

SPRING 2022 NATIVE PLANT DISTRIBUTION

Eastern Redbud, *Cercis canadensis*



Eastern Redbud is a deciduous, ornamental tree in the Fabaceae or pea family. It is native to eastern North America and may grow up to 20 or 30 feet tall. The genus name *Cercis* comes from the Greek word *kerkis*, which means weaver's shuttle, referring to the fact that the seed pod resembles the size and shape of a weaver's shuttle used to move thread back and forth on a loom. Sometimes called the Judas tree, from its oriental relative of that name, it is a smaller tree with a nearly flat or rounded crown that is often found growing beneath taller trees.

The tree is pH adaptable and can tolerate full sun or part shade and moderately fertile clay or sandy soil. It does not tolerate heat or drought that can stress the tree, or wet soils. It does not tolerate root disturbance, so plants should be placed in their permanent positions as soon as possible and should be kept well-watered until established. Because its branches tend to break, the tree should be sited in a relatively protected area. Regular watering, fertilization, and pruning out dead branches as needed will keep the tree vigorous.

Eastern redbud is a flowering tree that blooms before the leaves appear. In early spring, clusters of rose pink to light purple flowers mature and attract many pollinators including butterflies, and bees. The plant holds great wildlife value as a larval host plant and the bean pod fruits provide food for songbirds.

Plant this tree as a specimen in a pollinator garden, as an understory tree in a wooded landscape, in small groups, or mass planted for a dramatic springtime effect. It may also be planted as a street or lawn tree, but is very sensitive to herbicides and chemicals sprayed on lawns.

ATTRIBUTES

Genus: *Cercis*

Species: *canadensis*

Family: Fabaceae

Uses (Ethnobotany): Wood is heavy, hard, but not strong with little commercial value. The bark used as an astringent in treatment of dysentery, flowers eaten in salads or fried, Native Americans boiled the bark to make tea to treat whooping cough, roots and inner bark used for fevers, congestion, and vomiting.

Life Cycle: Woody

Recommended Propagation Strategy: Seed

Country Or Region Of Origin: Eastern and central North America, NC to E. Mexico

Distribution: New Mexico north to Nebraska, east to Michigan and Ontario, south through Pennsylvania and Massachusetts to Florida.

Fire Risk Rating: low flammability

Wildlife Value: 12 species of Lepidoptera use this tree as a larval host plant. Leafcutter bees (such as *Megachile rotundata*) and other bees use this plant (as shown in a picture). Host plant for Henry's Elfin butterfly. Butterflies and other insects nectar from the flowers. Caterpillars appear from February to May and have one flight. Adult Henry's Elfin butterflies feed on flower nectar. Songbirds and small mammals occasionally eat the seeds.

Particularly Resistant To (Insects/Diseases/Other Problems): deer, black walnut, and clay soils

Edibility: The flowers are edible and taste similar to peas. Contain high amounts of vitamin C.

Height: 20 ft. 0 in. - 30 ft. 0 in.

Width: 25 ft. 0 in. - 35 ft. 0 in.

CULTURAL CONDITIONS

Light: Full sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, High Organic Matter, Loam (Silt), Sand

Soil pH: Acid (<6.0), Alkaline (>8.0), Neutral (6.0-8.0)

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Available Space To Plant: 12-24 feet, 24-60 feet

NC Region: Mountains, Piedmont

USDA Plant Hardiness Zone: 4a, 4b, 5b, 5a, 6b, 6a, 7b, 7a, 8a, 8b, 9b, 9a

SPRING 2022 NATIVE PLANT DISTRIBUTION

WHOLE PLANT TRAITS

Plant Type: Edible, Native Plant, Shrub, Tree
Woody Plant Leaf Characteristics: Deciduous
Habit/Form: Multi-stemmed, Multi-trunked, Rounded
Growth Rate: Medium
Maintenance: Low

FRUIT

Fruit Color: Brown/Copper, Green, Red/Burgundy
Fruit Value To Gardener: Showy
Display/Harvest Time: Fall, Summer
Fruit Type: Legume
Fruit Length: 1-3 inches **Fruit Width:** < 1 inch
Fruit Description: By summer (after flowers) but possibly lasting through fall and even winter, this plant has green turning to brown, flat, oblong seedpods (with about 9 seeds per pod) which are about 2 to 4 inches long. The brown seed pods can look a little untidy hanging from the tree into the winter.

