

Wet Shade Kit

2024 Owner's Manual



Five native species that bloom from Spring to Fall to provide beauty in your yard and critical habitat for pollinators

Great Swamp Watershed Association Native Plant Program 2024

Kit Contents

This kit is perfect for those who have a shaded, low-lying area or a partly-shaded rain garden basin. Marsh marigold will kick off spring with beautiful greens leaves and golden flowers, appeasing the hungry early pollinators. By late spring, the blue flag iris will provide elegance with its attractive blue flowers and sword-like leaves. As the summer heats up, bumblebee-loving white turtlehead and the electric red of cardinal flower will draw in hummingbirds and other pollinators. By fall, the beautiful weeping seed heads of river oats will add both fall interest and seeds for small mammals and songbirds. This kit does best in dappled sunlight but will grow in part-sun to shade (but not deep shade) and moist to wet soils.

Your 25-plant plug kit includes five species that thrive in partly (not deeply) shaded gardens and wet conditions. The kit includes:

- Blue Flag Iris, *Iris versicolor*, 5 plugs
- Cardinal Flower, *Lobelia cardinalis*, 5 plugs
- Marsh Marigold, *Caltha palustris*, 5 plugs
- River Oats, *Chasmantium latifolium*, 5 plugs
- White Turtlehead, *Chelone glabra*, 5 plugs

Important: Once you get home, check to see if your plugs need water. Keep their soil moist to the touch (but not soaked) until you are able to plant them in the ground.

Designing your garden: Design Considerations

Your Landscaping Style

These plants can fit any style, including a formal garden, a naturalistic garden (like this design), or a wild garden with clumps. Pollinators will be equally happy with any of these options.

Your Garden

This design can be easily altered to fit a deeper, wider, or curved garden bed. These designs use moderate 10-12-inch center-to-center plant spacings to easily fill a 80 or 50 square foot area. The goal is to eventually have plants pressing shoulder to shoulder for easier maintenance. Tightly spaced plants create a “green mulch” reducing the opportunity for weeds to sprout so that annual mulching is no longer required. You can choose to plant on a tighter spacing. A larger spacing will require more maintenance and mulching to manage weeds, until plants establish.

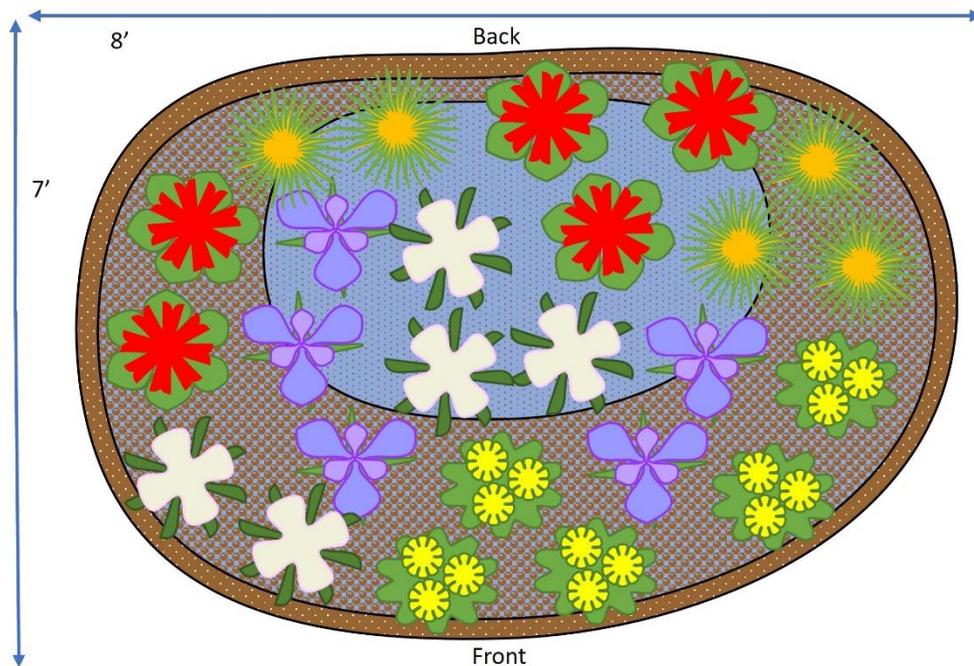
Add On!

These species can be planted alone or can be combined with other wet-loving kits or your favorite individual species to make a larger planting.

