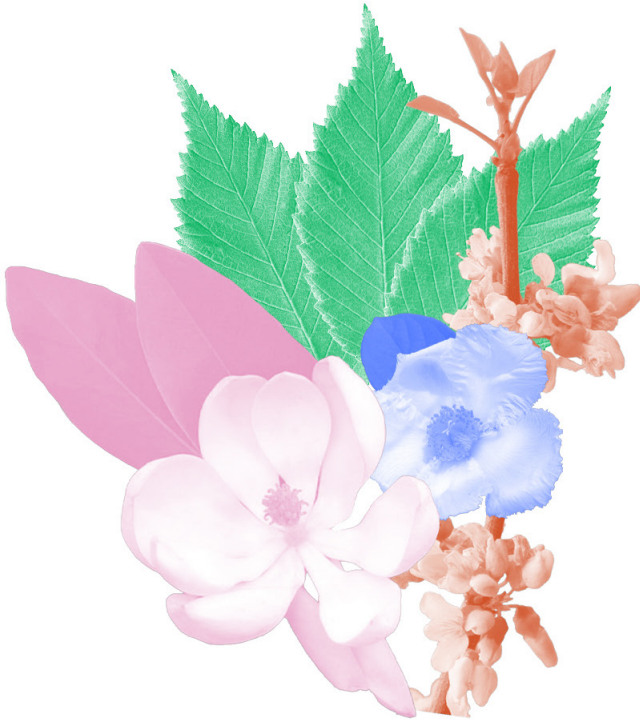


# The Diversity Garden Gardener's Handbook



24 Phillips Street  
Central Falls

Have a question about the plantings?  
About pruning trees?  
Reach out to Groundwork RI  
[info@groundworkri.org](mailto:info@groundworkri.org) or  
**(401) 305-7174**

All other questions (about trash pickup,  
water, repairs, etc.) can be directed to the  
Central Falls Planning Department.  
[jvandermillen@centralfallsri.us](mailto:jvandermillen@centralfallsri.us) or  
**(401) 616-2425**

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And to everyone in The Central Falls Planning Department, The Central Falls Parks & Recreation Department, the Central Falls Department of Public Works, and the Central Falls Legal Department.

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Our native plants teacher, George Christie, who wrote much of this book, and also provided planting design, plants, ongoing guidance, and volunteering.

Thank you past gardeners!

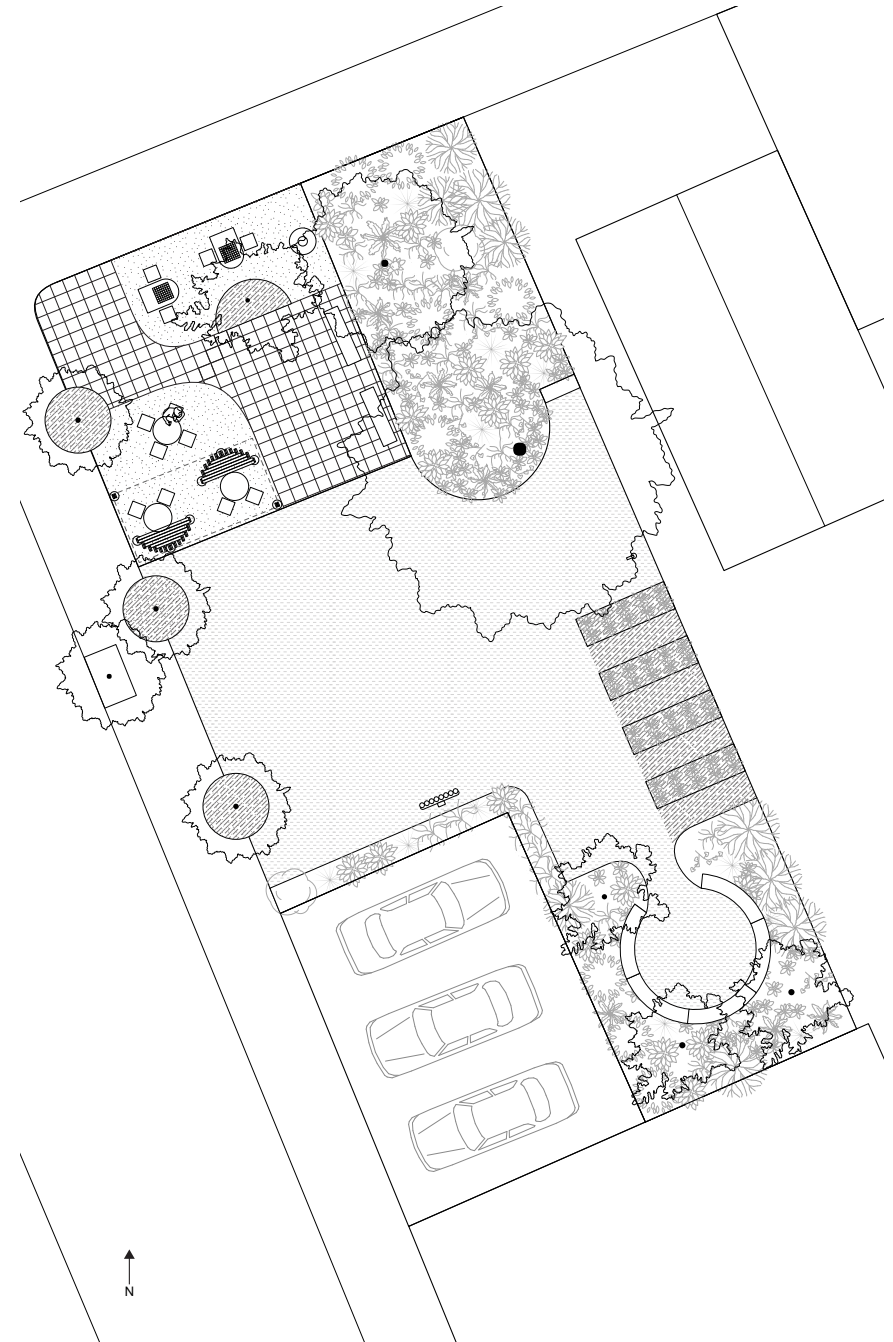
Thank you future gardeners!

## Our Philosophy of Gardening in Rhode Island

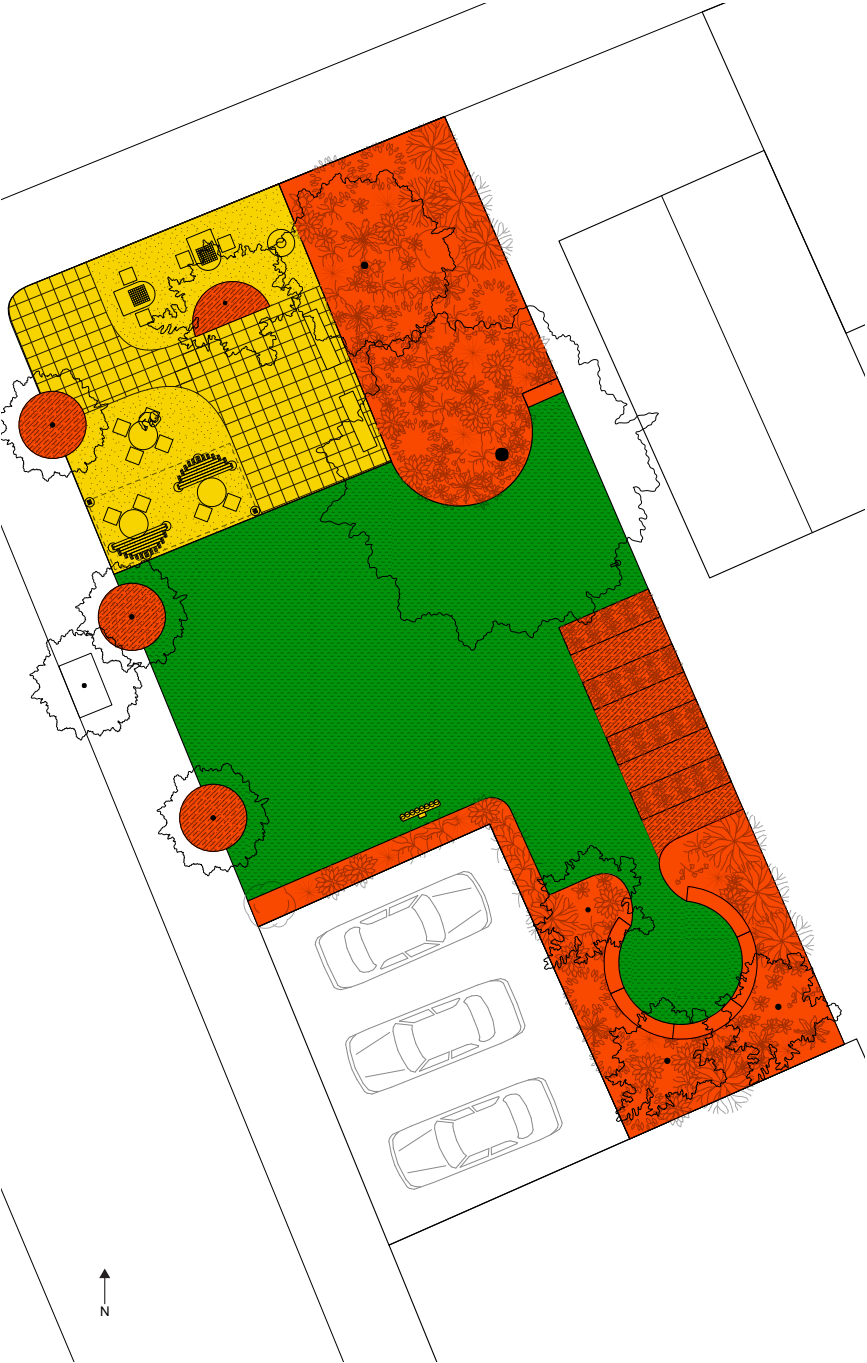
In this garden we have attempted to include many trees, shrubs, and perennials that are native to this area. Why? Because native plants are the foundation of a functional and diverse ecosystem. A thriving ecosystem depends on the presence of many diverse and native plants, which is why we've filled this garden with the trees, shrubs and perennials that grow naturally in our region.

