. verticillata</i>) or pale pink (<i>C. rosea</i>) flowers all summer.</p> <p><b><i>Carex pennsylvanica</i>, <i>C. rosea</i>, <i>C. appalachica</i>, <i>C. flaccosperma</i>, <i>C. muskingumensis</i> (sedges)</b> The grass-like foliage of sedges can be fine or wide, bright green or tinged with blue. Airy flower spikes in summer provide a graceful accent. <i>C. muskingumensis</i> also works as a spiller.</p> <p><b><i>Verbena bonariensis</i> (tall verbena)</b> Airy stems topped with small clusters of lavender flowers all summer are bee and butterfly magnets.</p>

**Plant This Not That-- Common Nursery Plants** Many nurseries and big box stores sell nonnative ornamental plants that are listed as invasive in some states across the U.S. While these plants may look harmless in their small pots, they can overrun and displace native shrubs and trees and rob our wildlife of the food they need to eat. They are [listed as invasive](#) in many states. Some have recently been banned from sale in Pennsylvania.

Instead of These Nonnatives	Plant These Natives
<b><i>Iris pseudocorus</i> (yellow flag iris)</b> Fast-growing pond plant that spreads by seeds to wet meadows and streams, where it can form impenetrable monoculture thickets that outcompete native vegetation.	<b><i>Iris versicolor</i> (blue flag iris)</b> Clump-forming iris native to marshes, swamps, wet meadows, and shorelines. Violet-blue flowers with streaks of yellow on the falls in mid-summer.
<b><i>Berberis thunbergii</i> (Japanese barberry)</b> Brilliant red fall foliage, small red berries. Spreads by seed and root sprouts to form dense thickets. Banned from sale in PA as of October 2023.	<b><i>Itea virginiana</i> (Virginia sweetspire)</b> Spires of fragrant white flowers in spring, long-lasting brilliant red to purple fall foliage. <b><i>Rhus aromatica</i> (fragrant sumac)</b> Very adaptable small to medium shrub with bright red to purple fall foliage.
<b><i>Euonymus alatus</i> (burning bush)</b> Mid to large-size shrub with bright red fall foliage and red berries. Spreads prolifically by seed and outcompetes native understory plants and tree seedlings.	<b><i>Aronia melanocarpa</i> (black chokeberry)</b> Fragrant white flowers in spring, black fruit, brilliant red fall foliage. <b><i>Vaccinium corymbosum</i> (highbush blueberry)</b> White or pink flowers in early summer, edible fruit, bright red fall foliage.
<b><i>Pyrus calleryana</i> (Callery or Bradford pear)</b> Asian native imported for hybridization with fruiting pears. Reseeds in fields and woodlands, forming thickets that crowd out native species. Banned from sale in PA as of November 2023.	<b><i>Amelanchier arborea</i> (serviceberry)</b> Small tree with masses of white flowers in spring, red edible fruit early summer. <b><i>Prunus americana</i> (American plum)</b> Thicket-forming shrub or small tree with spreading crown, showy white flowers in spring, and small edible red plums in summer.
<b><i>Ligustrum spp.</i> (privet)</b> Tall, dense shrub used in hedges. Spreads rapidly by seed in disturbed areas such as forest clearings and abandoned farm fields.	<b><i>Viburnum nudum</i> (possumhaw)</b> Medium-height shrub (12-15'), white flower clusters, berries turn from pink to deep blue, good fall leaf color, very low maintenance. <b><i>Aronia arbutifolia</i> (red chokeberry)</b> Multi-stem shrub, 6-10' tall, clusters of white flowers in spring, red fruit, good fall leaf color.
<b><i>Hedera helix</i> (English ivy)</b> Evergreen leaves (sometimes variegated) form a thick mat on the ground and climb to smother trees.	<b><i>Parthenocissus quinquefolia</i> (Virginia creeper)</b> Climbing vine or groundcover, not mat-forming. Brilliant red fall foliage; adaptable to sun or shade and most soil types. <b><i>Clematis virginiana</i> (woodbine)</b> Deciduous climbing or groundcover with finely textured leaves and masses of white fragrant flowers in late summer, followed by silvery seed heads.
<b><i>Acer platanoides</i> (Norway maple)</b> Large tree with broad rounded crown; yellow fall foliage. Spreads rapidly by seed and out-competes native trees.	<b><i>Acer saccharum</i> (sugar maple), <i>A. rubrum</i> (red maple)</b> Large-crowned trees with brilliant red fall foliage.
<b><i>Miscanthus sinensis</i> (Chinese silvergrass)</b> Large showy clumping grass with silver seed heads in summer. Spreads aggressively by seed and rhizomes. Displaces native vegetation and increases fire risk.	<b><i>Panicum virgatum</i> (switchgrass)</b> Clumping grass with airy seed heads in fall, golden fall foliage. <b><i>Sorhastrum nutans</i> (Indian grass)</b> Tall clumps of slender arching blue-green leaves and thick golden flower plumes in summer.
<b><i>Buddleia davidii</i> (butterfly bush)</b> Fast-growing shrub with arching stems and plumes of fragrant blue, purple, pink, or white flowers that attract butterflies. Reseeds aggressively.	<b><i>Clethra alnifolia</i> (summersweet)</b> Spires of fragrant pink or white flowers in summer, good fall leaf color, adapts to sun or shade. <b><i>Fothergilla gardenii</i> (witch alder)</b> Fragrant white flowers in spring, bright yellow fall foliage, very low maintenance.
<b><i>Vinca minor</i> (periwinkle)</b> Thick semi-evergreen ground cover for part to full shade. Small blue or purple flowers in spring. Can escape cultivation and spread to nearby woods and fields.	<b><i>Phlox stolonifera</i> (creeping phlox)</b> Evergreen foliage on creeping plants forming a thick mat in part to full shade; purple flowers in spring. Easily transplanted. Tolerates drought once established.



