

Arboretum entrance native plant garden guide



Why plant natives?

Native species are best fit for local growing conditions, as they require relatively little maintenance if you choose the right spot for your plants.

More importantly, native species are much better suited to form the base of our local food web: they sustain native insect herbivores and the higher trophic levels that depend on them as well as healthy populations of native pollinators that support wild plant communities and food crops alike.

Communities dominated by introduced plants **produce 91% fewer caterpillars and 68% fewer caterpillar species** (Richard et al. 2018).

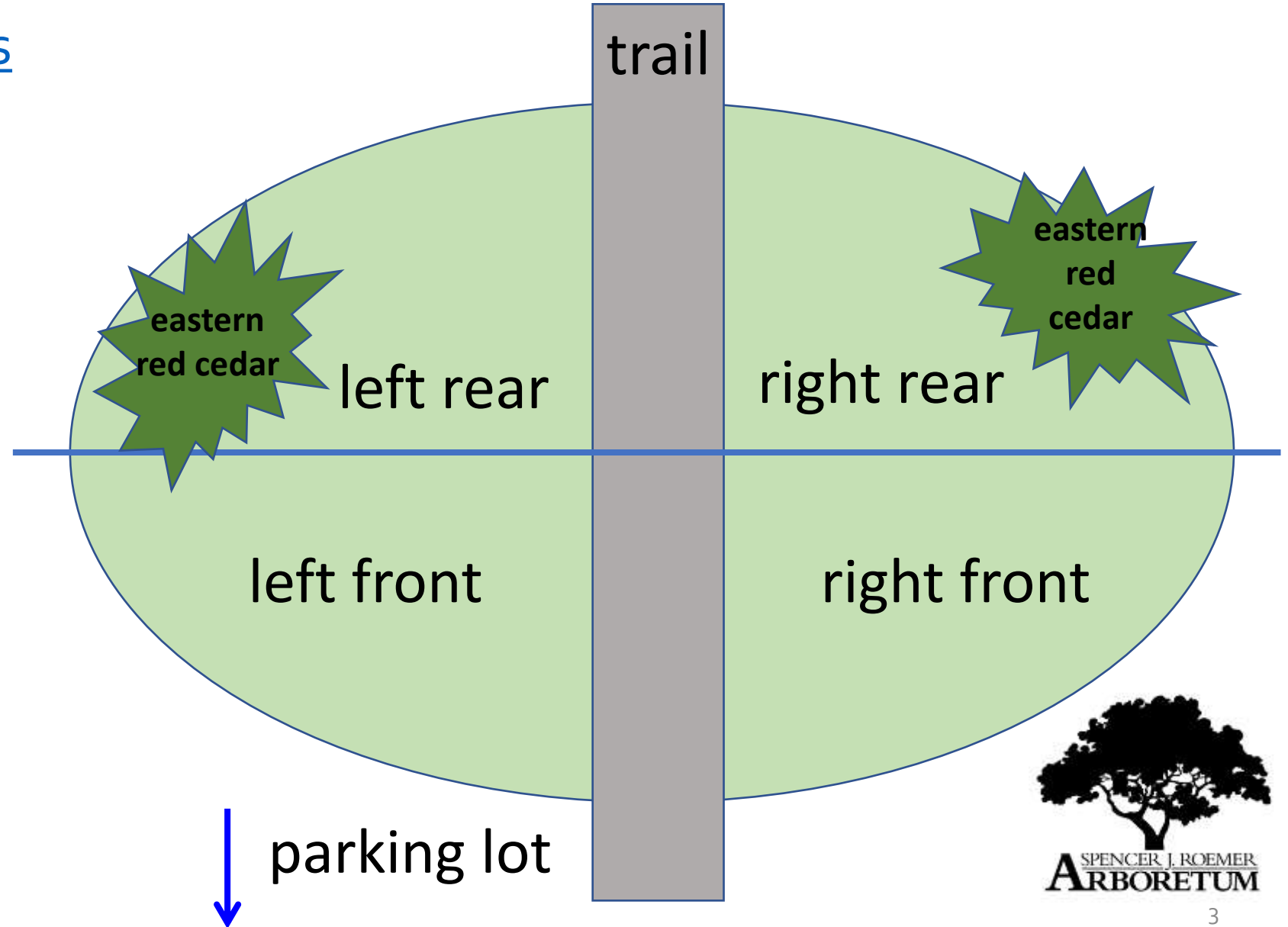
Caterpillars are key components of the diets of juvenile birds – for example, a pair of chickadees requires **at least 6000 caterpillars** to rear one nest of young (Brewer 1961). Consequently, these birds experience lower reproductive success in yards dominated by introduced plants than yards that are >70% native (Narango et al. 2018).

