



## Serviceberry Amelanchier canadensis

#### Height: 15-25' | Spread: 15-20' | Light: O- I | Moisture: medium

Commonly called shadblow serviceberry. This species is a small, often multi-trunked understory tree or tall shrub. It features showy white flowers in clusters in early spring before the leaves emerge. These blooms give way to delicious purple-red edible berries in June that resemble blueberries in size, color and taste. Berries can be eaten raw or used in jams and pies! If you don't eat them, the birds certainly will. Serviceberries will tolerate a range of soil types but not drought. It flowers best in part sun to part shade but tolerates shade. Serviceberries finish off the year with attractive yelloworange leaf color. Note: serviceberries are susceptible to cedar apple rust, which does not generally harm the tree but renders the berries inedible.



Photos (Clockwise from top left): Richard Webb, Bugwood.org ; T. Davis Sydnor, The Ohio State University, Bugwood.org; Richard Webb; James Gaither





#### Pawpaw Asimina triloba

#### Height: 15-30' | Spread: 15-25' | Light: •••• | Moisture-Medium-wet | Fruit: Edible

Known as the 'forgotten fruit," pawpaw it is the largest edible native fruit found in the US, and the only temperate member of a tropical family. Harvest pawpaws in early fall when fruit is just-soft and they are falling to the ground. The yellowish-green fruits are reminiscent of a mango, with a creamy inside that can be eaten raw or cooked, and include several large, dark-brown seeds. Not particularly showy, but interesting, purple, six-petaled flowers appear before leaf emergence. This is a good understory tree. No serious disease or insect problems. The fruit can create a mess on sidewalks and patios, but this can be minimized by planting only one tree; pawpaws seldom set much fruit without cross pollination.





Photos courtesy Bugwood.org: T. Davis Sydnor, The Ohio State University, Joseph LaForest, University of Georgia; Rebekah D. Wallace, University of Georgia; Steven Katovich.





#### Flowering Dogwood Cornus florida

Height: 20-30' | Spread: 20-30' | Light: <sup>(1)</sup>-<sup>(2)</sup> | Moisture: Moist, Well-drained

The powdered bark of the trunk was reportedly used in toothpaste and black ink, and as an aspirin-like substance. Song and game birds eat the berries. Flowering dogwood is a shade-loving tree commonly found growing as an understory species near the forest floor. It is not tolerant of stresses such as heat, drought, pollution, or road salt. Easily susceptible to powdery mildew.



T. Davis Sydnor, The Ohio State University, Bugwood.org; Gerald Holmes, Strawberry Center, Cal Poly San Luis Obispo, Bugwood.org; T. Davis Sydnor





#### Sweetbay Magnolia Magnolia virginiana

Height: 15-30' | Spread: 15-25' | Light: O-O | Moisture: moist-wet

Sweetbay magnolia makes an excellent tree for planting next to buildings, in narrow alleys or corridors, or in other urban areas with limited space for horizontal crown expansion. It usually maintains a good, straight central leader, although occasionally the trunk branches low to the ground forming a round multi-stemmed, spreading tree. This tree has extremely high aesthetic and wildlife values. In May, its large, white showy blossoms produce a sweet aroma. Flowers are followed by dark red aggregate fruits exposing bright red seeds that are popular with songbirds. Sweetbays flourish in moist, acid soil such as the swamps in the eastern U.S. and along stream banks.



Photos clockwise from top left; John Ruter – University of Georgia via bugwood.org, Ansel Oommen via bugwood.org, T. Davis Sydnor – The Ohio State University via bugwood.org, Chris Evans – University of Illinois via bugwood.org





## American Elderberry Sambucus canadensis

Height: 5-12' | Spread: 6-12' | Light: ☆-● | Moisture: moist - well-drained

Elderberry blooms fragrant, ivory white flowers during the spring and summer. Afterwards, purple-black fruit develop that attract birds that spread the seeds. Elderberries, inedible when fresh and raw, are used for making jelly, preserves, pies, and wine. Prune heavily in winter to maintain thick form. Elderberry is a fast grower and aggressive competitor with weeds and herbaceous species. Individual plants are very short-lived, however root masses produce new shoots.