**Plant This Not That -- Sedges, Rushes, and Grasses** Nonnative invasive ornamental plants can 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. The leaves, flowers, and seeds of the natives listed below provide important habitat and food for insects and birds.

Instead of These Nonnatives	Plant These Natives
<p><b><i>Ophiopogon japonicus</i> (mondo grass)</b> Fine, dark green to black foliage; thrives in shade. Aggressive spreader that can rapidly choke out other plants.</p> <p><b><i>Liriope muscari</i> (lilyturf); <i>Liriope spicata</i> (creeping lilyturf)</b> Drought-tolerant ground cover, often used for edging; lavender or white flower spikes in summer. Aggressive spreader that can choke out other plants.</p> <p><b><i>Festuca glauca</i> (blue fescue)</b> Compact, clumping, semi-evergreen grass with fine blue-green foliage. Intolerant of wet soil and humidity. Must be divided every few years to prevent center die-out.</p>	<p><b><i>Carex pennsylvanica</i> (Pennsylvania sedge)</b> Fine, delicate foliage with low, graceful, arching habit; spreads slowly via rhizomes. Part to full shade, dry to average well-drained soil.</p> <p><b><i>Carex appalachia</i> (Appalachian sedge)</b> Fine foliage, similar to <i>C. pennsylvanica</i> but clump-forming, spreads via offshoots.</p> <p><b><i>Carex plantaginea</i> (seersucker sedge)</b> Wide, bright green textured leaves; clump forming; thrives in light to deep shade and moist to semi-dry soils. Showy black flower spikes on dark purple stems in spring.</p> <p><b><i>Carex flaccosperma</i> (blue wood sedge)</b> Compact clumps of grass-like blue-green foliage. Evergreen in most winters. Moist to average soil in part shade; tolerates clay.</p>
<p><b><i>Pennisetum alopecuroides</i> (fountain grass)</b> Shorter grass (2' to 3') with purple or pink flower heads. Forms thick stands that can crowd out other plants.</p> <p><b><i>Imperata cylindrica</i> (Japanese blood grass)</b> Bright green blades 1 to 2 feet tall, upper portions turn red in summer. Banned as invasive in many southern states.</p>	<p><b><i>Sporobolus heterolepis</i> (prairie dropseed)</b> Easy-to-grow grass for full sun; 2-foot mounds of graceful foliage topped with fragrant pink to tan flower spikes in summer;. Good edging plant. Tolerates drought, erosion, dry soil, and shallow rocky soil.</p> <p><b><i>Muhlenbergia capillaris</i> (pink muhly grass)</b> Clump-forming, grass with clouds of pink to pinkish-red flower panicles from early to late fall. Dark green finely textured basal foliage. Ideal for hot, dry sites.</p> <p><b><i>Schizachyrium scoparium</i> (little bluestem)</b> Upright clumps of blue-tinged stems turn reddish bronze in fall. Performs best in average, dry to medium-moist, well-drained soil in full sun. Host plant for numerous skipper butterflies.</p> <p><b><i>Juncus effusus</i> (common rush)</b> Clump-forming; smooth green evergreen foliage. Effective erosion control on stream and pond</p>
<p><b><i>Miscanthus sinensis</i> (Chinese silver grass)</b> Tall, clump-forming grass with fluffy white seed heads. Extremely invasive; many "sterile" cultivars can cross-pollinate and set viable seed.</p> <p><b><i>Cortaderia selloana</i> (pampas grass)</b> Tall, clumping grass with sharp-edged foliage and large feathery white plumes. Spreads rapidly by seed.</p> <p><b><i>Calamagrostis brachytricha</i> (reed grass) and <i>Calamagrostis acutiflora</i> (feather reed grass)</b> Tall clump-forming grass; narrow, upright habit, white to tan feathery flower spikes.</p>	<p><b><i>Andropogon ternarius</i> (split bluestem)</b> Medium-height prairie native preferring poor, sandy soil. Foliage turns blue-green in summer and copper-bronze in fall.</p> <p><b><i>Andropogon virginicus</i> (broom sedge)</b> Medium-tall grass (to 4 feet) turns from green to dark red-purple in fall, to golden orange in winter.</p> <p><b><i>Panicum virgatum</i> (switch grass)</b> Tall, long-lived grass spreading slowly via short rhizomes. Airy, pink-tinged flower spikes in mid-summer. Seeds support birds.</p> <p><b><i>Andropogon gerardii</i> (big bluestem)</b> Tall clump-forming prairie native. Foliage turns blue-green in summer, changing to bronze-red in fall. Host plant for skippers. Drought tolerant, grows in full sun in almost any soil from wet clay to dry sand.</p> <p><b><i>Sorghastrum nutans</i> (Indian grass)</b> Clump-forming prairie native with golden-bronze seed plumes in late summer. Blue-green summer foliage turns gold in fall. Tolerates heavy clay and poor, dry soil.</p>