While honey bees are important providers of pollination services, they are just one of thousands of species that play this role. Native plants are key to supporting pollinators which maintain stability in pollination services for **1/3 of crops** used to feed people (Klein et al. 2006) as well as **90% of all flowering plants** (Ollerton et al. 2011). To sustain these important pollinators, mostly solitary bees, but also a variety of other insects, maintaining floral resources to provide them with food from spring into the fall is essential. These pollinators in turn are vital for the plants that provide leaves, fruits, and seeds for many other members of the food web that contribute to diverse and healthy ecosystems.

Enjoy the native gardens at the Spencer J. Roemer Arboretum and appreciate how they play a part in promoting a more diverse and interconnected landscape!

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Prepared by J. Apple (2022); photos by J. Apple

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Anise hyssop

Agastache foeniculum – may be just starting to sprout from base of old stems, opposite, triangular coarsely toothed leaves; square stems; leaves smell like anise (licorice); small purple flowers on cylindrical spikes July - October



Big bluestem

Andropogon gerardii – native bunchgrass with blue-green foliage and thick stems; long hairs near leaf base; flower and seed head resemble turkey foot



Tom Koerner, USFWS [CC BY 2.0](#)

Black-eyed susan

Rudbeckia hirta – large elliptical basal leaves, either toothless or coarsely toothed; persistent stems with spherical seed heads 0.5-0.75-inch; yellow flowers in July - September



Blazing star

Liatris spicata – narrow linear basal leaves without teeth; hairy on veins only; purple flowers on spikes July - August



Blue-eyed grass

Sisyrinchium angustifolium – thin, linear, smooth leaves (**not a grass**), thin central ridge on leaf underside; blue flowers in June



Butterfly milkweed

Asclepias tuberosa – in early summer, may just appear as short sprouts at base of previous year's stems which may have old seed pods; very hairy stems, linear sessile leaves, orange flowers June - August; lacks milky sap



Creeping phlox

Phlox subulata – narrow 1-inch leaves, opposite, low to ground, white, pink or blue flowers in May - June



Dwarf fothergilla

Fothergilla gardenii – shrub; round coarsely toothed leaves; bottle-brush flowers in May - June



Eastern bluestar

Amsonia tabernaemontana – very shiny, lance-shaped smooth toothless leaves with prominent light midvein, blue flowers in May - June



Foxglove beardtongue

Penstemon digitalis – smooth, shiny, hairless and toothless leaves clasp round stem, wide at base and come to point; white tubular flowers in June



Goatsbeard

Aruncus dioicus – complex compound thin leaves with up to 6" leaflets, hairless stems; small white flowers on spikes in clusters in June



Golden alexanders

Zizia aurea – compound smooth leaves with teeth on margins, variable leaflet number, flat-topped inflorescence of small flowers (1/8-inch) May - June; many volunteers – let them spread!