Designing your garden: Sample Design

Can be used as is or easily modified to fit your chosen space and your gardening goals. The deer icon indicates high (red) and medium (yellow) deer resistance; however, no plant is deer proof and **deer still may browse on these species.**

<p>Blue Flag Iris  </p>					<p>Cardinal Flower  </p>				
			May- Jun	2-3'				Jul - Sept	2-5'
Color	Light	Moisture	Season	Height	Color	Light	Moisture	Season	Height
<p>Marsh Marigold  </p>					<p>River Oats  </p>				
			Apr - May	1-2'				June - Sept	2-4'
Color	Light	Moisture	Season	Height	Color	Light	Moisture	Season	Height
<p>White Turtlehead  </p>									
			Jul - Sept	2-3'					
Color	Light	Moisture	Season	Height					



Side Profile



-  Level 1: Mostly dry. Floods during severe rainstorms
-  Level 2: Intermediate. Floods during moderate rainstorms
-  Level 3: Wet. Floods during every rainstorm

Site Preparation

Know your sun, moisture, and soil conditions

The plants in the Wet Shade Kit will do well in part shade to shade conditions, but will not thrive in deep shade.

These species grow well in moist to wet soil conditions. You may need to water your plants during dry summer periods during the first season, after that they should only need watered during drought. Once their roots are established, they will generally not suffer permanent damage even without watering.

These native plants are selected for the clay-silt-loam soils typical for our piedmont or highlands region.

Prepare the bed

If planting in a prepared bed, remove grass and any other unwanted plants that may compete with your new native garden while establishing. Minimize soil disturbance.

To prepare a new native plant bed replacing previous plantings:

Sheet mulching is a great way to start! It is a back-saving “no-dig” strategy that kills unwanted weeds and grass by blocking out sunlight, allowing everything to die and decompose, minimizing soil disturbance and avoiding stirring up the weed seed bank.

- Mow the area you’d like to transform. Use a garden hose or a length of rope to create the garden outline.
- Cover the area with tapeless clean cardboard or 5 to 8 sheets of newspaper (don’t use glossy pages.) Overlap the edges to prevent gaps so that the turf is solidly covered. Wet down as you go.
- Cover cardboard with 3-4” of composted mulch. No soil amendments, no fertilizer. Native plants grow best in simple, nutrient poor soils.
- Poke many small holes through the cardboard to maintain rainwater infiltration.

During spring and summer, this will take at least a month, usually two, to kill enough weeds and turf. Dig spot planting holes straight through to plant plugs.

For more information, go to [The Lasagna Method \(Sheet Mulching\)](#) on our resources page.

If not planting immediately

- Keep plugs in a sheltered spot with enough sun and protect from frost/wind.
- Keep them moist but do not over-water.
- Trim plants back to 6-12” and pinch off flowers if they will not be planted for more than a month. With proper care, landscape plugs should stay healthy for many weeks.

Planting your plugs

- The only tool you need is a garden knife, trowel, or lightweight one hand pick.
- Extract each plug gently from its socket. Squeeze the sides to loosen. Push up from the bottom or use a narrow spatula to ease the plug out. Avoid pulling on the plant's stem!
- Lay out where you want to place each plug. Dig a hole large enough for the plug.
- Plant so the top of the plug is even with the top of the soil. Tamp soil firmly.
- Water the plugs in well.

Pollinator Garden Management

Native plants are low maintenance, but every garden requires management.

Over-watering can be harmful. Through the first year, water them when the soil surface is dry. The second year and beyond you should only need to water during a drought.

Insects may chomp on plants, but these plants are larval hosts to butterflies and will recover.

Undesirable insects like Japanese beetles or aphids may become a problem. Find a caterpillar-safe way to mitigate the problem (Rutgers agricultural extension hotline 609-989-6853 can help). Even "organic" insecticides can kill desirable insects like Monarch caterpillars or butterflies.

- Healthy pollinator gardens host beneficial insects like ladybugs that eat pests.
- Mechanical removal, eg. spraying, wiping, or picking off large bugs works well.

Deer may also chomp some of these plants. Some species are more deer resistant than others.

- Plants are most palatable when young and don't have deep roots to recover.
- Organic deer repellents successfully repel deer and rabbits but require re-applications
- Cages and fences can be effective physical barriers but check local ordinances.
 - Deer fences should typically be 7-8' tall but for small enclosures 5' is effective.

Shortening up giants. If your soil is rich, tall-growing bushy plants may grow taller than wanted and can flop over. Avoid this by cutting back by $\frac{1}{3}$ - $\frac{1}{2}$ from Memorial Day to July 4th to shorten plant height.

A slightly messy garden is the best habitat! Leaving the stalks through the winter provides food and shelter for wildlife as well as visual interest. Cut the stalks in early spring after insects are active. In the fall, leave the autumn leaves to protect overwintering pupae and firefly eggs in your yard. The leaves decompose, enriching the soil, but ensure they are removed in the spring to protect basal rosettes.