FLOWERS

Flower Color: Pink, Purple/Lavender, Red/Burgundy
Flower Inflorescence: Umbel
Flower Value To Gardener: Edible, Long Bloom Season, Showy
Flower Bloom Time: Spring
Flower Shape: Irregular, Lipped
Flower Petals: fused petals
Flower Size: < 1 inch
Flower Description: Conspicuous bright-red flowers bloom in early spring (around April) and are anywhere from pink to red to purple in color. Unlike many other plants, the flowers are seen before the leaves. Only about 1/2 inch wide and having about 7 flowers in a cluster, these flowers grow right on new stems as well as older branches. Pea-shaped flowers, borne in tight clusters on old wood, fascicled or racemous, often cauliflorous. Blooms from March to May.

LEAVES

Woody Plant Leaf Characteristics: Deciduous
Leaf Color: Green
Deciduous Leaf Fall Color: Gold/Yellow
Leaf Type: Simple
Leaf Arrangement: Alternate
Leaf Shape: Cordate, Ovate
Leaf Margin: Entire
Hairs Present: No

Leaf Length: 3-6 inches **Leaf Width:** 3-6 inches
Leaf Description: Simple, alternate heart-shaped leaves, 3 to 5 inches long and wide, with smooth, entire margins. Bases are cordate, acute apex, with swelling on petioles just underneath the leaf plate. Attractive yellow fall color. Broadly cordate, acute, entire, lustrous dark green, 1.5 to 5 inches high and wide, 7 palmate veins extend from leaf base.

BARK

Bark Color: Black, Dark Brown, Orange
Surface/Attachment: Scaly, Smooth
Bark Description: Dark brown to black with orange inner bark that can be visible. Smooth when young, but developing long, narrow plates that separate into scales as the tree matures.

STEM

Stem Is Aromatic: No
Stem Buds: Smooth/Hairless
Stem Form: Zig Zags
Stem Lenticels: Not Conspicuous
Stem Surface: Smooth (glabrous)
Stem Description: Slender, glabrous, dark reddish brown to black, zig-zag, spreading and ascending; trunk usually divided close to ground.

LANDSCAPE

Landscape Location: Lawn, Naturalized Area, Woodland
Landscape Theme: Butterfly Garden, Edible Garden, Pollinator Garden
Design Feature: Border, Flowering Tree, Small groups, Small Tree, Specimen, Street Tree, Understory Tree
Attracts: Bees, Butterflies, Pollinators, Specialized Bees
Resistance To Challenges: Black Walnut, Compaction, Deer, Fire
Problems: Short-lived



Source: North Carolina State Extension
<https://plants.ces.ncsu.edu/plants>

SPRING 2022 NATIVE PLANT DISTRIBUTION

Flowering Dogwood, *Cornus florida*



Flowering dogwood is a woody, deciduous, flowering understory tree in the Cornaceae (dogwood) family that may grow 15 to 25 feet tall. It is native from southeastern Canada to eastern North America to eastern Mexico. The genus name comes from the Latin word for horn, *cornu*, most likely in reference to the tree's hard, dense wood.

Locate flowering dogwood in a site that receives full sun to partial shade and plant in well-drained soil that is high in organic matter and has an acidic to neutral pH. A 2 to 4-inch layer of mulch will help keep the roots cool and moist in hot summers. Propagate flowering dogwood by seed or stem cutting.

Dogwood's true flowers are visited by butterflies and specialized bees, and its red fruits are a food source for songbirds and other wildlife from fall through winter. This tree is quite tolerant to heat once established and has a low flammability rating.

The dogwood flower, which is actually the petal-like bracts, is the state flower of North Carolina, and the tree is found throughout the state, usually growing under larger forest trees and at woodland edges. With multi-season interest, it has many uses in the landscape such as a butterfly, pollinator, or children's garden, a native or winter garden, accenting a patio or play area, a specimen, or shade tree.