All animals (including us), get our energy from plants. In order to produce enough insects to pollinate our food-producing plants, and to feed birds, reptiles, amphibians, and mammals, we need to restore the ecosystems they depend on—which starts with native plants! Most insects have extremely specialized relationships with plants that have developed over thousands of years. For example, Milkweed is the only plant that Monarch caterpillars will eat, and without it, Monarch caterpillars—and their beautiful butterflies—would go extinct (but don't worry, we have some in the garden for them).

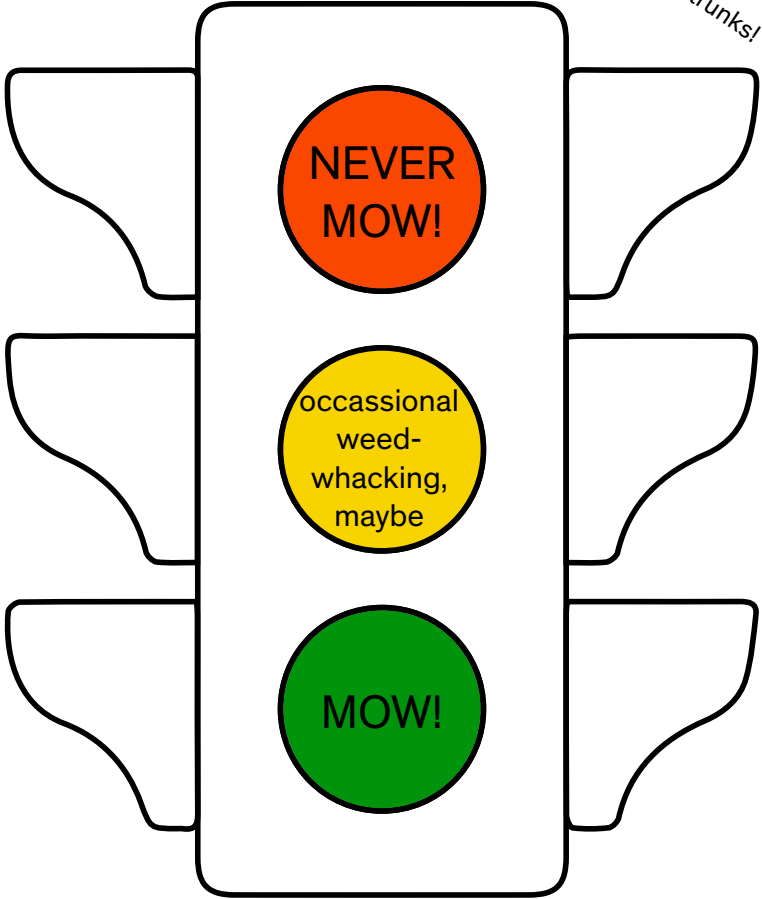
We hope you get to know and love the native plants in this garden as they work to create an ever-more vibrant, beautiful world around us. A garden well fitted to our soils and climate will develop into a complete landscape, at once comprehensible and comfortable, one that will feel more like home, simply because it *is* more like home. As you tend to this garden and your own, we hope you will consider adding natives to your planting palette at home.



# LAWN MOWING



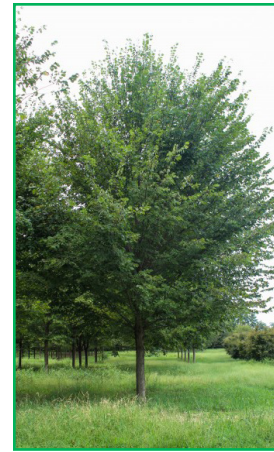
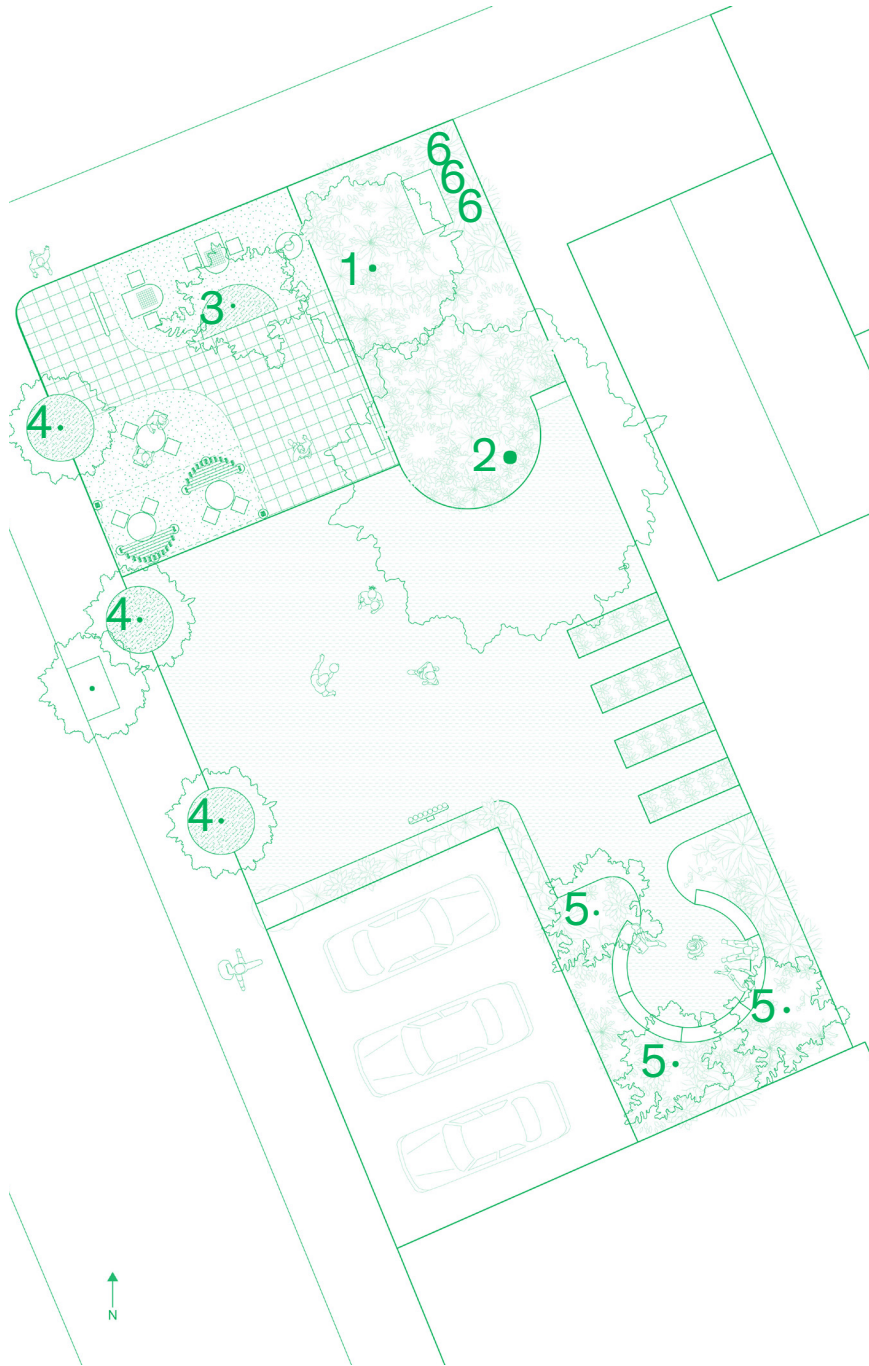
Please be careful of tree trunks!



Please leave shrubs and perennials alone!



# TREES



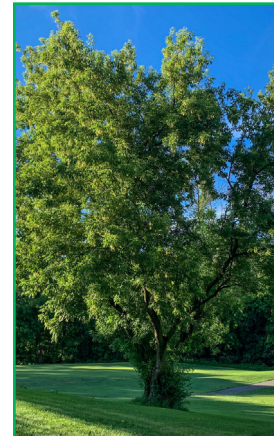
from left,  
1. full tree  
2. leaf in summer  
3. flower

## American Elm

*Ulmus americana* (native)

Since the 1950s, most American Elms have died from disease. Fortunately, there are now disease-resistant varieties so we can still enjoy them today. Elms grow in a majestic vase-like shape. (Check out the old Elm on Garfield St in CF!)

1



from left,  
1. full tree  
2. leaf in summer  
3. seeds

## Boxelder Maple

*Acer negundo* (native)

This short-lived maple tree is important for supporting biodiversity. Their leaves are incredibly variable in shape. Pre-adapted for rapid colonization of disturbed areas, box elder seedlings can become weedy on untended sites.