Photos courtesy of Bugwood.org (Clockwise from top left): John Cardina, The Ohio State University; James H. Miller, USDA Forest Service; Chris Evans, University of Illinois; Theodore Webster, USDA Agricultural Research Service





# American Hornbeam

Carpinus caroliniana

## Height: 20-35' |Spread: 20-35' |Light: ●-● |Moisture: well-drained moist

American hornbeam is a slow-growing, medium-sized tree with distinctive muscle-like bark and attractive red-orange fall foliage. It is naturally found as an understory species growing near the forest floor and therefore prefers some shade. It grows well along stream banks and bottomlands and tolerates periodic flooding, though it shows remarkable adaptability to drier, sunnier sites. Other common names include blue beech, water beech, musclewood and ironwood. As the common name suggests, the extremely hard wood of this tree was once used by early Americans to make bowls, tool handles and ox yokes. American hornbeam is the larval host for several native butterflies including the Eastern Tiger Swallowtail.



*Photos (Clockwise from top left):* <u>Sherief Saleh; treegrow;</u> Rob Routledge, Sault College, Bugwood.org; Chris Evans, University of Illinois, Bugwood.org;





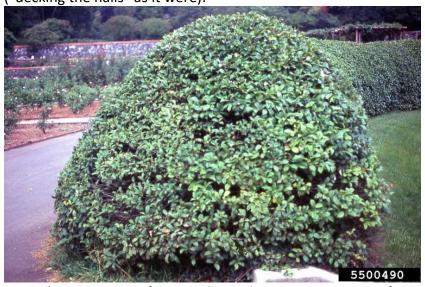
## American Holly Ilex opaca

#### Height: 30-50' | Spread: 15-25' | Light: •- • | Moisture: dry-moist



American holly is a slow-growing evergreen tree that adds year-round beauty to landscaping. Hollies make great privacy screens and are often planted in groups. If you plant American holly for the bright red berries, you will need to plant more than one to make sure you have both male and female plants. American holly provides important wildlife services. The flowers are pollinated by insects including bees, wasps, ants and night-flying moths. Many species of birds and mammals eat the bitter berries, but the fruits are poisonous to humans. The tree also forms a thick canopy which offers protection for birds from predators and storms.

American holly is the larval plant for Henry's Elfin butterfly. This is the holly whose berry-laden boughs are typically collected at Christmas time each year for ornamentation ("decking the halls" as it were).



Photos courtesy of Bugwood.org: Chris Evans, University of Illinois; T. Davis Sydnor, The Ohio State University







## American Beech Fagus grandifolia

#### Height: 50-80' | Spread: 40-80' | Light: ☆-**●** | Moisture: moist - well-drained

American Beech is a large, spreading shade tree. The tree bears edible beechnuts, which are among the most important food source for a variety of wildlife, especially squirrels, raccoons, bears, other mammals, and game birds. They are shade tolerant and long-lived. Not suitable for small areas. The leaves turn golden bronze in fall and often remain on the tree through the winter (marcescence). Unlike most trees, beeches retain smooth bark in age. The trunks are favorites for carving to preserve initials and dates indefinitely, but please avoid this practice as it damages the tree! Beech are generally deer resistant but intolerant of wet, poorly drained soils. They can be difficult to transplant and do not always grow well in urban settings.



