

Shaded Wet Woodland Pollinator Gardens in Brookline

The shaded wet woodland plant community is based on plants which are typically found in lowland shaded woodlands, floodplains, riverbanks, and pond edges. Gardens based on the shaded wet woodland plant community provide opportunities to restore natural habitat while also naturally reducing stormwater flooding and also improving water quality because these plants create vegetated buffers that increase the absorption and filtration of rainwater.

This plant community includes many ferns, which do not reproduce through pollination but are valuable for pollinator and wildlife conservation because they:

- Provide food and cover for many insects.
- Provide nesting sites and materials for birds.
- Provide sheltering and cooling habitat for small amphibians.
- Are larval hosts for some moth species.

Key Considerations for Shaded Wet Woodland Pollinator Gardens:

Gardens based on this plant community are well-suited for garden spaces, balconies, or patios that have

- 3 hours or less of sun per day, dappled sun, or full shade exposures.
- moist soils that do not drain quickly or containers that are well-watered.

Spring Ephemeral Perennials	Height & Spacing	Seasonal Interest	Pollinators Supported
Carolina spring beauty (<i>Claytonia caroliniana</i>)	2-5" high 4-6" apart	White and pink spring ephemeral	Supports bees. Deer and rabbit resistant.
Virginia spring beauty (<i>Claytonia virginica</i>)	2-4" high 4-6" apart	White spring ephemeral	Supports bees.
sharp-lobed hepatica (<i>Anemone acutiloba</i>)	3-6" high 6-8" apart	white, blue, pink very early spring ephemeral	Supports early bees. Deer and rabbit resistant.
bloodroot (<i>Sanguinaria canadensis</i>)	4-8" high 4"-1' apart	White spring ephemeral	Supports early bees. Deer and rabbit resistant.

Ferns and a Sedge	Height & Spacing	Special Notes about Wildlife Supported
royal fern <i>(Osmunda regalis)</i>	2-4' high 2-3' apart	Larval host for the osmunda borer moth.
cinnamon fern <i>(Osmunda cinnamomea)</i>	2-4' high 2-3' apart	Larval host for the osmunda borer moth.
ostrich fern <i>(Matteuccia struthiopter)</i>	2-3' high 2-4' apart	Larval host for the ostrich fern borer moth, which is a species of special concern in Massachusetts.
interrupted fern <i>(Osmunda claytoniana)</i>	2-3' high 2-3' apart	Larval host for the osmunda borer moth. Deer and rabbit resistant.
marsh fern <i>(Thelypteris palustris)</i>	1-3' high 1' apart	Deer and rabbit resistant.
sensitive fern <i>(Onoclea sensibilis)</i>	1-2' high 2-3' apart	Larval host for sensitive fern borer moths.
Northern lady fern <i>(Athyrium angustum)</i>	1-2' high 1-2' apart	Larval host for ghostly fern moths
Northern maidenhair fern <i>(Adiantum pedatum)</i>	1-2' high 1-2' apart	
hop sedge <i>(Carex lupulina)</i>	3' high 1-2' apart	

Perennials	Height & Spacing	Seasonal Interest	Pollinators Supported
Canada wild ginger <i>(Asarum canadense)</i>	1' high 1-2' apart	red spring flowers	Larval host for the pipevine swallowtail butterfly. Deer and rabbit resistant
blue cohosh <i>(Caulophyllum thalictroides)</i>	2-3' high 1-2' apart	green spring flowers, black summer berries	Supports bees and songbirds. Deer and rabbit resistant.
early blue cohosh <i>(Caulophyllum giganteum)</i>	2-3' high 1-2' apart	Dark blue spring flowers, black summer berries	Supports bees and songbirds. Deer and rabbit resistant.
Jack-in-the-pulpit <i>(Arisaema triphyllum)</i>	1-3' high 6"-1' apart	green spring bloom, red fall berries	Berries support songbirds. Deer and rabbit resistant.
Walter's violet <i>(Viola walteri)</i>	1-6" high 1-2" apart	purple spring flowers	Supports bees and butterflies
marsh marigold, cowslip <i>(Caltha palustris)</i>	1' high 1' apart	yellow spring flowers	Supports bees and hummingbirds.
blue flag iris <i>(Iris versicolor)*</i>	1-3' high 2-3' apart	Blue spring flowers.	Supports bees. Used in rain garden basins and swale bases. Deer and rabbit resistant.
Partridgeberry <i>(Mitchella repens)</i>	1-2' high 1' apart	white summer flowers	Supports bees and songbirds. Drought-resistant.
Allegheny monkey flower <i>(Mimulus ringens)</i>	1-3' high 1' apart	purple summer flowers	Supports bees, including at-risk bumblebees, butterflies, and hummingbirds. Deer and rabbit resistant.