2



from left,  
1. full tree in fall  
2. bark  
3. spring flowers

## Stewartia

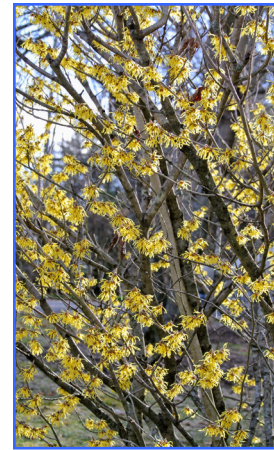
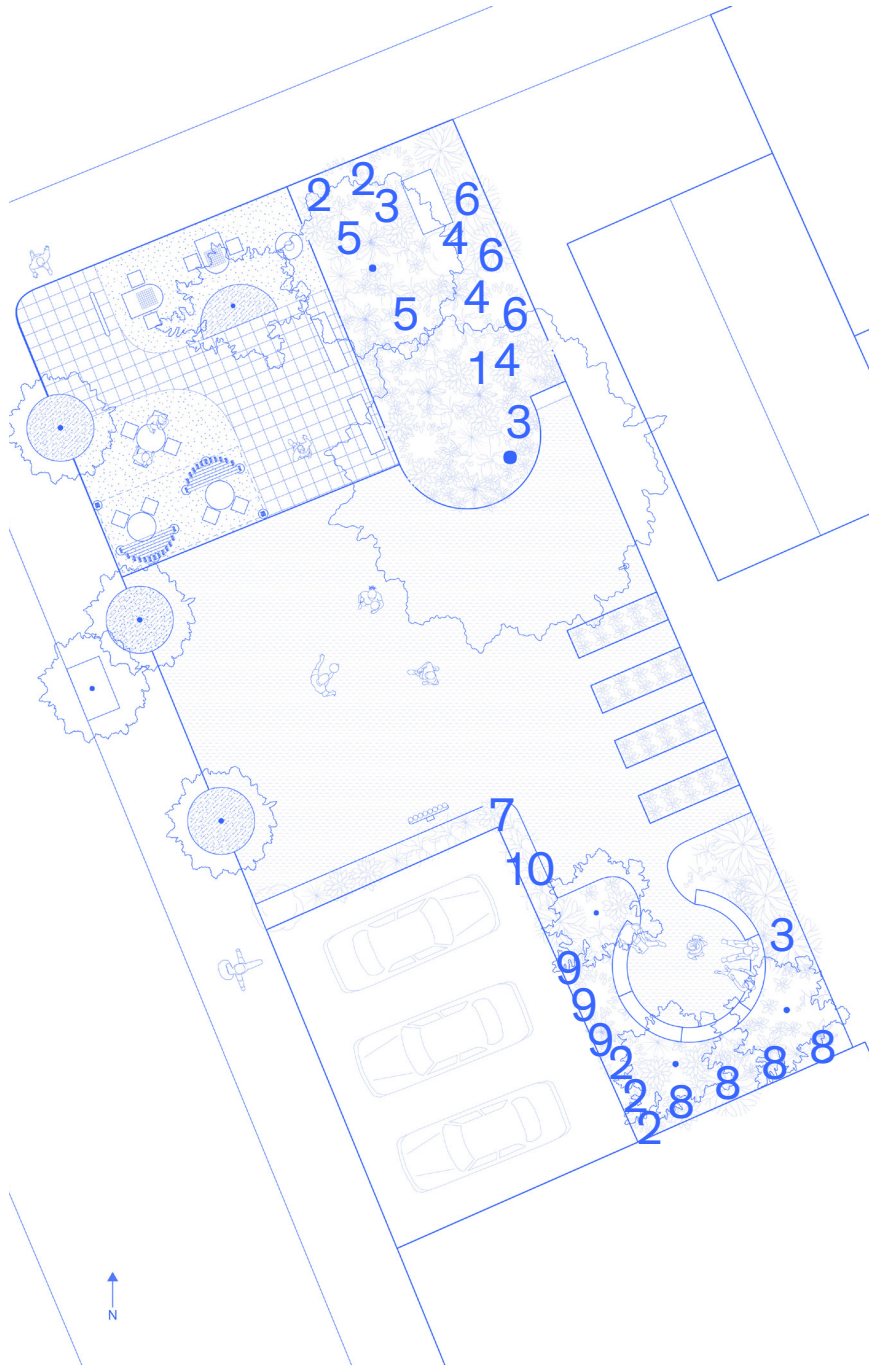
*Stewartia pseudocamellia* (non-native)

This small tree is native to Japan and Korea. It has beautiful smooth flaky bark, large white flowers and has bright fall color ranging from yellow to red.

3



# SHRUBS



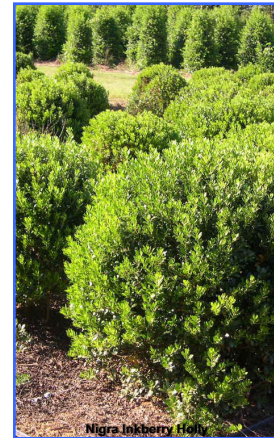
from left,  
1. bush with fall flowers  
2. close up of fall flowers  
3. summer leaves

## Witch Hazel

*Hamamelis virginiana* (native)

Witch Hazel, often found amongst ferns and rhododendrons, is known to attract moths and butterflies. This plant grows best in moist, well-drained soils in areas with partial to full sun. Its extracts are frequently used in herbal medicines.

1



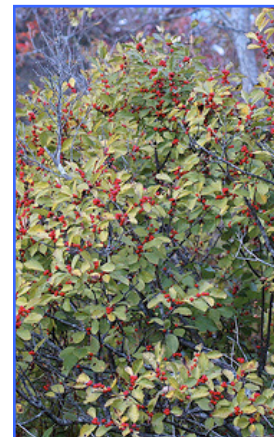
from left,  
1. full shrub  
2. berries in fall  
3. flowers in spring

## Inkberry

*Ilex glabra* (native)

Inkberries are an essential food source for wildlife. Inkberry bushes also provide cover and nesting sites for birds. They thrive in moist to wet soils with partial to full sun. Inkberry is also tolerant of seaspray.

2



from left,  
1. full shrub with berries, late summer and fall  
2. berries in winter  
3. leaves

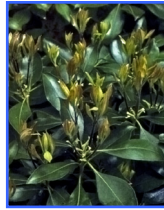
## Winterberry

*Ilex verticillata* (native)

Winterberry's name comes from its red berries that persist through the winter and are an important food source for birds. Tolerant of wet and poorly-drained soils, it is often found in wetlands with cattails, sedges, and others.

3





from left,  
1. full shrub  
blooming in late  
spring  
2. flowers  
3. leaves

Mountain Laurel

*Kalmia latifolia* (native)

Often found in the shade alongside ferns and rhododendrons, Mountain Laurel's showy pink or white flowers attract bees, butterflies, and hummingbirds. It is sensitive to pollution and drought and prefers well-drained, acidic soils.

4



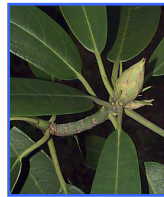
from left,  
1. full shrub,  
blooming in  
early spring  
2. close up  
of flowers  
3. summer leaves

Spicebush

*Lindera benzoin* (native)

Spicebush got its name from the spicy fragrance that is emitted when its leaves and stems are crushed. As a key member of the ecosystem, berries of the plant are eaten by birds and the plant serves as a larval host for spicebush swallowtail.

5



from left,  
1. full shrub  
blooming in  
spring  
2. spring flowers  
3. leaves, year-  
round!

Rosebay Rhododendron

*Rhododendron maximum* (native)

This stately, iconic rhododendron can reach 25-feet tall with age and is capable of growing anywhere from sun to shade and in moist or dry soils. Flowers range from purple to pink to white depending on soil conditions.

6



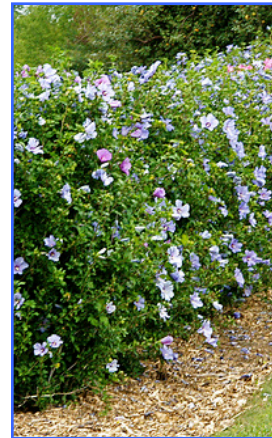
from left,  
1. summer  
flowers  
2. full shrub  
3. leaves

Panicle Hydrangea

*Hydrangea paniculata* (non-native)

Originally native to China, Korea, Japan and Russia, this plant has been widely cultivated as an ornamental shrub. It does not provide habitat for our local wildlife. Smooth Hydrangea and Oak-Leaf Hydrangea are great native alternatives.

7



from left,  
1. full shrub, in  
bloom  
2. flowers  
3. seed pods  
in fall

Rose of Sharon

*Hibiscus syriaca* (non-native)

Rose of Sharon is originally native to China but has been cultivated widely because of its vase-like shape and profuse blossoms. It is sometimes thought of as invasive. Swamp Mallow is a great native alternative with similar showy flowers.

8



from left,  
1. full shrub  
in bloom  
2. leaves and  
edible fruit  
3. summer leaves

Beach Plum

*Prunus maritima* (native)

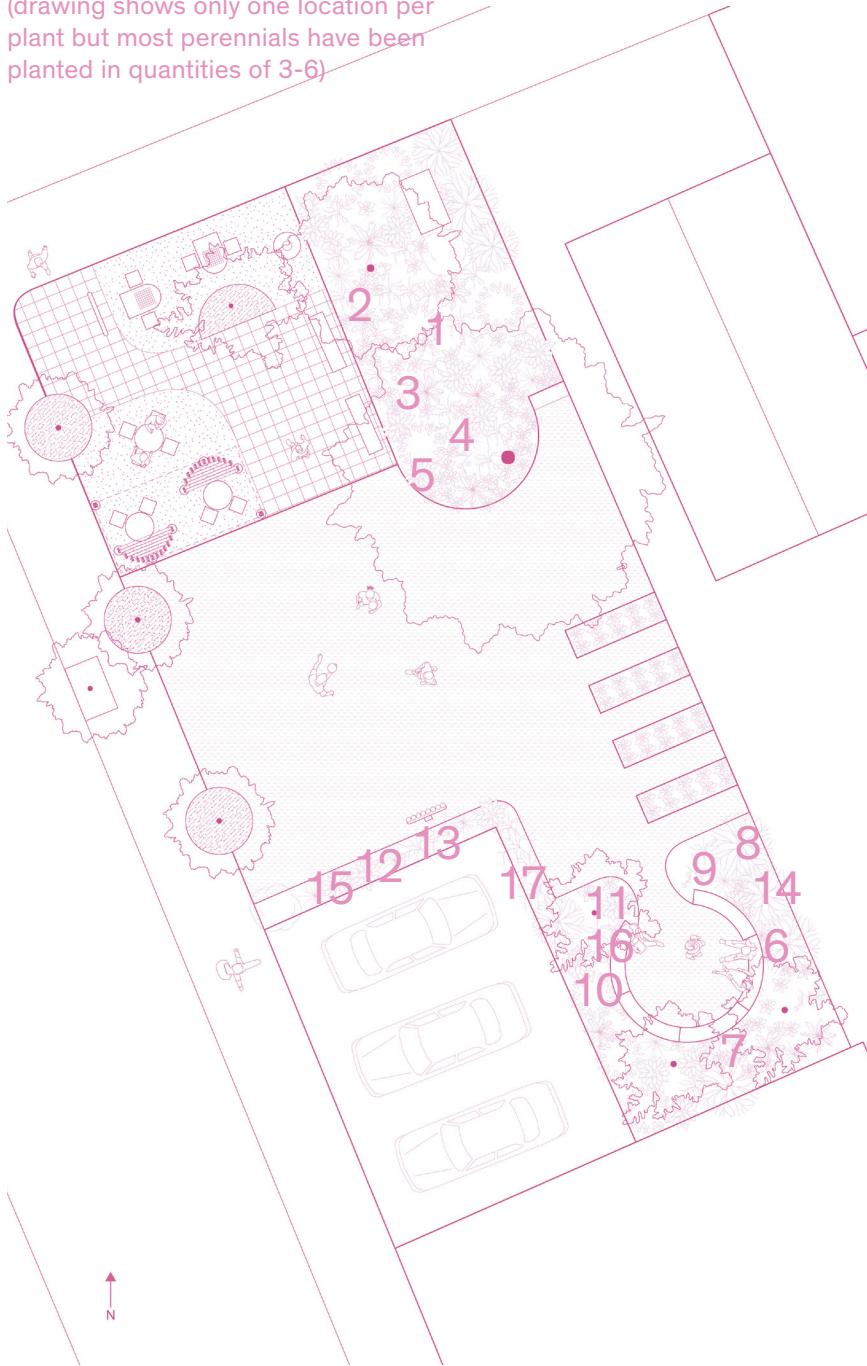
Beach plum is an ideal shrub for sunny, sandy sites. Profuse white flowers in spring are followed by flavorful fruit. *Prunus* species support over 400 species of butterflies and moths, and are beneficial to birds and bees as well.

