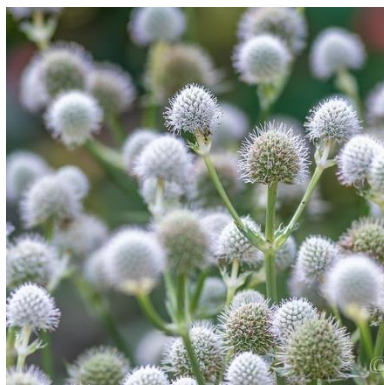


# Dry Sun Kit

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

Here is a group of hardy natives that can not only survive in tough, full sun, dry garden conditions, but will thrive! In early spring, watch as hummingbirds and early pollinators flock to blooming columbine. By mid-summer, the snapdragon-like purple flowers of obedient plant and the unique white flowers of the rattlesnake master are sure to intrigue both pollinators and the passersby. The brilliant yellow blooms of seaside goldenrod will extend into fall until the first frost. By winter, broom sedge will provide winter interest while also providing forage for overwintering birds. These plants would do well in both a hellstrip or a container garden. This kit does best in full sun and dry to moist soils. Your 25-plant plug kit includes five species that thrive in sunny gardens (6 hours of sun per day minimum) and dry to average soil conditions. The kit includes:

- Broom Sedge, *Andropogon virginicus*, 5 plugs
- Columbine, *Aquilegia canadensis*, 5 plugs
- Obedient Plant, *Physostegia virginiana*, 5 plugs
- Rattlesnake Master, *Eryngium yuccifolium*, 5 plugs
- Seaside Goldenrod, *Solidago sempervirens*, 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.