**Plants for Winter Interest Outside and Indoors** Many of our native plants have leaves, berries, stems, and even buds that provide color and interest over winter and can be used in holiday decorations,. After the holidays, take your decorations outside and leave the branches and berries on the ground for the birds and other animals.

***Ilex opaca* (American holly)** Glossy green leaves and red berries that hold well on indoor or outdoor decorations.

***Ilex verticillata* (winterberry holly)** Strong stems with clusters of red berries stand up well in containers.

***Callicarpa americana* (beautyberry)** Graceful arching stems with cluster of violet berries.

***Celastrus scandens* (American bittersweet)** Woody vine with clusters of orange berries at the tips of branches. Berries tend to fall off easily. Don't confuse this with invasive Asian bittersweet, which has berries all along the branches.

***Cornus sericea* (red-twig dogwood)** Bright red stems provide vertical element in arrangements.

***Hamamelis virginiana* (witch hazel)** Tiny yellow thread-like flowers bloom along stiff stems in winter.

***Tilia americana* (linden; basswood)** Prominent buds at the tips of twigs are tinged with red.

***Cornus florida* (white dogwood)** Small clusters of scarlet berries at the tips of branches.

***Viburnum* spp.** Clusters of berries can be red, blue, pink, or black.

***Schizachyrium scoparium* (little bluestem)** Soft blue upright stems turn reddish in fall.

***Sorghastrum nutans* (Indiangrass)** Soft tan plumes on thin stems are a graceful filler.

***Rosa carolina*, *R. virginiana* (Carolina rose, Virginia rose)** Bright red rose hips are decorative and edible too.

***Symphoricarpos alba* (snowberry)** Clusters of white berries at the tips of branches last well into winter.

***Juniperus virginiana* (eastern red cedar)** Small fleshy blue berries (actually seed cones) are clustered toward the ends of branches. Evergreen foliage is stiff and gray-green.

***Phytolacca americana* (pokeberry)** Arching sprays of medium-size dark blue to black berries on bright red-purple stems. Berries are soft and the juice has been used as a dye.