9



# PERENNIALS

(drawing shows only one location per plant but most perennials have been planted in quantities of 3-6)



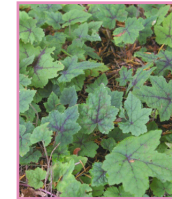
from left,  
1. flowers in late summer  
2. leaves  
3. flower

## Cardinal Flower

*Lobelia cardinalis* (native)

Though it prefers wet soils, Cardinal flower adapts easily to semi-shady garden soils. The Cardinal flower is known for its striking red flowers that attract butterflies and hummingbirds.

1



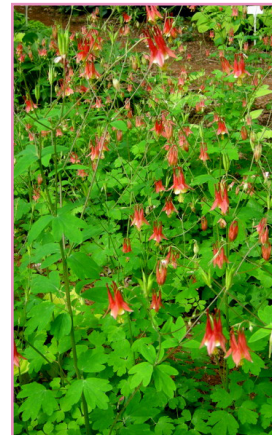
from left,  
1. spring flowers  
2. spring flowers  
3. leaves

## Foam Flower

*Tiarella cordifolia* (native)

Foam Flower derives its name from its delicate, foam-like flower spikes. The plant serves as a habitat for various insects. It does best in moist, soils in conditions of shade to partial shade alongside ferns and other woodland plants.

2



from left,  
1. full plant in early spring  
2. early spring flower  
3. leaves

## Red Columbine

*Aquilegia canadensis* (native)

Red Columbine thrives best in well-drained soils and partial to full sun but it is tolerant of various soil types. Its red and yellow flowers attract both hummingbirds and bees to the plant. It is a companion plant to various woodland wildflowers.

3

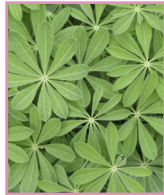


from left,  
1. full plant in  
spring  
2. flower  
3. leaf

Wild Blue Flox  
*Phlox divaricata* (native)

4

The wild blue phlox is known for its fragrant, bluish flowers that attract butterflies and bees. This plant likes woodland conditions and can often be found with other shade-loving wildflowers like trillium and bloodroot in well-drained soils.

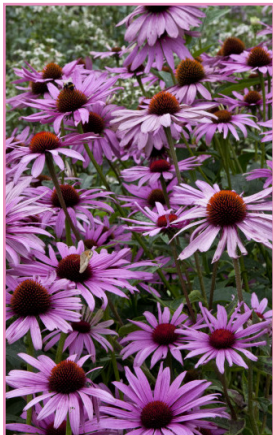


from left,  
1. full plant in  
spring/summer  
2. flowers  
3. leaves

Sundial Lupine  
*Lupinus perennis* (native)

5

Wild Lupine is the larval host of both the Eastern Tailed Blue butterfly and the Karner Blue butterfly. It is often found in sandy habitats amongst other wildflowers like coneflowers and black-eyed Susans.



from left,  
1. mid summer  
flowers  
2. leaves  
3. flowers

Purple Coneflower  
*Echinacea purpurea* (native)

6

Purple coneflower thrives in full sun in meadow settings with grasses and other wildflowers. Once established, the plant can be quite tolerant of drought. In herbal medicine practices, it is believed to have immune-boosting properties.

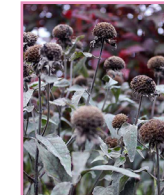


from left,  
1. summer  
flowers (pink)  
2. summer  
flowers (white)  
3. seed pods

Swamp Milkweed  
*Asclepias incarnata* (native)

7

An important nectar source for butterflies, like swallowtails and Monarchs, swamp milkweed normally grows in damp soil at wetland edges. Bees and other pollinators come to it as well. A host plant for monarch butterfly caterpillars.



from left,  
1. mid/late  
summer flowers  
2. leaves  
3. seed heads

Wild Bergamot  
*Monarda fistulosa* (native)

8

Also known as Bee Balm or Horsemint, Wild Bergamot has a lovely violet blossom and aromatic foliage. It is a favorite of butterflies, bees and hummingbirds. It prefers full sun to part shade and blooms from July through September.

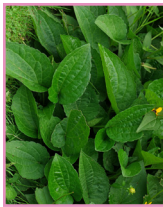
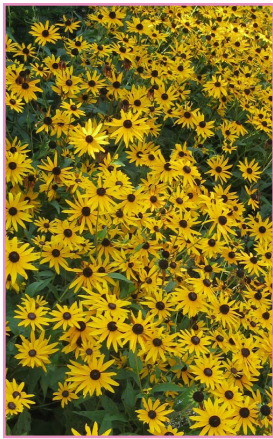


from left,  
1. summer  
flowers  
2. flower  
3. leaves

Scarlet Beebalm  
*Monarda didyma* (native)

9

Bee Balm's red, tubular flowers and aromatic leaves attract bees, hummingbirds, and butterflies to the plant. It prefers moist, well-drained soils, and full sun to part shade. It can be prone to mildew when in humid conditions.



from left,  
1. mid/late  
summer flowers  
2. leaves  
3. winter seed  
heads

Black Eyed Susan

*Rudbeckia goldsturm* (native)

Black-eyed Susans are a magnet for butterflies and pollinators and an important food source for goldfinches in the fall. Well-adapted to drier soils and full sun, they are a great choice for a sunlit meadow and will bloom in July and August.

10



from left,  
1. full plant in  
bloom  
2. flower  
3. leaves

Siberian Iris

*Iris spp.* (non-native)

The Siberian Iris is known for its elegant flowers which attract butterflies and other pollinators. This plant is tolerant of wet conditions and prefers moist, well-drained soils, and full sun to part shade. Blue Flag Iris is a great native alternative.

13



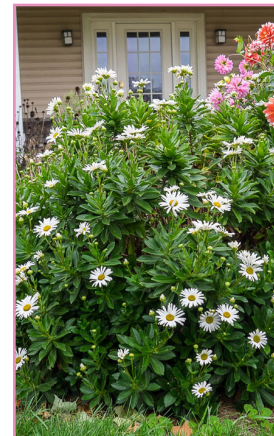
from left,  
1. full plant in  
summer  
2. flowers  
3. leaves

Blue False Indigo

*Baptisia australis* (native)

Blue False Indigo is often identified by its striking blue, pea-like flowers. As a helpful member of the greater ecosystem, it serves as a host plant for the Eastern Tailed- Blue butterfly and has notable nitrogen-fixing abilities.

11



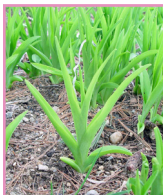
from left,  
1. full plant in  
summer  
2. summer  
flowers  
3. leaves

Montauk Daisy

*Nipponanthemum nipponicum* (non-native)

Montauk Daisy is a late-season bloomer with daisy-like flowers. It is often grown alongside other fall-blooming perennials. It is tolerant of sea spray making it suitable for coastal areas.

14



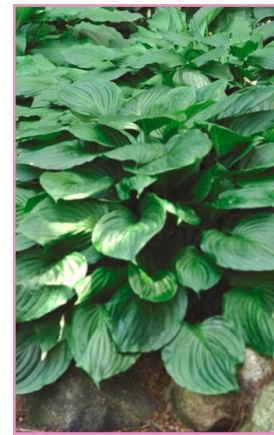
from left,  
1. full plant in  
summer  
2. early spring  
leaves  
3. seedhead

Daylily

*Hemerocallis fulva* (non-native)

Daylily is known for its trumpet-shaped flowers. These showy flowers attract butterflies and hummingbirds to pollinate the plant. Daylily thrives in well-drained soils, and full sun to light shade.

12



from left,  
1. full plant  
2. variegated  
leaves  
3. blue leaves

Hosta

*Hosta spp.* (non-native)

Hosta is known for its foliage which comes in a variety of sizes and colors. It prefers moist, well-drained soils, and partial to full shade. It is often grown with other shade-loving plants like ferns and astilbe.

15





from left,  
1. full plant in mulch  
2. full plant along pavement  
3. full plant in lawn

Crabgrass

*Digitaria spp.* (non-native)

Crabgrass, although a grass, is known to overtake other types of more manicured grass. In most cases, it is considered a weed. You have probably seen this at home.

1



from left,  
1. young plant  
2. leaves  
3. plant with flowers

Field Bindweed

*Convolvulus arvensis* (non-native)

Bindweed is a *very aggressive* thin climbing vine with white flowers similar to morning glory and arrow shaped leaves. It is extremely difficult to get out rid of due to its large root system and known to overtake other plants so watch out!

2



from left,  
1. full plant  
2. close up of leaves, with silvery undersides  
3. young plant

Mugwort

*Artemisia vulgaris* (non-native)

Mugwort grows *extremely* invasively but has many wonderful uses. For hundreds of years people have used mugwort to induce vivid dreams, repel moths and treat stomach problems.

3



from left,  
1. young vine  
2. vine with berries  
3. berries in fall/ winter

Oriental Bittersweet

*Celastrus orbiculatus* (non-native)

Bittersweet is an invasive vine that climbs and smothers other plants and is native to China, Japan and Korea. It was introduced to the US in the 1860s as an ornamental plant. Bittersweet has bright orange roots which helps to identify it.

4



from left,  
1. full plant  
2. leaves  
3. plant with flowers

Purslane

*Portulaca oleracea* (non-native)

Purslane is an edible succulent often found throughout gardens. Purslane is packed full of vitamins, minerals, and antioxidants. It is known to overtake other plants so you may want to pull it out (and eat it)!

5



from left,  
1. full plant  
2. flowers  
3. leaves

Horseweed

*Erigeron canadensis* (native)

Horseweed is a garden weed which is known to grow rapidly but is actually native to most of North America. It can be identified by its long, slender green leaves which grow in a rosette shape.