Sub-canopy Trees and Shrubs	Height & Spacing	Seasonal Interest	Pollinators Supported
American witch hazel <i>(Hamamelis virginiana)</i>	6-15' 6-15'	Yellow spring flowers	Supports bees and birds Larval host for 69 caterpillar species, including large lace-border, definite tussock, and funerary dagger moths.
mountain laurel <i>(Kalmia latifolia)</i>	4-10' 4-8'	white flowers in early summer	Supports bees, especially, bumblebees, butterflies, and hummingbirds. Larval host for laurel sphinx moths.
black elderberry <i>(Sambucus nigra)*</i>	5-8' high 3-8' apart	White summer flowers. Black edible berries for making pies and jams.	Supports bees, butterflies, and songbirds. Larval host for 33 caterpillar species, including bent-line grays, purplish-brown loopers, ruby quakers, white-lined sphinxes, imperials, cecropias, and polyphemous moths. Deer and rabbit resistant.
spicebush <i>(Lindera benzion)</i>	6-12' 6-12'	white flowers in early spring	Supports bees, butterflies, and songbirds. Hosts the eastern tiger swallowtail, spicebush swallowtail, tulip tree beauty, and promethea moth Deer and rabbit resistant.

* Prefers part shade (about 3 hours of sun per day)

Example Wet Woodland Gardens

If you have space, consider adding trees or shrubs that are a part of the shaded wet woodland plant community to your garden.

Example 1: A shaded fern wet woodland with spring ephemerals and wildflowers

1. Carolina spring beauty (*Claytonia caroliniana*)
2. Virginia spring beauty (*Claytonia virginica*)
3. sharp-lobed hepatica (*Anemone acutiloba*)
4. bloodroot (*Sanguinaria canadensis*)
5. ostrich fern (*Matteuccia struthiopteris*)
6. interrupted fern (*Osmunda claytoniana*)
7. sensitive fern (*Onoclea sensibilis*)
8. Northern maidenhair fern (*Adiantum pedatum*)
9. Walter's violet (*Viola walteri*)
10. marsh marigold (*Caltha palustris*)
11. Allegheny monkey flower (*Mimulus ringens*)

Example 2: A shaded fern wet woodland with a focus on structural foliage

1. bloodroot (*Sanguinaria canadensis*)
2. hop sedge (*Carex lupulina*)
3. royal fern (*Osmunda regalis*)
4. cinnamon fern (*Osmunda cinnamomea*)
5. interrupted fern (*Osmunda claytoniana*)
6. marsh fern (*Thelypteris palustris*)
7. Northern lady fern (*Athyrium angustum*)
8. Canada wild ginger (*Asarum canadense*)
9. Jack-in-the-pulpit (*Arisaema triphyllum*)
10. early blue cohosh (*Caulophyllum giganteum*)
11. partridgeberry (*Mitchella repens*)
12. blue flag iris (*Iris versicolor*)*

Example 3: A shaded wet woodland wildflower garden

1. Carolina spring beauty (*Claytonia caroliniana*)
2. Virginia spring beauty (*Claytonia virginica*)
3. sharp-lobed hepatica (*Anemone acutiloba*)
4. hop sedge (*Carex lupulina*)
5. Canada wild ginger (*Asarum canadense*)
6. Jack-in-the-pulpit (*Arisaema triphyllum*)
7. blue cohosh (*Caulophyllum thalictroides*)
8. early blue cohosh (*Caulophyllum giganteum*)
9. Walter's violet (*Viola walteri*)
10. marsh marigold (*Caltha palustris*)
11. blue flag iris (*Iris versicolor*)*
12. partridgeberry (*Mitchella repens*)
13. Allegheny monkey flower (*Mimulus ringens*)

References

More information about plants in wet woodland gardens and woodland plant communities is available from

- The Native Plant Trust, including their website and the book *The Northeast Native Plant Primer* by Uli Lorimer
- Grow Native Massachusetts (formerly the New England Wildflower Society), and the book *Native Plants for New England Gardens* by Mark Richardson and Dan Jaffe.
- *Designing Gardens with Flora of the American East* by Carolyn Summers and Kate Brittenham.
- *Planting for Climate Resilience in Northeast Landscapes* by the Wild Seed Project
- The Ladybird Johnson Wildflower Center.
- Leaves for Wildlife
- Cornell Botanic Gardens