***Crataegus phaenopyrum* (Washington hawthorn)** Small clusters of orange-red berries hang from tips of branches.

***Rhus typhina* (staghorn sumac)** Large upright cones of bright red berries make a dramatic statement.

***Polystichum acrostichoides* (Christmas fern)** Evergreen fronds are a great filler in vases and wreaths.

***Asclepias* spp. (milkweeds)** Teardrop-shaped pods are a dramatic accent with or without their white silk.

***Pinus strobus* (eastern white pine)** Long graceful branches with soft clusters of long evergreen needles.

***Juniperus horizontalis* (creeping juniper)** Short, dense sprays of gray-green evergreen needles are great as fillers in wreaths and other small arrangements.

***Hibiscus palustris* (swamp rose mallow)** Seed capsules open to form small five-pointed stars.

***Pinus resinosa* (red pine)** Medium-size egg-shaped cones are tinged with red.

***Quercus* spp. (oaks)** Acorns can be flat or elongated, green or brown; a few have fuzzy caps.

***Ilex glabra* (inkberry)** Small evergreen leaves and small black berries.

***Picea rubens* (red spruce)** Stiff evergreen needled branches provide good filler. Egg-shaped cones are reddish brown.

***Rhododendron maximum* (rosebay)** Long narrow leathery evergreen leaves and interesting seed pods.

***Magnolia virginiana* (sweetbay magnolia)** Red cone-like seed pods with bright red seeds mature in early fall.

***Alnus serrulata* (smooth alder)** Clusters of small black cones that resemble small pine cones.

***Abies balsamea* (balsam fir)** Soft, flat evergreen needles on stiff branches; fragrant.

***Myrica pennsylvanica* (northern bayberry)** Clusters of small aromatic silver-grey berries on female plants.

***Tsuga canadensis* (Canadian hemlock)** Soft, feathery evergreen needles form a flat horizontal spray on the twig. Tiny brown cones hang from twigs.

**Plant This Not That -- Small Trees** Homeowner with smaller spaces might think they don't have room to plant canopy trees, particularly the keystone tree species that are so important in producing enough food to sustain a critical mass of insect larvae that in turn feed our native birds and small mammals. Although all of these species (oak, poplar, cherry, birch, willow, and pine) can be maintained as shorter trees by pruning, the native understory trees listed here also provide important habitat and can fit into almost any landscape.