6



from left,  
1. leaves  
2. full plant  
flowering  
3. young plant

Broadleaf Plantain

*Plantago major* (non-native)

Broadleaf Plantain is edible and known to treat things like chronic diarrhea as well as digestive tract disorders. Flowers grow in a spike like shape while the leaves grow in an oval shape.

7



from left,  
1. full plant with  
flowers  
2. leaves  
3. flowers

Narrowleaf Plantain

*Plantago lanceolata* (non-native)

Narrowleaf Plantain is also edible but has smaller, narrower leaves and seeds found closer to the tip of each leaf.

8



from left,  
1. leaves  
2. leaves and  
flowers  
3. young shoots

Japanese Knotweed

*Reynoutria japonica* (non-native)

Japanese Knotweed originated from Asia and was brought to the US in the late 1800s. One of the most common types of invasive weeds, knotweed is known to dominate natural landscapes and outcompete native plants.

9



from left,  
1. leaves and  
flowers  
2. leaves before  
flowers  
3. flowers

Smartweed

*Polygonum spp.* (native)

About 75 species of smartweeds occur in North America. They are mainly identified by their spikes of numerous flowers and encircling leaf sheaths. There are also climbing species of smartweeds.

10



from left,  
1. full plant  
2. leaves  
3. plant with  
flowers

Nightshades

*Solanum spp.* (native and non-native)

Bittersweet Nightshade and Eastern Black Nightshade are both toxic and grow invasively in gardens, though Eastern Black Nightshade is native to much of the US.

11



from left,  
1. full plant  
2. young plant  
3. leaves and  
seeds

Pigweed

*Amaranthus retroflexus* (native)

A member of the amaranth family, it has a storied history and an important role as a food in many cultures. Each plant can produce upwards of 100,000 seeds that are rich in protein and have a higher protein content than rice, sorghum, or rye.

12





from left,  
1. full plant in bloom  
2. seed head  
3. leaves

Dandelion

*Taraxacum officinale* (non-native)

Perhaps the most famous of all weeds, Dandelion has a stubborn taproot that readily regenerates if any part is left in the soil. To get rid of it, be prepared to dig deep. Its root usually extends almost a foot or more below the surface.

13



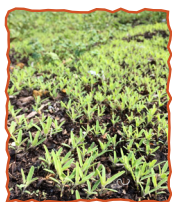
from left,  
1. leaves  
2. flowers  
3. full plant

Common Burdock

*Arctium minus* (non-native)

The weed is recognized by its very large, oval or triangular “elephant-ear” leaves. The upper surface of the dark green leaves may be smooth or hairy and the lower leaf surface is typically woolly and pale green. It has a huge taproot.

14



from left,  
1. leaves  
2. new shoots  
3. dusty white on new leaves

Lamb's quarters

*Chenopodium album* (non-native)

Lamb's quarters can be identified by the telltale dusty white coating on new growth and the undersides of leaves. It's a favorite among foragers, who mostly gather it for the leaves, which taste like a mild version of spinach.

15



from left,  
1. full plant in bloom  
2. leaves  
3. flower

Common Ragweed

*Ambrosia artemisiifolia* (native)

Ragweed is actually a native plant but thrives in disturbed sites and has become invasive in many other parts of the world. It is not loved because it is a major source of hay fever (allergies) in late summer/fall, caused by its wind-borne pollen.

16



from left,  
1. full plant with berries  
2. young plant  
3. berries and flowers

Common Pokeweed

*Phytolacca americana* (native)

Pokeweed is actually a native plant but it is not loved by gardeners as the entire plant is quite poisonous (only to humans, birds will eat the berries). Pokeweed can grow a sizeable taproot so you will probably need a shovel to remove it!

17



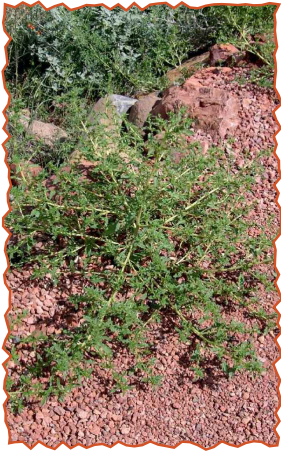
from left,  
1. full plant with flowers  
2. leaves  
3. flowers

Yellow Woodsorrel

*Oxalis stricta* (native)

Yellow Woodsorrel is edible and its leaves and flowers taste tart and lemony and can be added to salads or used to make tea. It will develop a tap root but is generally easy to pull by hand.

18



from left,  
1. full plant  
2. close-up  
3. close-up

**Tumble Pigweed**

*Amaranthus albus* (non-native)

Originating in South America, tumble pigweed grows throughout North America and nearly worldwide. It is an annual that, after senescing, breaks off at the base of the stem and, blown by the wind, may roll great distances.

19



from left,  
1. full plant with flowers  
2. flower  
3. leaves

**Spotted Knapweed**

*Centaurea maculosa* (non-native)

Spotted knapweed is an herbaceous biennial or perennial weed native to Europe and western Asia. This invasive weed has a taproot but can be pulled by hand or by mowing early when the plant is just beginning to flower.

20



from left,  
1. leaves  
2. leaves and flowers  
3. young shoots

**Prickly Lettuce**

*Lactuca serriola* (non-native)

Prickly lettuce is native to Europe and introduced worldwide, including throughout North America. It can reach 6 feet tall. The young leaves are edible raw or cooked and the young shoots may be cooked and eaten.

21



from left,  
1. full plant  
2. seed head  
3. flowers

**Common Groundsel**

*Senecio vulgaris* (non-native)

Growing up to 3.5 feet tall, Common Groundsel is a common garden weed. It can produce enormous amounts of seeds and is classified as a winter annual because the seeds germinate in late fall through early spring.

22



from left,  
1. leaves and fruit  
2. leaves  
3. spiny fruits

**Common Cocklebur**

*Xanthium strumarium* (non-native)

A cocklebur was the inspiration for the invention of Velcro. George de Mastral examined the burs that stuck to his socks and discovered that they consisted of hundreds of tiny hooks, which attached themselves to anything loopy.

23



from left,  
1. full plant  
2. young plant  
3. leaves and seeds

**Wild Mustard**

*Brassica kaber* (non-native)

Wild Mustard is an introduced winter or summer annual, reproducing by seed. Its stems are upright and branched above with bristly hairs near base. It is highly invasive in many parts of the world.

24



from left,  
1. full plant  
2. leaves  
3. flower

Shepherd's Purse

*Capsella bursa-pastoris* (non-native)

Having been introduced on every continent, shepherd's Purse is said to be the most common weed on earth after dooryard knotweed (*Polygonum aviculare*). Its puffy, knotted fruits resemble tiny purses.

25



from left,  
1. full plant with flowers  
2. leaves  
3. flowers

Common Chickweed

*Stellaria media* (non-native)

Common stitchwort has been an agricultural weed in Europe since ancient times, and is now introduced to every continent. Its seeds can survive in the soil for over fifty years making it nearly impossible to eradicate.

26



from left,  
1. full plant  
2. huge fuzzy leaves  
3. flower

Common Mullein

*Verbascum Thapsus* (non-native)

Common mullein is a biennial native to Eurasia and Africa that develops a basal rosette of felt-like leaves the first year, then bolts to heights of six feet or more. This plant was introduced in the mid 18th century as the source of a fish poison.

27



from left,  
1. full plant  
2. flowers  
3. leaf with spines

Carolina Horsenettle

*Solanum carolinense* (non-native)

Carolina nightshade is a non-native perennial weed that has conspicuous sharp spines on the leaves and stems.

28



from left,  
1. leaves and flower  
2. leaves  
3. flowers

Hedge Bindweed

*Calystegia sepium* (non-native)

Hedge false bindweed is a large vine that can grow to 10 feet, with large rhizomatous root systems and 2 1/2- to 3-inch flowers.

29

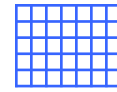


# JANUARY

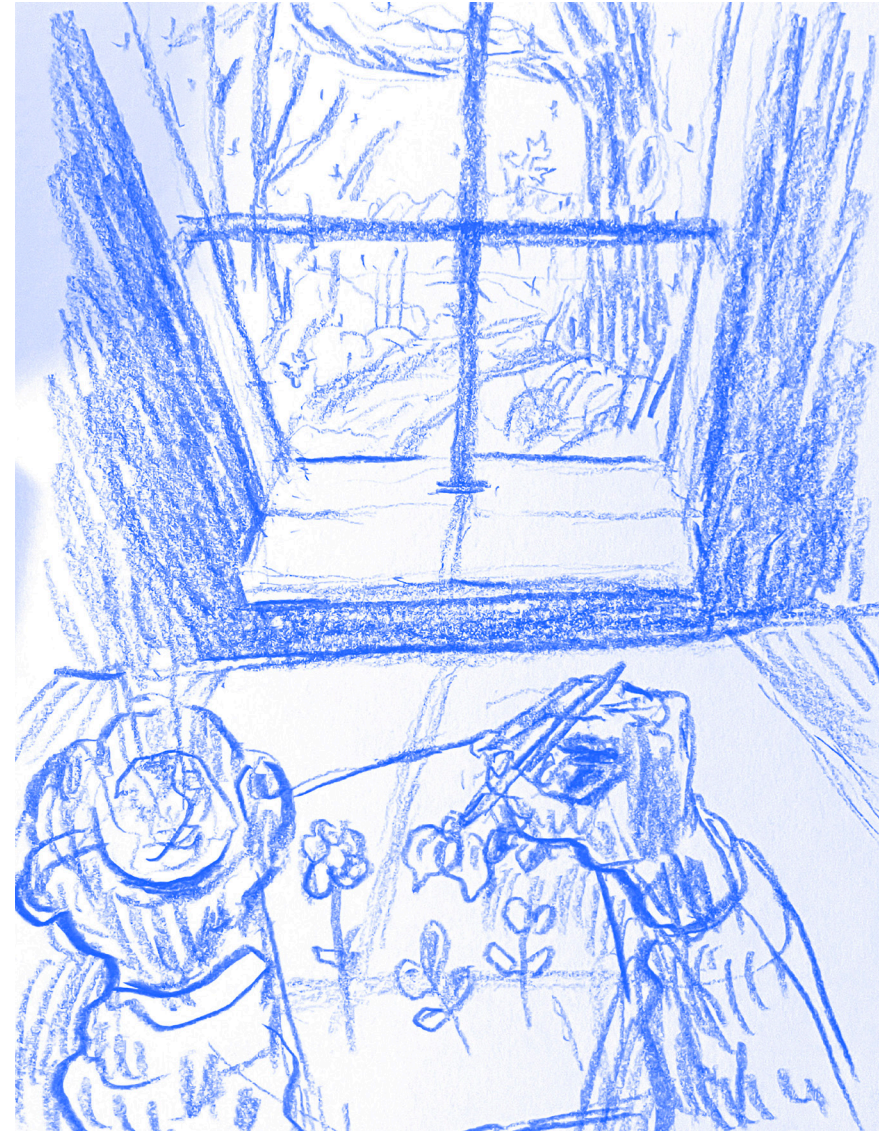
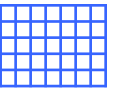


There should be little work needed during this time period, though general park maintenance should continue. If leaves can be collected and composted on site, they can be used in the spring as a natural mulch.

