

# Arboretum gazebo native plant garden guide



Prepared by J. Apple (2022); photos by J. Apple (unless otherwise indicated)



# 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.

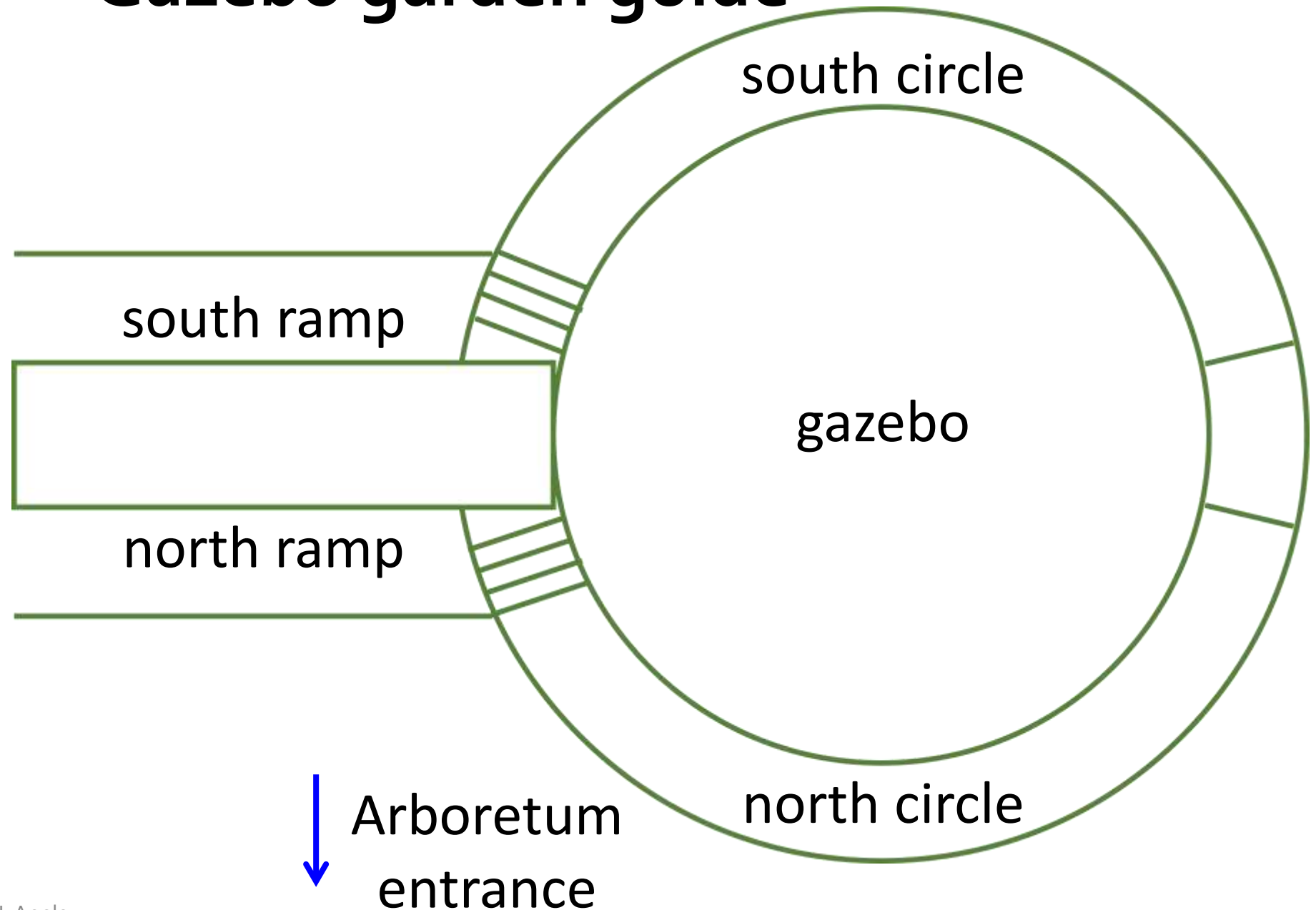
Enjoy the native gardens at the Spencer J. Roemer Arboretum and appreciate how they play a part in promoting a more diverse and interconnected landscape!