Instead of These Nonnatives	Plant These Natives
<b><i>Acer palmatum</i> (Japanese maple)</b> Cultivars can be upright or weeping, with palmate to fernlike foliage that can range from green to orange, red, purple, and variegated. Insignificant flowers and fruit.	<b><i>Cornus alternifolia</i> (pagoda dogwood)</b> Elegant tiered horizontal branching pattern showcases clusters of white flowers in spring and dark blue berries in fall. Burgundy-red fall foliage. Excellent specimen plant.
<b><i>Malus</i> spp. (crabapple)</b> Cultivars can have white, pink, or red flowers and a weeping, rounded, or columnar habit. Most produce small orange, gold, or red fruit in fall.	<b><i>Malus coronaria</i> (sweet crabapple), <i>M. angustifolia</i> (southern crabapple)</b> Native to the upper Midwest or southeastern U.S., this small tree has pale pink to white flowers and produces small green fruits that can be made into cider or jelly.
<b><i>Ginkgo biloba</i> (maidenhair tree)</b> Unusual fan-shaped leaves turn deep yellow in fall. Often used as a street tree. Dioecious; mature female trees produce messy, unpleasant smelling fruit.	<b><i>Acer pennsylvanicum</i> (striped maple)</b> Distinctive white-striped bark on stems and young trunks. Clusters of small greenish-yellow bell-shaped flowers in spring. Large, papery leaves turn yellow in fall. Many animals browse the leaves and twigs.
<b><i>Cornus kousa</i> (kousa dogwood)</b> White flowers appear a few weeks later than those of the native white dogwood. Soft red-purple fruits in fall attract squirrels and can be messy on a patio or walkway.	<b><i>Cornus florida</i> (white dogwood)</b> Large white flowers in April to May, followed by glossy green foliage turning red to purple in fall. Small bright red berries may persist into winter and are attractive to birds.
<b><i>Prunus pendula</i> (weeping cherry)</b> Cultivar developed for its weeping habit, pale pink or white flowers in spring, and yellow fall foliage.	<b><i>Cercis canadensis</i> (redbud)</b> Single-trunk or multi-stem tree with clusters of pink-purple flowers all along branches in early spring, before heart-shaped leaves appear. Purple pea-pod fruit and yellow foliage in fall. Flowers attract migrating orioles.
<b><i>Magnolia stellata</i> (star magnolia)</b> Showy white flowers in early spring, before the leaves emerge. Buds are sometimes damaged by frost. Seed pods contain large orange seeds.	<b><i>Magnolia virginiana</i> (sweetbay magnolia)</b> Large white lemon-scented saucer-shaped flowers in late spring. Large, mostly evergreen leaves backed with silver shimmer in the wind. Bright red seeds in cone-shaped pods are attractive to birds.
<b><i>Laburnum x. watereri</i> (golden chain tree)</b> Dramatic hanging clusters of fragrant yellow pea-like flowers in spring. All parts of the tree are toxic.	<b><i>Chionanthus virginicus</i> (fringe tree)</b> Airy, drooping clusters of fragrant white flowers in spring, blue-black olive-like fruits on female trees in fall are attractive to birds. Yellow fall foliage.
<b><i>Albizia julibrissin</i> (mimosa or silk tree)</b> Silky fragrant pink flowers in mid-summer, fern-like leaves. Spreads aggressively and readily colonizes disturbed habitats, such as roadsides. Listed as invasive in some southern states.	<b><i>Cotinus obovatus</i> (smoke tree)</b> Native to the southern U.S. but thrives in our area as well. Large oval leaves emerge pink and mature to blue-green. Long upright pink to lavender flower panicles in summer resemble plumes of smoke. Orange to red fall leaf color.
<b><i>Carpinus betulus</i> (European hornbeam)</b> Densely textured foliage and slate-grey smooth or fluted bark. Yellow fall foliage. Used as a specimen tree or in hedges.	<b><i>Carpinus caroliniana</i> (American hornbeam or musclewood)</b> Leaves emerge reddish-purple, changing to dark green, then yellow to orange-red in fall. Fluted blue-grey bark is attractive in winter.
<b><i>Salix babylonica</i> (weeping willow)</b> Fast grower, thrives near water. Pendulous, weeping branches break easily. Narrow light-green leaves emerge early in spring.	<b><i>Betula nigra</i> (river birch)</b> Fast growing single-trunk or multi-stem tree that tolerates wet soil as well as some drought. Mature trees have peeling, silver to cinnamon-colored bark. Catkins are favored by birds. Leaves can turn bright yellow in fall. Larval host plant for mourning cloak butterfly.
<b><i>Prunus cerasifera</i> 'Newport' (Newport plum)</b> Bronze-purple foliage turning red in fall. Pale pink flowers in early spring, small purple fruit in fall.	<b><i>Prunus americana</i> (American plum)</b> Short trunk and broad crown, showy large white flowers in spring. Small edible red plums in late summer attract birds. Red to yellow fall foliage.

**Plant This Not That -- Plants for Fall Color** Here are suggestions for native plants, from trees to ground-covers, whose leaves, berries, stems, and even buds provide color and interest to the garden through fall and winter, and benefit wildlife as well.

**Colorful foliage**

is the hallmark of fall. Even before the first frost, some of these trees, shrubs, and vines are starting to turn gorgeous colors.



***Carya ovata* (shagbark hickory)** Tall tree (to 90 feet) with golden yellow leaves in fall.

***Acer rubrum* (red maple), *A. saccharum* (sugar maple)** Tall trees with flaming red to orange fall foliage.

***Liquidambar styraciflua* (sweet gum)** Tall tree (to 75 feet) boasting large star-shaped orange, red, and purple leaves in fall.

***Cercis canadensis* (redbud)** Medium-size understory tree, to 30 feet. Heart-shaped bright yellow leaves in fall. Peapod seeds hang from mature branches all winter.

***Fothergilla* spp. (witch alder)** Branching shrub to 6 feet. Long-lasting fall colors range from gold, orange, red, and purple, often at the same time.

***Quercus rubra* (northern red oak), *Q. coccinea* (scarlet oak)** Large trees with long-lasting dark red or scarlet foliage.

***Sassafras albidum* (sassafras)** Relatively fast-growing tree to 60 feet; often grows in clumps. Mitten, ghost, and oval shaped leaves turn yellow, orange, scarlet, and purple in fall.