Trees can be pruned in winter. Winter is the best time of year to prune because branches are easy to see, diseases cannot be spread, and there is minimal stress to the tree. But for most trees, pruning can be done at any time. See additional information about pruning trees on page 48.



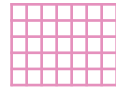
# FEBRUARY



Winter is the best time to plan your gardening projects for spring!



# MARCH



## SHRUBS

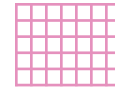
- See the guide to pruning shrubs on page 52.
- Panicle Hydrangeas should be cut back to between 24 and 30" tall and wide. You do not have to worry about old wood/new wood like big leaf hydrangeas.
- Once Winterberry gets to four- to five-feet tall, can prune to shape before it leafs out in the spring.
- Prune Beach Plums once they get between 4 and 5 feet tall and wide.
- You may also want to clip off any suckers the emerge from the ground around the plants.

## PERENNIALS

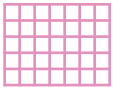
- Leave them alone! While old leaves and last-year's stems may appear "messy" they are providing valuable habitat for overwintering pollinators, butterflies eggs and chrysalids and other important small wildlife. If beds must be "cleaned," delay as long as possible and leave raked (no leaf blowers, please!) leaves in a pile on site at least through mid-May.

## TREES

### LAWN



# APRIL



## SHRUBS

- Check for winter damage and prune broken or dead branches (see shrub pruning guide, page 52).
- First- and second-year shrubs can receive a fertilization of a slow-release, organic fertilizer like Espoma's Tree Tone or Holly Tone.

## PERENNIALS

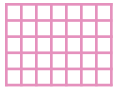
- Note emerging perennials and pull fallen leaves/disturbed mulch away from the emerging growth so sunlight can reach foliage.
- DO NOT FERTILIZE. Most of the perennials here are native species that will respond to artificial fertilizers by growing very tall and flopping over. Wait until May to determine if any plants appear weak and could use a top-dressing of compost.
- Perennial beds should be edged to make clear which is planting bed and which is lawn.
- If perennial beds are mulched ensure that no mulch touches the trunks of trees and shrubs or the crown of perennials.
- Tiarella is vulnerable to 'frost heave,' where the plants are actually lifted slightly out of the soil by frost. Check and re-plant as necessary.

## TREES

- Check for winter damage and prune broken or dead branches.
- First- and second-year trees can receive a fertilization of a slow-release, organic fertilizer like Espoma's Tree Tone or Holly Tone.
- Remove small, weak branches from lower trunks of magnolias (see tree pruning guide, page 46).

## LAWN

- First mowing of the year.
- Assess lawn for bare spots and over-seed with a seed mix that includes white clover.
- DO NOT FERTILIZE. Fertilizers throw the microorganisms of the soil out of whack, creating an unnecessary, on-going need for fertilizer. Add clover to your seed mix when patching bare spots instead.
- If a pH test indicates a soil pH of 6 or lower, lime to increase pH.
- DO NOT use any pesticides on the grass areas. Pesticides disrupt the normal life of the soil and create ensure the soil will be more vulnerable to future pest attacks.



# MAY

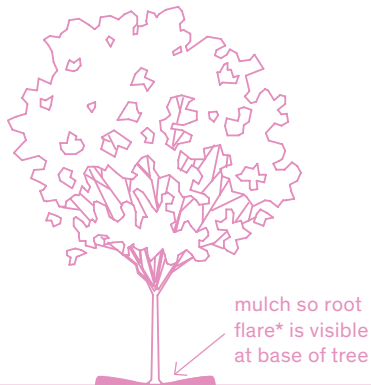


## SHRUBS

- Start watching for Spotted Lantern Fly nymphs on trees and shrubs and kill them.
- DO NOT worry about aphids on Beach Plum or other shrubs/perennials. Predators and parasites will take care of the problem, though it may take several weeks.

## PERENNIALS

- Use an organic compost as a top-dressing for perennials that aren't growing well.
- Keep perennial beds weeded. Pay particular attention to grubbing out any poison ivy and bind weed.
- If Bee Balm and Wild Bergamot have many stems growing from the crown, cut out any weak stems—they won't produce many flowers and they will cause reduced air circulation which can increase powdery mildew.

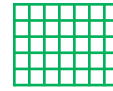


## TREES

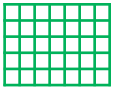
- Start watching for Spotted Lantern Fly nymphs on trees and shrubs and kill them.
- Redbuds should not need much pruning, but, if needed (for example: crossing branches, branch too low) do so just after blooming. Trees should not be pruned at all (with the exception of dead/dying/diseased branches) until Spring 2026!. See tree pruning guide, page 48.
- Check and adjust level of mulch in spring. Keeping 1-2" of mulch piled in a donut shape around your tree helps it in four ways. It keeps the soil moist, replenishes nutrients to the soil as it decays, suppresses weeds from growing, and it insulates the soil from extreme temperatures. It can also help keep lawn mowers clear of your tree! Careful! Don't pile the mulch up directly around the base of the tree trunk as this can cause it to rot. Leave 2-3" of space around the root flare\* (this is the part of the trunk that widens out like a skirt at the very bottom). See diagram, left.

## LAWN

- Mow as needed.



# JUNE



## SHRUBS

- Rhododendrons should be pruned back within two or three weeks after flowering is done.
- The hybrid rhododendron at the front of the north perennial bed will bloom first. It is a compact plant and pruning is only necessary to keep a good shape.
- The Rhododendron maximum along the fence line will bloom several weeks later. They tend to have longer stems between nodes. Pruning will keep the plant denser.
- Dead flower heads on Mountain Laurel should be trimmed off. If plant appears to be struggling (can be normal for a new plant), top dress with compost—mountain laurels prefer a loose, high organic soil.

## PERENNIALS

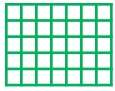
- As the flowers of plants like columbine, creeping phlox and tiarella start to fade, only deadhead as needed to keep beds neat. Seed heads are important food sources for wildlife.
- When peony flowers fade, trim out flowering stems.
- Keep perennial beds weeded.

## TREES

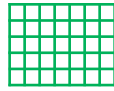
- Begin to water trees during dry periods. All trees should receive ~15 gallons of water every week during the growing season through Fall 2025. Trees can receive extra water if they appear dry and during heat waves.

## LAWN

- Mow as needed.



# JULY



## SHRUBS

- Once Inkberry is done growing for the season, tip prune one to two inches to encourage branching and denser growth.
- Once growth has stopped for the summer on the Beach Plum and Spice Bush, new growth can be trimmed back by half or so to keep the plant dense.

## PERENNIALS

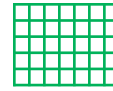
- Iris and daylily flower stems can be cut back when flowering is done.
- Keep perennial beds weeded.
- Powdery mildew can be a problem on Monarda species (Bee Balm). Keep them in full sun and a more-open setting to reduce the problem. Once they have finished blooming, if the powdery mildew is bad, simply cut the stems back to the ground consider moving the plants to a sunnier area next spring.
- Deadhead Purple Coneflower—there is a moth caterpillar that attacks the flower heads and makes them unsightly.

## TREES

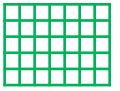
- Water trees during dry periods. All trees should receive ~15 gallons of water per week during the growing season through Fall 2025. Trees can receive extra water if they appear dry and during summer heat waves. A deep watering once a week is better than more-frequent, shallow waterings. Pay particular attention to the second-year (2022 planted) Redbuds as they dislike drought stress.

## LAWN

- Grass areas may need water before deeper rooted perennials, shrubs and trees. A full inch of water once a week is better than small amounts more frequently.



# AUGUST



## SHRUBS

- Supplemental watering may be necessary. A deep watering once a week is better than more-frequent, shallow waterings. Pay particular attention to the second-year (2022 planted) Witch Hazel as they dislike drought stress
- Do not prune Inkberry after early August. It may stimulate new growth that could be killed by early frosts.

## PERENNIALS

- Supplemental watering may be necessary. A deep watering once a week is better than more-frequent, shallow waterings.
- Keep perennial beds weeded.

## TREES

- Water trees during dry periods. All trees should receive ~15 gallons of water per week during the growing season through Fall 2025. Trees can receive extra water if they appear dry and during summer heat waves. A deep watering once a week is better than more-frequent, shallow waterings. Pay particular attention to the second-year (2022 planted) Redbuds as they dislike drought stress.

## LAWN

- Mow as needed.
- Deep waterings as needed

# SEPTEMBER

## SHRUBS

- Strongly recommend pruning the Rose of Sharon back one or more feet to remove all seed pods before they open. Much easier than weeding out hundreds of seedlings.

## PERENNIALS

- Unless flower stalks are broken or flopped over completely, leave for the winter to provide cover and hiding spots for solitary bees.
- Keep perennial beds weeded.

## TREES

- Water trees during dry periods. All trees should receive ~15 gallons of water per week during the growing season through Fall 2025. Trees can receive extra water if they appear dry and during summer heat waves.
- As leaves begin to fall they could be mowed with a mulching mower with bag and composted on site for use in raised beds or to top-dress perennial beds

## LAWN

- Mow as needed.
- No more watering should be needed.