Monitor your garden as it changes. Remove invasive plants and weeds little and often. If species prove too prolific, divide and share. Diverse yards incorporate multiple layers and support more wildlife.

Experiment and have FUN!

About each plant

Blue Flag Iris



Flowers: May - June
Light: Sun to Part Sun
Moisture: Moist to Wet
Height: 2-3 ft

A native Iris with bluish-purple blooms with pale lemon centers above sword-shaped blue-green leaves reaching 2-3 ft. Blooms May-June, attracting bees and butterflies. Sun to part shade, moist to wet soil. Can tolerate shallow standing water.

Cardinal Flower



Flowers: July - Sept
Light: Sun to Part Sun
Moisture: Moist to Wet
Height: 2-5 ft

Showy, scarlet-red spikes of flowers, 2-5 ft tall bloom July through September. A late-summer nectar source used especially by hummingbirds, bees, and butterflies. Short lived perennial but will repopulate if seed meets slightly disturbed soil. Sun to part shade, moist to wet soil.

Marsh Marigold



Flowers: Apr - May
Light: Part Shade to Shade
Moisture: Moist to Wet
Height: 1-2 ft

Reaching 2 ft tall, marsh marigold bloom in early spring and are primarily pollinated by hoverflies. Like its name suggests, marsh marigold grows best in wet areas. It's toxic leaves make it unpalatable for deer and other herbivores. Prefers moist to wet soils, partial sun to shade. CAUTION: This plant contains poisonous parts that can be toxic to humans in large quantities.

River Oats



Flowers: June - Sept
Light: Part Shade to Shade
Moisture: Moist
Height: 2-4 ft

Also known as fish-on-a-fishing-pole, this beautiful grass displays large, showy oat-like seed heads in late summer. In winter, seeds are eaten by small mammals and birds. Larval host to the pepper & salt skipper butterfly and multiple species of roadside skipper butterflies. Salt tolerant and provides year-round habitat. Grows best in dappled sunlight with average to occasionally wet soils.

White Turtlehead



Flowers: July - Sept
Light: Sun to Part Sun
Moisture: Average - Wet
Height: 2-3 ft

Delicate white, single flowers rise on long stalks 3 ft above mounds of dark green foliage. Flowering in spring and early summer, this plant produces pollen for many native bees. The low growing leaves can also be used as ground cover. Provides winter interest with its thimble like seed heads, and can grow in both sun and shade, dry or moist soils.

Your native garden throughout the year

Emerge, Bloom and Seed Timeline									
Species Name	Spring		Summer		Fall			Winter	
Blue Flag Iris									
Cardinal Flower									
Marsh Marigold									
River Oats									
White Turtlehead									
	Key:		Emerge		Bloom			Seed	

Garden Maintenance Timeframe				
Species Name	Spring	Summer	Fall	Winter
Blue Flag Iris				
Cardinal Flower	expose the basal rosettes, cut back last year's stalks to 8-15"			leave stems for habitat
Marsh Marigold				
River Oats	cut back last year's stalks to 8-15"			leave seedheads for wildlife leave stems for habitat
White Turtlehead	cut back last year's stalks to 8-15"			leave stems for habitat

Some native pollinators that frequent these plants	
Species Name	Pollinators, Larval Hosts, and Specialist Species
Blue Flag Iris	Bees: bumbles, carpenters Butterflies: long dash, monarch, silver-banded fritillary, skippers, swallowtails Larval Host Species: <i>Virginia ctenucha</i>
Cardinal Flower	Bees: bumbles, diggers, green sweats, small carpenters, yellow-faced Birds: ruby-throated hummingbird Butterflies: monarch, spicebush swallowtail
Marsh Marigold	Bees: cuckoo, green sweat, sweat Others: Formicidae ants, giant bee fly, syrphid flies, two leaf beetle
River Oats	Larval Host Species: pepper & salt skipper, roadside skippers, northern pearly-eye
White Turtlehead	Bees: bumbles, two-spotted long-horned Larval Host Species: Baltimore checkerspot

Put your garden on the Map

Each new native planting adds to the Pollinator Pathway that renews and extends wildlife habitat across our neighborhoods and region, whether it is one container on the patio or a fully native backyard.

If you plant it, the pollinators and birds really will come!

Please take a minute to [Register Your Pollinator Garden](#) on the map to encourage the growing sustainable landscaping community.

To encourage your neighbors, we also recommend attractive explanatory garden signs.

You can purchase a Pollinator Pathway Garden sign through the GSWA plant sale.



If you have questions about your native plant garden

Feel free to email us at plantsale@greatswamp.org We want your pollinator garden to get a good start so it will provide you with years of enjoyment!



Great Swamp Watershed Association

The Passaic River **WATERKEEPER**® ALLIANCE Affiliate

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