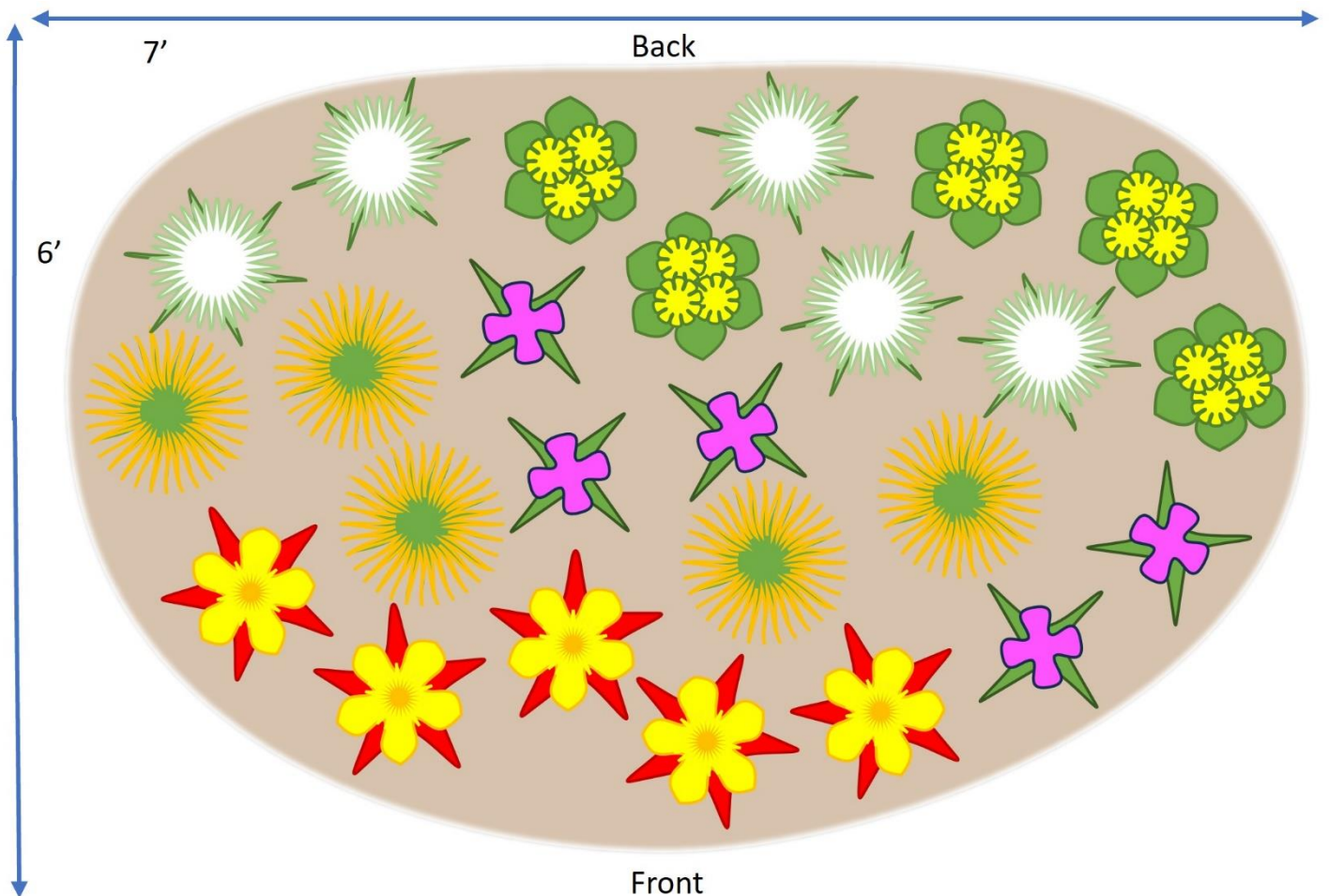
### *Add On!*

These species can be planted alone or can be combined with other sun-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><b>Broom Sedge</b>  </p> <p>   June - Sept 2-4'</p> <p>Color Light Moisture Season Height</p>					<p><b>Columbine</b>  </p> <p>   Apr - May 2-3'</p> <p>Color Light Moisture Season Height</p>				
<p><b>Obedient Plant</b>  </p> <p>   Jun - Sept 3-4'</p> <p>Color Light Moisture Season Height</p>					<p><b>Rattlesnake Master</b>  </p> <p>   Jul - Sept 2-5'</p> <p>Color Light Moisture Season Height</p>				
<p><b>Seaside Goldenrod</b>  </p> <p>   Aug - Nov 2-6'</p> <p>Color Light Moisture Season Height</p>									



## Site Preparation

### *Know your sun, moisture, and soil conditions*

The plants in the Dry Sun Kit need 6 hours of sunlight per day, but more sun is always better.

These species grow well in dry to average 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 4<sup>th</sup> 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

### Broom Sedge



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

A perennial warm season grass, broom sedge will provide both habitat and winter interest to your garden. Growing up to 4ft tall, this grass can be used in dried flower arrangements. Host to the Zabulon skipper as well as winter seed source to smaller birds. Prefers full to part sun, and medium to moist soils.

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### Columbine



Flowers: Apr - May  
Light: Sun to Part Sun  
Moisture: Dry to Moist  
Height: 2-3 ft

Drooping bell-shaped red and yellow bi-colored flowers float over delicate feathery foliage in April and May. Provides nectar for hummingbirds and early pollinators and is a larval host plant for butterflies and moths as well. 2-3ft tall, mixes well with other early bloomers. Sun to part shade, average to moist soil.

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### Obedient Plant



Flowers: June - Sept  
Light: Sun to Part Sun  
Moisture: Dry to Moist  
Height: 3-4 ft

Spikes of tubular, 2-lipped snapdragon-like pink flowers bloom in summer. Showy, long-lasting blooms, 3-4 ft high are good for cut flowers. Nectar source for bees, butterflies, and hummingbirds. Host to Henry's elfin butterfly. Sun to part sun, dry to moist soil.

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### Rattlesnake Master



Flowers: June - Sept  
Light: Sun  
Moisture: Dry to Moist  
Height: 3-5 ft

Unique white, golf-ball sized, globular flowers cluster on the branch ends of this 3-5 ft. tall plant. Mid-summer blooms last about a month, but they are attractive before and after bloom, providing visual interest from early summer into fall with yucca-like leaves. High value to pollinators and important larval food plant to the rattlesnake borer moth. Deadhead to prevent selfseeding, as it can be an aggressive spreader at times. Sun to part sun, moist to dry soil.