ATTRIBUTES

Genus: Cornus

Species: florida

Family: Cornaceae

Uses (Ethnobotany):

This plant was used for medicinal purposes by Native Americans, as well as for carvings, looms, and disinfectant. Wood is hard, heavy, close grained and strong. Often used for textile shuttles and spools as well as handles for tools.

Life Cycle: Woody

Recommended Propagation Strategy: Seed, Stem Cutting

Country Or Region Of Origin: South Eastern Canada, Eastern North America, to Eastern Mexico

Distribution: Native: Canada--Ontario; Mexico--Mexico Gulf and Mexico Northeast; US--Al, AR, CT, DE, DC, FL GA, IL IN, KS, KY, LA, ME, MD, MA, MI, MS, MO, NH, NJ, NY, NC, OH, OK, PA, I, SC, TN, TX, VT, VA, and WV

Fire Risk Rating: low flammability

Wildlife Value: It is a host plant for the spring Azure (Celastrina ladon) butterfly/larvae. Flights are from May to August in Canada but range from January through October near the Gulf Coast. Butterflies nectar on the blooms. Its fruits are eaten by songbirds, ruffed grouse, quail, wild turkey, chipmunks, black bear, foxes, white-tailed deer, skunks, and squirrels. Members of the genus Cornus support the following specialized bees: *Andrena (Gonandrena) fragilis*, *Andrena (Gonandrena) integra*, and *Andrena (Gonandrena) platyparia*. The fruits are food for birds. Deer eat the leaves and twigs.

Play Value: Attractive Flowers, Edible fruit, Shade, Wildlife Food Source

Height: 15 ft. 0 in. - 25 ft. 0 in.

Width: 15 ft. 0 in. - 30 ft. 0 in.

CULTURAL CONDITIONS

Light: Full sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, High Organic Matter, Loam (Silt), Sand

Soil pH: Acid (<6.0), Neutral (6.0-8.0)

Soil Drainage: Good Drainage, Moist, Occasionally Dry

Available Space To Plant: 12-24 feet, 24-60 feet

NC Region: Coastal, Mountains, Piedmont

USDA Plant Hardiness Zone:

5a, 5b, 6b, 6a, 7a, 7b, 8a, 8b, 9b, 9a

SPRING 2022 NATIVE PLANT DISTRIBUTION

WHOLE PLANT TRAITS

Plant Type: Native Plant, Shrub, Tree
Woody Plant Leaf Characteristics: Deciduous
Habit/Form: Ascending, Pyramidal, Rounded, Spreading
Growth Rate: Medium
Maintenance: Low
Texture: Medium

FRUIT

Fruit Color: Green, Red/Burgundy
Fruit Value To Gardener: Edible, Showy
Display/Harvest Time: Fall
Fruit Type: Berry, Drupe
Fruit Length: < 1 inch **Fruit Width:** < 1 inch
Fruit Description: Fruit is a glossy bright, shiny red, oval drupes (0.5") in tight clusters of 3 or 4 that are bitter and inedible to humans but loved by birds. They display from August to October.

FLOWERS

Flower Color: Gold/Yellow, Green, Pink, White
Flower Inflorescence: Cyme, Insignificant
Flower Value To Gardener: Showy
Flower Bloom Time: Spring
Flower Shape: Cross
Flower Petals: 4-5 petals/rays
Flower Size: 3-6 inches
Flower Description: Blooms early spring before leaf-out, March-May, the true flowers at the center, are green and insignificant, but are surrounded by 4 petal-like 2 inch long bracts, notched at the ends, that are often mistaken for the actual flowers. Flower buds are round and flattened at the ends of stems, (many) greenish-yellow; bud is biscuit-shaped, glabrous and flattened, gray-green, at branch ends, covered by 2 large silky scales becoming 2 of the showy white bracts.

LEAVES

Woody Plant Leaf Characteristics: Deciduous
Leaf Color: Green
Leaf Value To Gardener: Showy
Deciduous Leaf Fall Color: Purple/Lavender, Red/Burgundy
Leaf Type: Simple
Leaf Arrangement: Opposite
Leaf Shape: Cuneate, Ovate
Leaf Margin: Entire
Hairs Present: No
Leaf Length: 3-6 inches **Leaf Width:** 3-6 inches

Leaf Description: Veins curve from base of leaf to tip. Opposite, simple, oval to ovate, acuminate, cuneate to rotund, entire, dull green above, glaucous beneath and pubescent on the veins, 6-7 vein pairs, 2.5-6" long. The fall color is red to reddish purple.