# OCTOBER

## SHRUBS

## PERENNIALS

## TREES

- Leave raked (no leaf blowers, please!) leaves in among perennials and in a pile on site at least through mid-May as overwinter habitat for beneficial insects and other animals.
- And/or mulch-mow leaves and compost on site for use in raised beds or to top-dress perennial beds

### LEAVE THE LEAVES!

“When leaves fall from a tree, the plant material covers the tree’s root zone and begins to break down, returning nutrients to the soil. Within that fallen leaf layer is an entire ecosystem, home to all sorts of animals, including invertebrates, reptiles, amphibians and pollinators. Many species of moths and butterflies, for instance, rely on the leaf layer to complete their life cycle. More than 90% of moth species attach themselves to leaves and spend the winter in cocoons buried among the foliage. Those moths and butterflies, in turn, are a critical food supply for many birds.”  
-NYTimes

## LAWN



# PRUNING TREES

## GENERAL NOTES

- For the first 3 years after trees were planted (so until Fall 2025), only prune dead or broken branches.
- If you are ever unsure about pruning, please contact someone at Groundwork RI before proceeding (trees@groundworkri.org)
- Only prune what you can reach with two feet on the ground.
- As the Redbuds along the street grow, lower limbs can be removed so that there is 8' of clearance over the sidewalks.

## WHY

- The main reasons for pruning trees are safety, health, and aesthetics. Pruning can encourage trees to develop a strong structure and reduce the likelihood of damage during the winter.
- Pruning for safety involves removing branches that could fall and cause injury or property damage, trimming branches that interfere with lines of sight on streets or driveways, and removing branches that grow into utility lines.
- Pruning for health involves removing diseased or insect-infested wood, thinning the crown to increase airflow and reduce some pest problems, and removing crossing and rubbing branches.
- Pruning for aesthetics involves enhancing the nature form and character of trees or stimulating flower production.

## WHEN

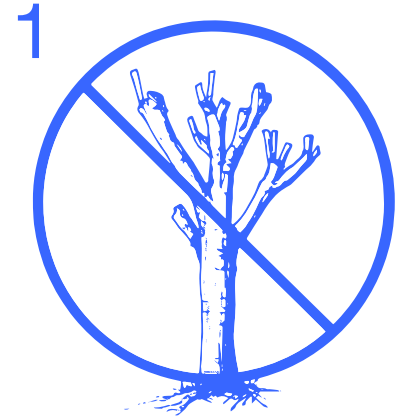
- Winter is the best time of year to prune because branches are easy to see, diseases cannot be spread, and there is minimal stress to the tree. But for most trees, pruning can be done at any time.
- Beginning 3 years after planting, light pruning can be done every other year. After 10 years, consult an arborist for pruning advice.

## HOW

### GENERAL NOTES

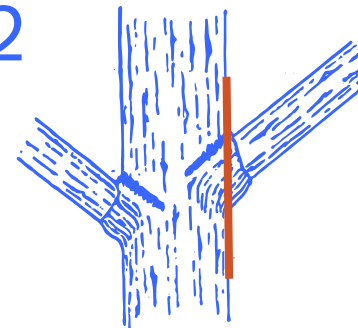
- Please only prune branches that can be cut using bypass pruners. For any branches requiring a hand saw to be removed, please contact Groundwork RI and a member of our crew will be happy to assist.
- Do not remove more than 25 percent of the tree's live branches at any one time!

1. Topping is not pruning!! Topping is the indiscriminate removal of branch ends. Topping injures and ultimately results in early failure or death of a tree.
2. Pruning cuts should be made just beyond the branch collar, at a sloping angle, perpendicular to the line of the branch.

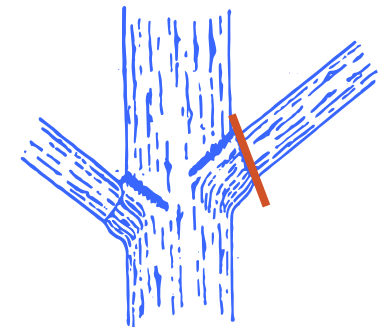


Topped tree.  
Never top trees!!

2



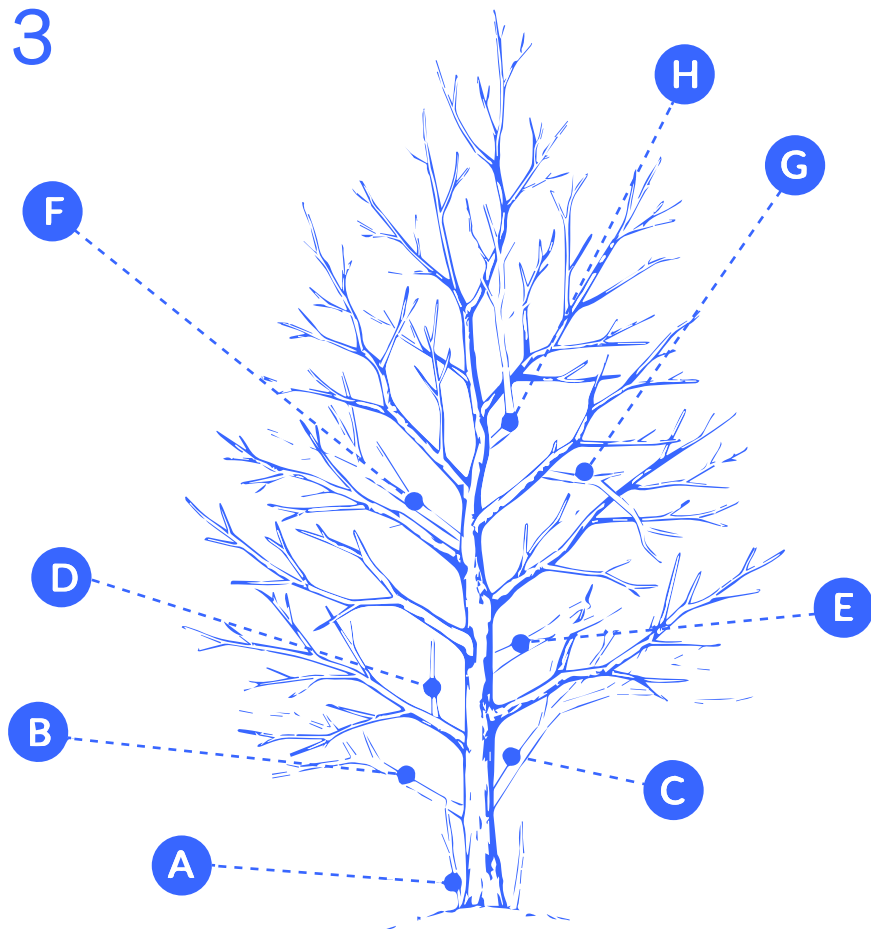
NO!



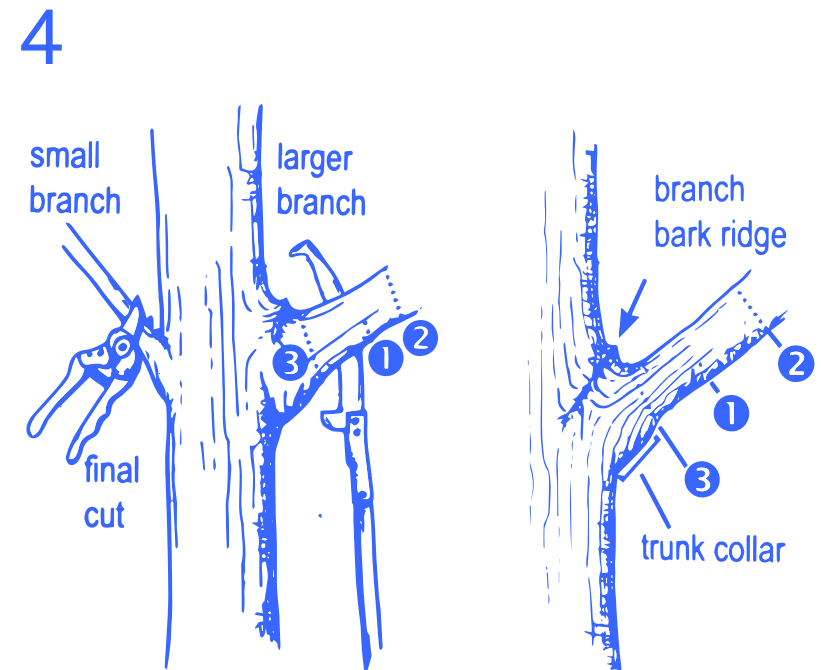
YES!

3. What to prune from a tree:
- A.** Suckers that grow from the roots or base of the trunk
  - B.** Limbs that sag or grow too close to the ground. (Redbud trees along the sidewalk should eventually be limbed up to 8')
  - C.** Branches that form an acute angle with the trunk
  - D.** Watersprouts that shoot up from main branches

- E.** Limbs that are dead, diseased, or broken
- F.** Branches that grow parallel to and too close to each other
- G.** Branches that cross or rub against others
- H.** Limbs that compete with the tree's central leader.



4. Three Step Method:
1. Cut one-third of the way through the branch on the underside
  2. Go 2-4 inches beyond the undercut to remove the branch
  3. Make the final cut just outside the branch bark ridge and trunk collar.



# PRUNING SHRUBS

New buds may start under the stem of a leaf or form anywhere along a branch. If undisturbed, they grow into new tops, leaves, and branches during the following season. Much of the skill in pruning involves knowing how to make good use of buds in order to redirect growth or rejuvenate the plant. The drawings below show, first, three incorrect ways to prune in relation to a bud, followed by illustrations of the correct pruning method.

## INCORRECT CUTS



Too close to the bud. The tender part of the bud will be too near the cut, may not receive enough sap, and will dry out — or it may be damaged by freezing temperatures.



Too far from the bud. The dead stub will rot and look ugly, and the rot can spread easily to the rest of the tree. Likewise, when you're cutting off dead branches, always cut back to a live bud or branch so that no deadwood will be left on the plant.



A flat topped cut. This cut is not only stubby and unattractive but it is also slow to dry out after a rain, inviting rot and disease.

## CORRECT CUTS!

A slanting cut, about 1/4 inch above a bud. In addition to being the best spot to inspire new growth in the bud, it leaves less stub and the slant dries.