***Cotinus obovata* (American smoke tree)** Small (to 30 feet) drought-tolerant tree with large oval blue-green leaves that turn orange to scarlet in fall.

***Rhus aromatica* (fragrant sumac)** Deciduous shrub to 5 feet or lower ('Gro Low') with spreading habit. Small leaves turn bright red to maroon in fall.

***Vaccinium corymbosum* (blueberry)** Twiggy medium-size shrub with bright red fall foliage.

***Itea virginica* (Virginia sweetspire)** The leaves of this medium-size suckering shrub turn as red as those of invasive burning bush and last much longer.

***Parthenocissus quinquefolia* (Virginia creeper)** Vigorous vine that is both a groundcover and a climber, up to 50 feet. Large five-fingered leaves turn dark red in fall.

***Hydrangea quercifolia* (oakleaf hydrangea)** Large shrub with red to purple fall foliage.

**Berries/Stems/Buds**

These natives have particularly colorful berries, stems, or even buds that persist through winter.

***Ilex verticillata* (winterberry holly)** Medium size shrub with clusters of red berries in fall.

***Callicarpa americana* (beautyberry)** Graceful arching stems covered with red-purple berries.

***Celastrus scandens* (American bittersweet)** Woody vine with clusters of orange berries in fall.

***Cornus sericea* (red-twig dogwood)** Suckering shrub with bright red stems in winter.

***Symphoricarpos orbiculatus* (coralberry)** Suckering shrub with small bright pink berries in fall.

***Hamamelis virginiana* (witch hazel)** Tall shrub with bright yellow thread-like flowers in winter.

***Tilia americana* (linden; basswood)** Tall tree whose buds are tinged with red over winter.

**Foliage AND berries**

These natives have it all.

***Cornus florida* (dogwood)** This familiar understory tree has bright red to maroon fall foliage and scarlet berries loved by birds.

***Aronia arbutifolia* (red chokeberry), *A. melanocarpa* (black chokeberry)** Clumping shrubs with flaming red fall foliage and small red or black fruits.

***Nyssa sylvatica* (black gum or tupelo)** Medium-tall slow-growing tree with brilliant red, orange, yellow, and purple foliage in fall, along with small dark-blue fruit for the birds.

***Viburnum* spp.** Small trees or large shrubs with colorful fall foliage and blue, pink, or black berries.

**In Pots**

Native alternatives to the standard chrysanthemums and ornamental kale.

***Symphyotrichum oblongifolium* (aromatic aster)** Masses of showy violet-blue rayed flowers in late fall. Pinch back by 1/3 in July for fuller display. Prefers full sun.

***Solidago sphacelata* 'Golden Fleece' (autumn goldenrod)** Arching sprays of golden yellow flowers in August and September. Full sun.

***Schizachyrium scoparium* (little bluestem)** Soft blue upright 2' stems turn reddish in fall.

***Symphyotrichum ericacea* 'Snow Flurry' (white heath aster)** In fall, clouds of tiny white flowers cover the stiff needle-like foliage of this 6" high groundcover and spill over the sides of a pot.



**Plant This Not That -- Streetside Plantings** If your property includes sidewalks and street frontage, these areas are an opportunity to showcase native plantings and educate passers-by about the beauty and diversity of native plants. Plant groundcovers and shorter plants next to the pavement, and site your taller natives far enough from the sidewalk or roadway that they won't flop onto the pavement after a hard rain. A border of bricks or landscaping pavers will give your streetside planting added definition. Lay bricks or pavers level with the street or sidewalk to avoid having them plowed up in the winter.