BARK

Bark Color: Dark Brown, Dark Gray
Surface/Attachment: Ridges
Bark Plate Shape: Rectangle. Square
Bark Description: Attractive, dark gray, brown, or black bark that is broken into small scaly blocks as the tree matures.

STEM

Stem Color: Purple/Lavender, Red/Burgundy
Stem Is Aromatic: No
Stem Form: Straight
Stem Surface: Smooth (glabrous)
Stem Description: Horizontal branching. Slender, green to purple, sometimes coated with fine powder, pubescent when young, later glabrous; bark broken into small squarish and rectangular, grayish-brown to blackish blocks.

LANDSCAPE

Landscape Location: Patio, Recreational Play Area, Woodland
Landscape Theme: Butterfly Garden, Children's Garden, Edible Garden, Native Garden, Pollinator Garden, Winter Garden
Design Feature: Accent, Border, Flowering Tree, Mass Planting, Shade Tree, Small Tree, Specimen, Understory Tree
Attracts: Butterflies, Pollinators, Small Mammals, Songbirds, Specialized Bees
Resistance To Challenges: Compaction, Deer, Fire, Wind
Problems: Frequent Disease Problems



Source: North Carolina State Extension
<https://plants.ces.ncsu.edu/plants>

SPRING 2022 NATIVE PLANT DISTRIBUTION

Black Gum, *Nyssa sylvatica*



Black gum or Black Tupelo is a native deciduous tree that grows throughout North Carolina and can reach 50 to 80 feet tall, but typically reaches 20 to 30 feet in cultivation. Trunk diameter is typically 1 to 2 feet, but can reach 4 to 5 feet in taller specimens. It tolerates many soil types and moisture conditions, but is slow-growing, reaching about 12 to 15 feet in about ten years, growing faster with a good watering and fertilizer schedule. It is found in dry upland forests (occasionally bottomlands), savannas, swamp margins, and upland depressions that are occasionally flooded. It can also be found in the hills and mountains on dry slopes with oaks and hickories. The Black gum is grown as an ornamental for its beautiful, scarlet red, fall color and for its shiny, dark green leaves in the summer.

It has a flowering habit that is polygamodioecious, meaning that some plants have mostly male flowers while others have mostly female flowers, with most plants having a few perfect flowers. This would account for some plants being loaded with egg-shaped blue-black berries, while others may only have a few berries. The tree does well in average, medium to wet soils in full sun to part shade. It prefers moist, acidic soils, but is adaptive and tolerates poorly-drained soils and standing water, some drought and some dry soils, at least in the wild. Female trees need a male pollinator to set fruit. The nectar from the flowers is sought after by bees and Tupelo honey is highly prized.

This tree is an excellent choice to support wildlife in the landscape. However, it should be sited in a permanent location because its long taproot makes it difficult to transplant later. It is tolerant of drought, heat, dry and wet soils, and is moderately salt tolerant. It withstands wind, ice, and salt spray in coastal locations.

ATTRIBUTES

Genus: Nyssa

Species: sylvatica

Family: Nyssaceae

Uses (Ethnobotany): Wood is tough, cross-grained, hard to work, and warps easily. It is often used for crates, cross ties, rough floors, and pulpwood.

Life Cycle: Perennial, Woody

Recommended Propagation Strategy: Layering, Seed

Country Or Region Of Origin: Eastern North America

Distribution: Maine south to Florida, west to Texas, Oklahoma, and Missouri northeast through Illinois and Michigan and Ontario.

Fire Risk Rating: low flammability

Wildlife Value: Its young sprouts are eaten by white-tailed deer. The fruits (berries) are enjoyed by thrushes and other songbirds, wild turkeys, black bear, foxes, raccoons and opossums from August through October. It is one of the most important food sources for fall song bird migration. The natural hollows that form in the tree are a refuge for reptiles, tree frogs, bats and other wildlife. The spring flowers are a nectar source for bees.