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### Seaside Goldenrod



Flowers: Aug - Nov  
Light: Sun  
Moisture: Dry to Moist  
Height: 3-6 ft

Dense showy deep-yellow flowers bloom throughout the fall. Varying height from 2-6ft. Salt tolerant. Valuable nectar-pollen source and host plant to gall larvae. Birds feed on both the seeds as well as the gall larvae. Attracts predatory insects which prey on garden pests. Full sun is best, dry to moist soil.

# Your native garden throughout the year

Emerge, Bloom and Seed Timeline									
Species Name	Spring			Summer		Fall		Winter	
Broom Sedge									
Columbine									
Obedient Plant									
Rattlesnake Master									
Seaside Goldenrod									
	<b>Key:</b>			<b>Emerge</b>		<b>Bloom</b>		<b>Seed</b>	

Garden Maintenance Timeframe				
Species Name	Spring	Summer	Fall	Winter
Broom Sedge	cut back last year's stalks to 8-15"		leave seedheads for wildlife leave stems for habitat	
Columbine				
Obedient Plant	same as broom sedge		leave stems for habitat	
Rattlesnake Master	same as broom sedge		same as broom sedge	
Seaside Goldenrod	same as broom sedge		same as broom sedge	

## Some native pollinators that frequent these plants

Species Name	Pollinators, Larval Hosts, and Specialist Species
Broom Sedge	<b>Bees:</b> provides nesting materials and structures for native bees <b>Larval Host Species:</b> numerous species of skippers, Virginia ctenucha
Columbine	<b>Bees:</b> bumble, small sweets <b>Birds:</b> ruby-throated hummingbird <b>Larval Host Species:</b> columbine borer moth, columbine duskywing
Obedient Plant	<b>Bees:</b> bumbles, green sweets, sweets, yellow-faced <b>Birds:</b> ruby-throated hummingbird <b>Butterflies:</b> monarch, skippers, sulphurs, tiger swallowtails <b>Moths:</b> sphinx <b>Others:</b> burrowing bugs, two spotted stink bugs <b>Larval Host Species:</b> Henry's elfin butterfly
Rattlesnake Master	<b>Bees:</b> bumble, carpenter, long-tongued, short-tongued, sweat, yellow-faced <b>Butterflies:</b> black swallowtail, crescents, fritillaries, hairstreaks, monarchs, skippers, sulfurs, viceroys <b>Wasps:</b> beetle, beewolf, carrot, grass-carrying, great black, great golden digger, mason, paper, thread-waisted, thynnid, <b>Others:</b> banded long-horn beetles, red-shouldered pine beetle, soldier beetles, soldier flies, wedge-shaped beetles <b>Larval Host Species:</b> flower feeding moth, rattlesnake master borer moth, stem-borer moth
Seaside Goldenrod	<b>Bees:</b> bumble, green sweat, leafcutter, long-horned, small carpenter, sweat, yellow-faced, <b>Butterflies:</b> crescent, monarch <b>Moths:</b> scapes <b>Wasps:</b> grass-carrying, mason, paper, potter, great golden digger, square-headed, thread-wasted, yellowjacket <b>Others:</b> bee flies, greenbottle flies, goldenrod soldier beetle, locust borer beetle, syrphid flies, tachinid flies <b>Specialist Species:</b> mining bees <b>Larval Host Species:</b> brown-hooded owlet, dart moth, goldenrod gall fly

## Put your garden on the Map

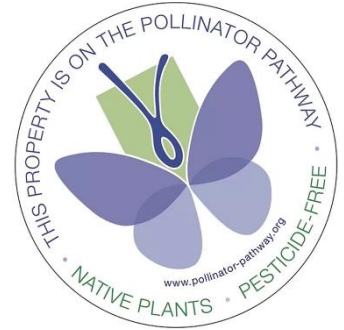
Each new native planting adds to the Pollinator Pathway that renews and extends wildlife habitat across our neighborhoods and region, whether it is one container on the patio or a fully native backyard.

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](mailto: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**

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