<p><b>For Sun</b> -- Plants are listed from shortest to tallest. Shrubs should be sited well back from the pavement to avoid damage to woody stems by plows in winter.</p>	<p><b><i>Phlox subulata</i> (moss phlox)</b> Needle-like semi-evergreen foliage in spreading clumps. Pink, pale blue, or white flowers in spring. Good for edging. Salt-tolerant.</p> <p><b><i>Antennaria plantaginifolia</i> (pussytoes)</b> Round silver leaves form a groundcover that spreads slowly. Small white flowers in early summer. Host plant for painted lady butterfly.</p> <p><b><i>Rudbeckia hirta</i> (black-eyed Susan)</b> Bright yellow rayed flowers on stiff, upright stems. Blooms in full sun all summer. Biennial or short-lived perennial.</p> <p><b><i>Coreopsis verticillata</i>, <i>C. rosea</i> (threadleaf coreopsis)</b> Mounded plants with delicate thread-like foliage and masses of yellow (<i>C. verticillata</i>) or pale pink (<i>C. rosea</i>) flowers all summer.</p> <p><b><i>Asclepias tuberosa</i> (butterfly milkweed)</b> Stiff stems hold clusters of bright orange flowers in summer. Larval host plant for monarch butterfly. Forms clumps slowly.</p> <p><b><i>Echinacea</i> spp. (coneflowers)</b> Purple or yellow rayed flowers on stiff stems in summer.</p> <p><b><i>Sporobolus heterolepis</i> (prairie dropseed)</b> Mounding clump of fine-bladed leaves with airy pink to tan flower spikes in summer.</p>
	<p><b><i>Rhus aromatica</i> (fragrant sumac)</b> Deciduous shrub, low spreading habit, cluster of small yellow flowers followed by red berried. Colorful fall foliage.</p>
<p><b>For Part Sun to Shade</b> -- Plants are listed from shortest to tallest.</p>	<p><b><i>Phlox stolonifera</i> (creeping phlox)</b> Mat-forming plant with small purple flowers in spring. Will spread to form attractive groundcover.</p> <p><b><i>Carex pennsylvanica</i>, <i>C. rosea</i>, <i>C. appalachica</i>, <i>C. flaccosperma</i></b> The grass-like foliage of sedges can be fine or wide, bright green or tinged with blue.</p> <p><b><i>Anemone canadensis</i> (Canada anemone)</b> Soft-leaved groundcover with sparkling white flowers in spring.</p> <p><b><i>Penstemon digitalis</i> (foxglove beardtongue), <i>P. hirsutus</i> (downy beardtongue)</b> Attractive basal leaves all season, graceful spikes of white or lavender flower in early summer, leaves may turn red in fall.</p> <p><b><i>Elymus hystrix</i> (bottlebrush grass)</b> Adds color, texture, and vertical element. Mixes well with other medium-height natives.</p> <p><b><i>Zizia aurea</i> (golden alexanders)</b> Clusters of bright yellow flowers in spring.</p> <p><b><i>Eurybia divericata</i> (white wood aster), <i>Aster cordifolius</i> (blue wood aster)</b> Masses of white or light blue daisy-like flowers in late summer to fall. Important food for late-season pollinators.</p>
<p><b>Under Street Trees</b>-- Plant the area out to the drip line to provide a soft landing area for insects. In addition to the shade plants listed above, these shallow-rooted plants will avoid competition with tree roots.</p>	<p><b><i>Potentilla tridentata</i> (three-toothed cinquefoil)</b> Mat-forming groundcover with compound evergreen leaves, small white flowers in summer, red fall foliage.</p> <p><b><i>Carex pennsylvanica</i>, <i>C. rosea</i>, <i>C. appalachica</i>, <i>C. flaccosperma</i> (sedges)</b> The grass-like foliage can be fine or wide, bright green or tinged with blue. Airy flower spikes in summer provide a graceful accent.</p> <p><b><i>Heuchera americana</i> (alum root)</b> Heart-shaped, mounding leaves can be variegated or have attractive darker veins. Airy white to pink flowers in early summer. Requires good drainage.</p> <p><b><i>Geranium maculatum</i> (cranesbill)</b> Spreading mounds of light green compound leaves, pale pink flowers in summer.</p> <p><b><i>Athyrium filix-femina</i> (lady fern)</b> Forms clumps of arching, lacy fronds.</p>

**Plant This Not That -- Water Garden Plants** *Nonnative ornamental plants provide little food for native creatures, and some can escape residential gardens and colonize streams, ponds, and wetlands, displacing and altering native plant communities, and degrading wildlife habitat and water quality.*

*You can help reverse this degradation by replacing nonnative pond and wetland plants with natives. The leaves, flowers, tubers, and seeds of the natives listed below provide important habitat and food for insects, amphibians, reptiles, and birds.*