Jacob's ladder

Polemonium reptans – compound leaves with small oval, pointed, smooth leaflets; small blue flowers in April - May



Joe-pye weed

Eupatorium maculatum – in May some leaves are just sprouting at base of persistent stems; elliptical, coarse-toothed leaves, pointed at end; pink flowers top tall hairy stems in flat-topped panicles in July - September



Labrador violet

Viola labradorica – purple-tinged, heart-shaped leaves; purple flowers in April - May



New England aster

Symphotrichum novae-angliae – somewhat hairy, linear toothless leaves clasp hairy stems; may volunteer throughout garden (keep unless inconveniently situated); blooms August - October, purple daisy-like flowers



New York ironweed

Vernonia noveboracensis – in May, just sprouting at base of stout persistent stems; linear leaves with fine teeth; stem with short hairs; purple flower heads top very tall stems in flat-topped panicles in August - October



Nodding onion

Allium cernuum – smooth long, linear, flat leaves; white or pink flowers in a loose umbel, July - August



Pearly everlasting

Anaphalis margaritacea – linear leaves gray-green above, white and woolly below; flowers with yellow centers surrounded by pearly white bracts in July - August; painted lady hostplant so let caterpillar herbivores live!



Pink turtlehead

Chelone lyonii – smooth lance-shaped, sharply toothed, opposite leaves; smooth stems; pink tubular flowers in dense spikes July - September (garden escapee; not-native but naturalized)



Purple coneflower

Echinacea purpurea – large lance-shaped leaves with shallow coarse teeth; long petioles at base of persistent stems with spiky >1-inch diameter seedheads; purple flowers July - September



Small's beardtongue

Penstemon smallii – clasping, lance-shaped hairy leaves with wide short teeth, smaller than foxglove penstemon, hairy stems and flower stalks
pink tubular flowers in June



Smooth oxeye

Heliopsis helianthoides – opposite toothed large leaves with rough surface; seems to be volunteering throughout beds; yellow sunflower-like blooms July - Sept



Virginia mountain-mint

Pycnanthemum virginianum – square stems like all mints, fragrant lance-shaped leaves, hairy stems, leaves less so; small white flowers in dense heads, July - September



Wild indigo

Baptisia australis – compound leaves with 3 leaflets, bluntly pointed at tips; somewhat blue-green foliage; purple blooms in late May - early June; later will have heavy pods



Wild petunia

Ruellia humilis – just emerging in May, very hairy, opposite oval leaves; pink flowers June - Sept



Wingstem

Verbesina alternifolia – lance-like alternate, rough leaves; wing-like extensions along hairy stems; gets very tall; yellow flower heads August - October



Entrance garden – left front

- [Appalachian sedge](#)
- [Creeping phlox](#)
- [Eastern bluestar](#)
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Appalachian sedge

Carex appalachica – deep-green thread-like leaves; 3-sided stems like all sedges; small flower spikes in May



Northern bayberry

Morella (Myrica) pensylvanica – shrub; alternate oblong leaves wider at tips; aromatic leaves; inconspicuous catkins appear in late spring/early summer



Palm sedge

Carex muskingumensis – three-sided stems like all sedges; glossy green leaves; inflorescences of spikes appear May - June



Pussytoes

Antennaria plantaginifolia – grayish, hairy leaves; broad oval-shape; fuzzy flowers in tight clusters on stalks in May - June



Stiff goldenrod

Oligoneuron rigidum – large, very hairy and soft leaves at base with fine widespread short teeth; smaller oval leaves along stem; yellow flowerheads 1/4-1/2-inch on flat panicles in August - September



Sweetspire

Itea virginica – shrub, oval, alternate pointed leaves with fine widely spaced teeth; small white flowers in drooping racemes in June - July