Before

During

After



# PLANTING A FOOD GARDEN

Edible plants that work well in a school garden include crops that are planted and harvested in the spring and fall like:

- PEAS are a cool season crops meaning they thrive in temperatures between 55-70 degrees. Planting in March or early April allows the peas to mature in the cooler weather. Plant the peas in a sunny location to insure they get as sweet as possible. A second round of peas can be planted in the late summer.
- KALE is another cool weather vegetable that can be planted in early spring or fall. In the spring, kale can be started from seed and young kale plants can be set out very early (3 to 5 weeks before the last frost) but kale will also thrive when planted in the fall. You can harvest kale until the ground freezes which makes it a great crop for a school garden
- LETTUCE is another good cool season crop that grows well in spring and fall.
- BEETS can be planted in early to late fall for a winter harvest.
- CARROTS can be planted in mid- to late summer, starting about 10 weeks before your first fall frost for a fall harvest .
- SCALLIONS can be planted in

early spring and fall. They are an easy vegetable to grow and cook/eat!

- ONIONS are a great school friendly crop to grow. Onions are usually planted around March or April. Once planted, they will be able to be harvested in the late summer and fall.
- SPINACH can be planted in early spring and fall (mid-September) for a harvest in early summer or later fall. Spinach is a great, hearty green, perfect for a school garden.

These annual crops can be planted directly in the garden by seed. Planting seeds is easy—just follow the directions on the seed packet.

Some crops like tomatoes and peppers have a longer growing season than our RI climate provides so they should be planted as seedlings.

HERBS are reliable plants that also offer sensory stimulation, medicinal benefits and support for pollinators in a school garden.

- SAGE, OREGANO, THYME, MINT AND LAVENDER are perennials, coming back each year without being replanted.
- BASIL, CILANTRO, AND DILL are annuals that can be planted each year by scattering the seeds on top of the soil in a garden bed—a good activity for even the youngest students. Or to get a jump start on the season, start seeds inside (6 weeks or so before the last

spring frost) and you may have herbs to harvest before school is out.

- PARSLEY is one of the few biennials, so it grows leaves and stems for harvest the first year and then if it's not pulled up it will produce flowers and seeds the next year.
- Some annuals such as cilantro and dill “self-sow” meaning they drop seeds which grow new plants during the season and also in future years. This can be confusing because it appears that they are coming back like perennials each year but they are actually new plants grown from seeds dropped by the parent plant.

## PLANT LIFE CYCLES

Annuals complete their life cycle in a single growth season. They produce vegetation, flowers, fruit and seeds and then they die. Annuals can be pulled up when the season is over since they won't come back to life.

Perennials regrow every spring. They go dormant in the winter but they are not dead. Cut back their old growth in the early spring.

Biennials are less common and have a two-year life cycle, producing vegetation the first year and flowers, fruit and seeds the second year before dying.

RHODE ISLAND PLANTING CALENDAR FOR FRUITS AND VEGETABLES

Fruit or vegetable	Days until harvest	February		March		April	
		1	15	1	15	1	15
ASPARAGUS (buy crowns)	1–2 Years						CR
BEANS, BABY LIMA	60–100						
BEANS, PINTO	60–80						
BEANS, SNAP	60–80						
BEETS	60–80					S	S
BLACKEYED PEAS	90–120						
BOK CHOY	45						
BROCCOLI	60–90 from transplant					I	
BRUSSELS SPROUTS	100–120 from transplant						
CABBAGE	80–90 from transplant			I			T
CABBAGE, CHINESE	45 from transplant					I	
CARROTS	60–80				S	S	S
CAULIFLOWER	80 from transplant						I
CELERY	90 from transplant			I			
CHARD	60						S
CORN, SWEET	70–90						
CUCUMBERS	60–90						I
EGGPLANT	60 from transplant				I	I	
ENDIVE/ESCAROLE	80–120				S	S	
GARLIC	5–7 months						
KALE	60–90				I	S	S
KOHLRABI	45–60 from transplant					S	S

Legend: **C** = Plant cloves, **CR** = Plant crowns, **S**=Direct-seed in garden, **T** = Transplant seedlings started indoors to garden.

Notes: Dates are based on final frost on May 15 and first frost on October 15. Be aware of local microclimates that may make your garden colder/warmer and alter your frost dates. Transplants should be exposed to the outdoors for increasing periods over several days before planting (“hardened off”).

May		June		July		August		September		October	
1	15	1	15	1	15	1	15	1	15	1	15
CR	CR										
	S	S	S	S	S						
	S	S	S								
	S	S	S	S	S	S					
S	S	S	S	S	S	S	S				
	S	S	S								
S	S						S	S	S		
	T			I	I	T	T				
I				T							
			IS	S	TS						
S	TS			I	S	TS	S				
S	S	S	S	S	S						
	T	I	I	T	T						
T	T										
S	S	S					S	S			
S	S	S	S								
	TS	S	S								
		T									
						S		S			
											C
TS					S	S	S	S	S		
S	S	S	S	S	S	S	S	S	S		

URI Cooperative Extension is a good resource for free seeds and technical information including this Rhode Island Planting Calendar for Fruits and Vegetables. Find more school garden information at the URI School Garden Initiative website: <https://web.uri.edu/sgi/>

RHODE ISLAND PLANTING CALENDAR FOR FRUITS AND VEGETABLES

Fruit or vegetable	Days until harvest	February		March		April	
		1	15	1	15	1	15
LETTUCE, HEAD	45–90				I S	I S	I S
LETTUCE, FOR CUTTING	40–70				S	S	S
LEEK	75–100 from transplant			I	I		
MELONS	60–80 from transplant						I
ONIONS, BULB	SETS: 4–5 months					Sets	Sets
ONIONS, GREEN	90–100				S	I S	S
PARSNIPS	100–120					S	S
PEAS	60–75			S	S	S	S
PEPPERS	55–80 from transplant				I	I	
POTATO (plant seed potatoes)	70–90					S	S
POTATOES, SWEET (order slips)	90–120 from transplant						
PUMPKIN	90–120						
RADISHES	30–60				S	S	S
RUTABAGAS	90–100						
SPINACH	40–90			S	S	S	S
SQUASH, SUMMER	45–90						
SQUASH, WINTER	80–100						
TOMATOES	50–75 from transplant				I	I	I
TOMATILLOS	65–75 from transplant					I	I
TURNIPS	45–65						S

Legend: **C** = Plant cloves, **CR** = Plant crowns, **S**=Direct-seed in garden, **T** = Transplant seedlings started indoors to garden.

Notes: Dates are based on final frost on May 15 and first frost on October 15. Be aware of local microclimates that may make your garden colder/warmer and alter your frost dates. Transplants should be exposed to the outdoors for increasing periods over several days before planting (“hardened off”).

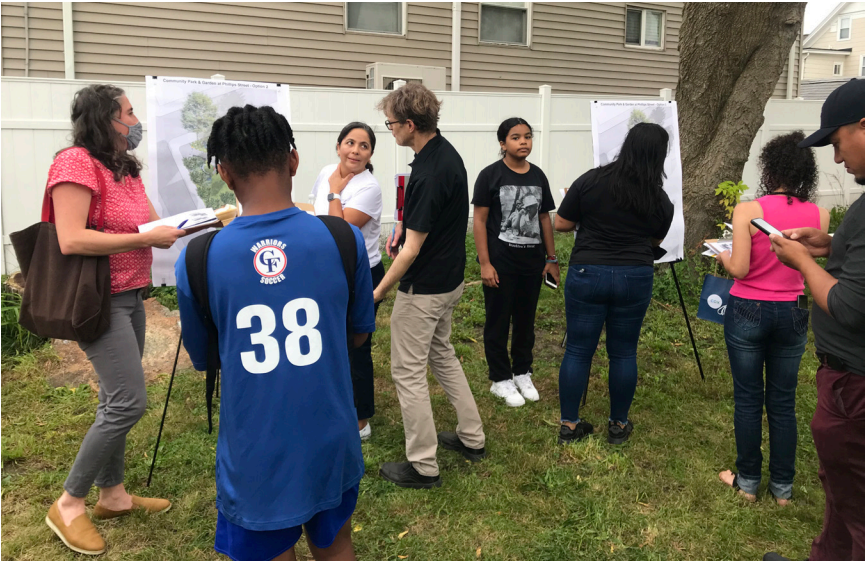
May		June		July		August		September		October	
1	15	1	15	1	15	1	15	1	15	1	15
S	T					I	I	T			
S	S	S	S	S	S	S	S	S	S		
	T										
		T									
S	T S	S	S								
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S	S	S	S	S	S	S	S				
				S	S						
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	S	S	S	S							
	S	S	S								
		T									
I	T	T	T								
S							S	S			

URI Cooperative Extension is a good resource for free seeds and technical information including this Rhode Island Planting Calendar for Fruits and Vegetables. Find more school garden information at the URI School Garden Initiative website: <https://web.uri.edu/sgi/>

# The Diversity Garden in Spring 2021



Community meeting, Fall 2021





# Volunteer clean-up, Summer 2022



# Volunteers from Lowes and Central Falls High School, Fall 2022





Groundcorp and Building Futures RI  
building the garden, Fall 2022-Spring 2023





‘.and thank you to the man all night long  
hosing a mist on his early-bloomed  
peach tree so that the hard frost  
not waste the crop, the ice  
in his beard and the ghosts  
lifting from him when the warming sun  
told him sleep now; thank you  
the ancestor who loved you  
before she knew you  
by smuggling seeds into her braid for the long  
journey, who loved you  
before he knew you by putting  
a walnut tree in the ground, who loved you  
before she knew you by not slaughtering  
the land; thank you  
who did not bulldoze the ancient grove  
of dates and olives,  
who sailed his keys into the ocean  
and walked softly home; who did not fire, who did not  
plunge the head into the toilet, who said stop,  
don’t do that; who lifted some broken  
someone up; who volunteered  
the way a plant birthed of the reseeding plant  
is called a volunteer, like the plum tree  
that marched beside the raised bed  
in my garden, like the arugula that marched  
itself between the blueberries,  
nary a bayonet, nary an army, nary a nation,  
which usage of the word volunteer  
familiar to gardeners the wide world  
made my pal shout “Oh!” and dance  
and plunge his knuckles  
into the lush soil before gobbling two strawberries  
and digging a song from his guitar  
made of wood from a tree someone planted, thank you.’

excerpted from “Catalog of Unabashed Gratitude”  
BY ROSS GAY