Photos (Clockwise from top left): T. Davis Sydnor, The Ohio State University, Bugwood.org; T. Davis Sydnor; Paul Langlois, Live Botanical Collections, USDA APHIS PPQ, Bugwood.org; Chris Evans, University of Illinois, Bugwood.org

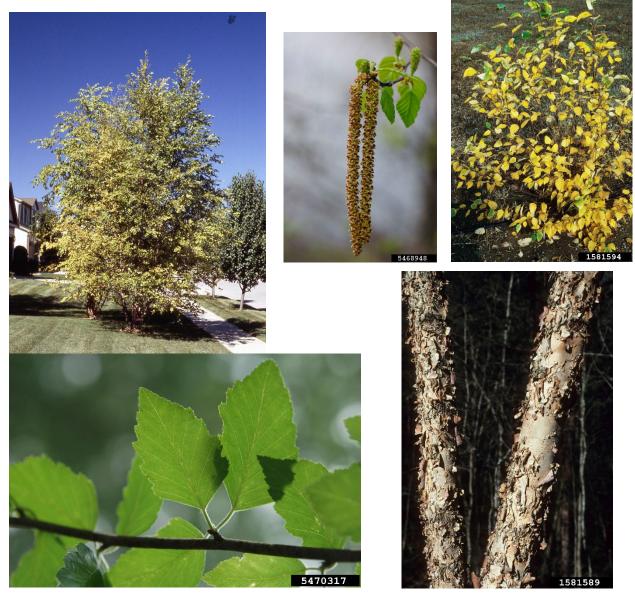




## River Birch Betula nigra

#### Height: 40-70' | Spread: 40-60' | Light: O-I | Moisture: well-drained

River birch naturally grows along moist riverbanks, but it is a versatile tree and can be planted almost anywhere in the U.S. It has colorful, exfoliating bark, which is particularly noticeable in the winter. The species is valued for its relatively rapid growth, tolerance of wetness and some drought, spreading limbs and relative resistance to birch borer. It prefers partial shade. River birch is a medium to tall tree, typically living 50 -75 years.



Photos courtesy of Bugwood.org (Clockwise from top left): T. Davis Sydnor, The Ohio State University; Vern Wilkins, Indiana University; John Ruter, University of Georgia; John Ruter, University of Georgia; Karan A. Rawlins, University of Georgia





## Pignut Hickory Carya glabra

Height: 50-65' | Spread: 30-50' | Light: ••• | Moisture: Dry-moderate Pignut hickory is a good ornamental tree, especially for drier sites.



Photos courtesy of Bugwood.org (Clockwise from top left): T. Davis Sydnor, The Ohio State University; Chris Evans, University of Illinois; T. Davis Sydnor, The Ohio State University; Rebekah D. Wallace, University of Georgia; Chris Evans, University of Illinois





# Common Persimmon

Diospyros virginiana

#### Height: 40-60' | Spread: 25-35' | Light: ••• | Moisture: dry-med (well-draining)

The American, or common, persimmon produces a sweet, edible fruit best enjoyed after it softens after the first frost in late autumn. When ripe, the sweet fruit of somewhat recalls the flavor of dates. Immature fruit contains tannin and are strongly astringent. Persimmons are consumed fresh and are used to make puddings, cakes, and beverages. Because the persimmon is normally *dioecious* (male and female flowers appear on separate trees), the best way to ensure fruit production is to plant multiple trees. Mature trees are easily identifiable by thick, dark-gray bark that is deeply furrowed and broken into scaly, squarish blocks.