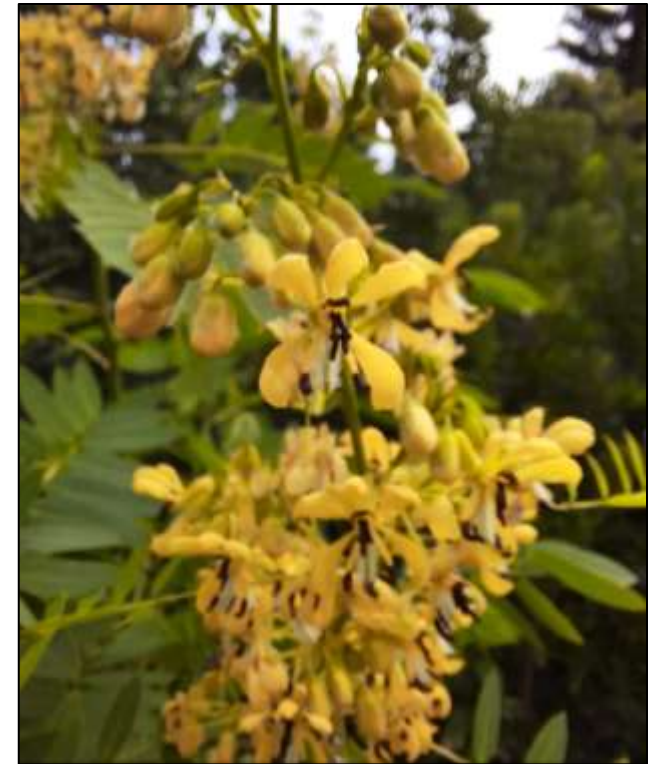
Wild quinine

Parthenium integrifolium – large basal, rough leaves, wide teeth on margins; heads of white flowers in flat-topped panicles in June - September



Wild senna

- *Senna hebecarpa* – compound leaves of 10-20 oblong leaflets, rounded at tips; tall flower stalks, yellow flowers July - August; distinctive hairy ovaries and brown anthers in flowers



Wild stonecrop

Sedum ternatum – thick succulent, rounded leaves; low spreading habit; white flowers in May



Entrance garden – left rear

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- [Butterfly milkweed](#)
- [Eastern bluestar](#)
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Bush honeysuckle

Diervilla lonicera – shrub; elliptical pointed, sessile opposite leaves with fine teeth; yellow tubular flowers in clusters in June-July



Fragrant sumac

Rhus aromatica – shrub; alternate, trifoliate fuzzy leaves with lobed leaflets, fragrant when crushed; small yellow flowers (females) and catkins (males) appear in April – May; hairy red berries appear in June



Green-and-gold

Chrysogonum virginianum – low groundcover, yellow flowers in May-June (sometimes again in fall)



Hairy mountain-mint

Pycnanthemum verticillatum – wider and hairier opposite leaves than Virginia mountain-mint; foliage very fragrant, stems very hairy; square-shaped stems like all mints; small white flowers in dense heads, July - September



Heartleaf alexanders

Zizia aptera – basal leaves heart-shaped, leaves less dissected overall than golden alexanders, umbels of tiny yellow flowers in May - June



Northern sea oats

Chasmanthium latifolium – grass; soft wide blades with decorative seedheads



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Ohio spiderwort

Tradescantia ohiensis - smooth, grasslike leaves; 3-petaled purple flowers that mainly open in morning June - July



Prairie smoke

Geum triflorum - basal compound leaves; pink nodding flowers in May - June, followed by feathery seedheads



Rough blazing star

Liatris aspera – linear basal leaves, covered with dense layer of hairs; purple flowers on spikes in August - September



Short-toothed mountain-mint

Pycnanthemum muticum – opposite, stalkless, oval leaves; fragrant foliage; square stems like all mints; small white flowers in dense heads, July - September



Showy tick trefoil

Desmodium canadense – just sprouts at base of tall persistent stems in May; compound leaves of 3 oval leaflets; ½ inch purple flowers in dense racemes in June – July; very sticky seed pods



Shrubby St. John's wort

Hypericum prolificum – shrub; alternate oval rounded toothless leaves; yellow 5-petaled flowers in July - August



Entrance garden – right rear

- [Black-eyed susan](#)
- [Bush honeysuckle](#)
- [Creeping phlox](#)
- [Evening primrose](#)
- [Ohio spiderwort](#)
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- [Smooth oxeye](#)
- [Summersweet](#)

Evening primrose

Oenothera fruticosa – smooth alternate lance-shaped leaves, toothless; fine hairs on stem yellow 4-petaled flowers in June - September



Summersweet

Clethra alnifolia – shrub; with shiny, sharply toothed, oval alternate pointed leaves; spikes of small white flowers in July - August



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