Instead of These Nonnatives	Plant These Natives
<p><b><i>Lysimachia nummularia</i> (creeping jenny or moneywort)</b> Small round leaves on long trailing stems. Grows in wet soil or water up to 1" deep. Aggressive spreader.</p> <p><b><i>Pistia stratiotes</i> (water lettuce)</b> Thick, almost succulent leaves in a low-growing rosette formation. Aggressive spreader; can form thick floating mats.</p> <p><b><i>Crassula helmsii</i> (New Zealand pygmyweed or swamp stonecrop)</b> Bright green succulent leaves form dense mats with tiny white flowers. Can grow semi-submerged or completely under water.</p>	<p><b><i>Heteranthera dubia</i> (water stargrass)</b> Thin, grass-like branching stems, bright yellow star-shaped flowers in late summer. Can grow up to 6' long and form floating colonies. Valuable habitat for microinvertebrates.</p> <p><b><i>Hydrocotyl ranunculoides</i> (floating pennywort), <i>H. umbellata</i> (marsh pennywort)</b> Thick mass of scalloped 2" leaves; spreads quickly via rhizomes. Small white flowers in summer. Grows in sun to shade in saturated soil at water's edge.</p> <p><b><i>Ludwigia palustris</i> (water purslane or marsh seedbox)</b> Mat-forming plant with green to reddish leaves underwater and to 12" above the surface.</p>
<p><b><i>Axorus garmineus</i> (golden Japanese sweetflag)</b> Narrow light green foliage, sometimes variegated. Grows at the water's edge or partially submerged.</p>	<p><b><i>Acorus americanus</i> (sweetflag)</b> Aromatic upright green blades resemble iris foliage. Full sun to part shade in wet soil along banks of ponds or streams.</p>
<p><b><i>Nymphoides peltata</i> (yellow floating heart)</b> Broad heart-shaped floating leaves, bright yellow flowers with five fringed petals. Forms dense mats and spreads easily.</p>	<p><b><i>Orontium aquaticum</i> (golden club)</b> Slender bright yellow flowers above floating narrow leaves in late spring. Grows in shallow water; leaves and roots provide habitat for frogs.</p> <p><b><i>Calla palustris</i> (water arum)</b> Heart-shaped leaves on upright stalks; showy white flowers, red fruit.</p>
<p><b><i>Iris pseudocorus</i> (yellow flag iris)</b> Showy yellow iris that spreads easily in wet soils; thick root mats can choke waterways.</p>	<p><b><i>Iris versicolor</i> (blue flag iris), <i>I. prismatica</i> (slender blue iris)</b> Blue-green sword-like foliage, deep blue-purple flowers in early summer. Grows in wet soil at water's edge or in shallow water.</p>
<p><b><i>Nelumbo nucifera</i> (sacred lotus)</b> Large pink flowers stand above waxy leaves up to 2' in diameter. Spreads rapidly; listed as a noxious weed in some states.</p>	<p><b><i>Nelumbo lutea</i> (American yellow lotus)</b> Large, pale yellow flowers stand above leaves over 1' in diameter. Spreads rapidly in shallow ponds and on quiet water in rivers.</p>
<p><b><i>Pontederia crassipes</i> (water hyacinth)</b> Free-floating aquatic plant with thick oval to elliptical leaves and showy blue-purple flowers on upright spikes. Quickly forms dense floating mats.</p>	<p><b><i>Pontederia cordata</i> (pickerelweed)</b> Spikes of blue-purple flowers above arrow-shaped leaves from summer to early fall. Flowers and leaves provide food for many native insects.</p>
<p><b><i>Nymphaea</i> spp. (nonnative water lily)</b> Nonnative water lilies may have pink, red, yellow, purple, or white flowers. Fleshy underground rhizome can spread extensively.</p>	<p><b><i>Nymphaea odorata</i> (white water lily)</b> Floating aquatic plant found in quiet creeks and ponds. Round floating leaves, green to maroon in color. Fragrant white flower. Spreads quickly via rhizomes and tubers.</p>
<p><b><i>Cyperus alternifolius</i> (umbrella palm)</b> Stiff stems to 4' topped with strappy leaves arranged like the spokes of an umbrella. Deep-rooted; spreads quickly.</p>	<p><b><i>Sagittaria latifolia</i> (arrowhead or duck potato)</b> Arrowhead-shaped leaves 2'-4' tall. Grows submerged in shallow water. Valuable food source for waterfowl. Spreads rapidly by seed and rhizomes.</p> <p><b><i>Sagittaria montevidensis</i> (giant arrowhead)</b> Stemless, rhizomatous plant with large, arrowhead-shaped leaves. White flowers with burgundy spots and yellow centers appear in summer.</p>