Play Value: Wildlife Food Source

Particularly Resistant To (Insects/Diseases/Other Problems): Resistant to fire. This tree is somewhat resistant to deer damage.

Edibility: Fruit can be eaten raw or cooked. Produces a thin sharply acid pulp that is pleasant to roll in the mouth as a masticatory, it is also used in preserves. The honey bees produce from the flowers of this tree is highly prized.

Height: 30 ft. 0 in. - 100 ft. 0 in.

Width: 20 ft. 8 in. - 35 ft. 6 in.

CULTURAL CONDITIONS

Light: Full sun (6 or more hours of direct sunlight a day), Partial Shade (Direct sunlight only part of the day, 2-6 hours)

Soil Texture: Clay, Loam (Silt), Sand

Soil pH: Acid (<6.0)

Soil Drainage: Good Drainage, Occasionally Dry, Occasionally Wet

Available Space To Plant: 12-24 feet, 24-60 feet

NC Region: Coastal, Mountains, Piedmont

USDA Plant Hardiness Zone:

3a, 3b, 4a, 4b, 5b, 5a, 6a, 6b, 7a, 7b, 8a, 8b, 9b, 9a

SPRING 2022 NATIVE PLANT DISTRIBUTION

WHOLE PLANT TRAITS

Plant Type: Native Plant, Tree
Woody Plant Leaf Characteristics: Deciduous
Habit/Form: Open, Pyramidal, Spreading
Growth Rate: Medium
Maintenance: Low
Texture: Medium

FRUIT

Fruit Color: Black. Blue
Display/Harvest Time: Fall, Summer
Fruit Length: 1-3 inches **Fruit Width:** < 1 inch
Fruit Description: Female trees only. In the late summer to mid-fall the tree produces a bluish black egg-shaped 1/2 inch wide fruit clustered on stalks up to 1 1/2 inches long. Fruits are available August-October. Thin, bitter smelling flesh surrounds the small, ribbed seeds.

FLOWERS

Flower Color: Gold/Yellow, Green, White
Flower Inflorescence: Insignificant, Umbel
Flower Bloom Time: Spring, Summer
Flower Size: < 1 inch
Flower Description: The flowers bloom in the spring from April-June are not showy. Individual flowers are about an 1/8 of an inch.

LEAVES

Woody Plant Leaf Characteristics: Deciduous
Leaf Color: Gold/Yellow, Green, Orange, Purple/Lavender
Leaf Feel: Glossy
Leaf Value To Gardener: Showy
Deciduous Leaf Fall Color: Gold/Yellow, Orange, Purple/Lavender, Red/Burgundy
Leaf Type: Simple
Leaf Arrangement: Alternate
Leaf Shape: Elliptical, Oblong
Leaf Margin: Dentate, Entire
Hairs Present: No
Leaf Length: 3-6 inches
Leaf Width: 1-3 inches
Leaf Description: Leaves are 3 to 6 inches long and 1/2 to 3 inches wide, alternate, roughly oval with sharp, blunt points. Leaves turn yellow, orange, red to purple in the fall. On sprouts or young trees, the leaves may have a few coarse teeth.

BARK

Bark Color: Black, Light Gray
Surface/Attachment: Ridges
Bark Plate Shape: Rectangle, Square
Bark Description: The bark is light grey and deeply furrowed to create rectangular or square ridges (cobbled). Bark on younger trees is furrowed between flat ridges and matures into quadrangular blocks that are dense, hard, and nearly black.

STEM

Stem Is Aromatic: No
Stem Description: Slender limbs grow at right angles to the trunk.

LANDSCAPE

Landscape Location: Coastal, Lawn, Riparian
Landscape Theme: Drought Tolerant Garden, Native Garden, Nighttime Garden, Pollinator Garden
Design Feature: Shade Tree, Specimen, Street Tree
Attracts: Bats, Bees, Frogs, Pollinators, Reptiles, Small Mammals, Songbirds, Specialized Bees
Resistance To Challenges: Deer, Drought, Dry Soil, Fire, Heat, Salt, Wet Soil, Wind



Source: North Carolina State Extension
<https://plants.ces.ncsu.edu/plants>