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# Eastern bluestar

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





# Evening primrose

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





# 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!





# Golden groundsel

*Packera aurea* – heart-shaped smooth basal leaves with coarse teeth; bright yellow 1/2-3/4-inch flowers top stalks in May-June; leaves on stalks are smaller and highly dissected; spreads well; good groundcover





# Green-and-gold

*Chrysogonum virginianum* – oval, pointed, coarsely toothed leaves with fine hairs; long hairy petioles and hairy stems; yellow flowers in May-June (sometimes again in fall); good groundcover which spreads well





# Narrowleaf mountain-mint

*Pycnanthemum tenuifolium* – narrow 1-2 inch linear leaves; square stems like all mints, small white flowers in dense heads, July - September





# Northern sea oats

*Chasmanthium latifolium* – grass; wide blades with decorative seedheads



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# 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!





# Prairie smoke

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





# Pussytoes

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





# Showy goldenrod

*Solidago speciosa* – large elliptical to oval basal leaves; thick, leaves with wide shallow teeth; small ¼-inch flowers in pyramid-shaped panicles in August - October



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# 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





# Solomon's seal

*Polygonatum biflorum* – arching stems with large oval leaves; white flowers in small clusters appear beneath stems April - May



# Spring cinquefoil

*Potentilla neumanniana* - mat-forming plant with palmately compound, deep green leaves; small yellow 5-petaled flowers in April – June; spreads well; good groundcover





# Virginia anemone

*Anemone virginiana* – compound three-parted leaves with deeply lobed leaflets (note different pattern than white avens); hairy stems; white 5-petaled flowers top tall stalks in May - June





# 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 geranium

*Geranium maculatum* – palmately lobed leaves on long stalks from base of plant; lobes deeply cut; pink flowers with 5 petals appear May - June





# Wingstem

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





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# Blue flag iris

*Iris versicolor* – long linear basal leaves; large blue/purple flowers with three petals top long stalks in June - July





# Blue-eyed grass

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





# Cardinal flower

*Lobelia cardinalis* – oval to oblong, coarsely toothed smooth leaves; smooth stem; tubular flowers with spreading petals appear in August - September





# Creeping phlox

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





# Culver's root

*Veronicastrum virginicum* – oval to oblong, finely toothed leaves in whorls around hairy stem; small white flowers on multiple spikes July - August





# Cutleaf coneflower

*Rudbeckia laciniata* – more basal leaves large and pinnately lobed; upper stem leaves simple; yellow flowers with 6-16 rays surrounding a central spherical disk top tall stalks in July - September





# Flat-topped white aster

*Doellingeria umbellata* – alternate, large, oval toothless, smooth leaves;  $\frac{1}{2}$  -  $\frac{3}{4}$  inch white flowers with yellow centers in flat-topped panicles in July - September





# Jacob's ladder

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





# 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





# Obedient plant

*Physostegia virginiana* – opposite, narrow and long lance-shaped leaves with fine teeth; square stems like all mints; pink flowers on very symmetrical terminal racemes July - September



# Ohio spiderwort

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





# Robin's plantain

*Erigeron pulchellus* – broadly oval to rounded hairy leaves at base; flowers  $\frac{3}{4}$  - 1 inch; 50-100 white or pinkish rays with yellow center in June





# Seersucker sedge

*Carex plantaginea* – long linear leaves, papery and wrinkled; flower heads of pale yellow stamens appear in April





# Summer phlox

*Phlox paniculata* – opposite narrowly oblong, smooth leaves; bright flowers with 5 petals in July - September (various colors)





# Early meadow-rue

*Thalictrum dioicum* – delicate leaves 3 times pinnately compound with lobed leaflets; flowers in May which lack petals, consist of either many dangling greenish or purplish stamens or 10 white pistils





# Turk's cap lily

*Lilium superbum* – just emerging from ground in May; narrow oval leaves in whorls around stem; large, orange, nodding flowers with strongly recurved petals in July



# Wild columbine

*Aquilegia canadensis* – basal multiply compound leaves with lobed leaflets; red tubular flowers with prominent nectar spurs in May - June, solitary and nodding on stems





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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





# Barren strawberry

*Waldsteinia fragarioides* – low growing compound leaves with three coarsely toothed leaflets, low growing habit; yellow, 5-petaled flowers in April - May; attractive groundcover





# 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





# Bush honeysuckle

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



# Hairy mountain-mint

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





# 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



# 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)





# Red beebalm

*Monarda didyma* – oval, smooth pointed leaves with widely separated fine teeth; smooth square stems; tubular red flowers in terminal heads in July - August





# 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





# Wild delphinium

*Delphinium exaltatum* – alternate palmately lobed leaves; purple flowers with prominent nectar spurs in loose racemes in July - September





# Wild stonecrop

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





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# Nodding onion

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





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