Photos: T. Davis Sydnor, The Ohio State University; Bugwood.org



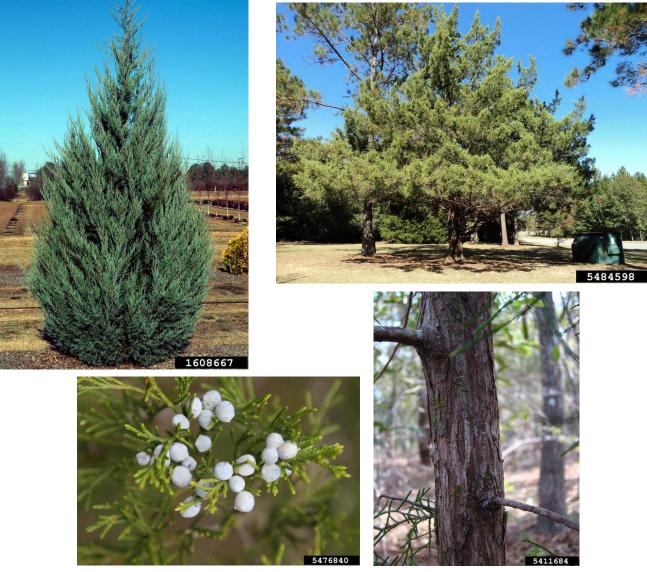


# Eastern Red Cedar

Juniperus virginiana

Height: 30-65' | Spread: 8-25' | Light: O | Moisture: dry-moist

The Eastern red cedar has a compact, pyramid shape is excellent for windbreaks and screens. Fragrant, evergreen foliage provides nesting and roosting cover for native birds. They love its small, rounded fruit that is gray or bluish-green in color . This fruit, which appears only on female trees, resembles a berry but it is actually a cone made of fused scales. Red cedar can be injurious to apple orchards because it is an alternate host for cedar-apple rust, a fungal disease. Avoid planting near serviceberries. Fun facts: The wood was a staple of the pencil industry for over a century until supplies became exhausted and the industry switched to more plentiful western cedars. This cedar is an ancient tree and fossil evidence indicates it once covered large portions of the continent.



Photos (Clockwise from top left): John Ruter, University of Georgia, Bugwood.org; Rebekah D. Wallace, University of Georgia, Bugwood.org; Chris Evans, University of Illinois, Bugwood.org; Michasia Dowdy, University of Georgia, Bugwood.org





# **Tulip Tree**

#### Liriodendron tulipifera

Height: 60-90' | Spread: 30-50' | Light:  $\bigcirc$  | Moisture: moderately moist, deep, well drained Liriodendron tulipifera, commonly called tulip poplar or yellow poplar, is actually more closely related to magnolia than either a tulip or a poplar large. It is a stately, deciduous tree of eastern North America that typically grows 60-90' named and noted for its cup-shaped, tulip-like flowers that bloom in spring. Introduced into Europe from Virginia by the earliest colonists and grown also on the Pacific Coast. Native Americans made dugout canoes from tulip tree trunks. This is the state tree of Kentucky, Tennessee and Indiana.



Photos courtesy of Bugwood.org (Clockwise from top left): Karan A. Rawlins, University of Georgia; T. Davis Sydnor, The Ohio State University; Chris Evans, University of Illinois; John Ruter, University of Georgia





## White Oak

Quercus alba

#### Height: 60-90' | Spread: 60-80' | Light: 🔍 | Moisture: moist

The white oak is a large, handsome tree named for its whitish bark and grey twigs. It is slow growing and long-lived with glossy, bright green leaves. Do not plant in shade, areas of poor drainage, or alkaline soil. White oaks are the state tree of Maryland as well as Connecticut and Illinois. The largest known white oak specimen had a circumference of 32 feet and grew in the Wye Oak State Park, Talbot County, Maryland In general, oaks are a keystone species, meaning that entire ecosystems depend on them for survival. They can live for centuries, providing food and habitat for hundreds of species of wildlife, and cleaning the air for future generations! If you have the space, choose this tree! Leave a legacy of clean air and water.





Photos from Bugwood.org (Clockwise from top left): Vern Wilkins, Indiana University; T. Davis Sydnor; The Ohio State University; T. Davis Sydnor; T. Davis Sydnor; Paul Wray, Iowa State University





# Southern Red Oak

#### Quercus falcata

#### Height: 60-80' | Light: •-• | Spread: 40-50' | Moisture: dry-moist soil

This is an ornamentally attractive oak with a straight trunk and an open rounded crown. It is best grown in acidic, dry to medium, well-drained loams in full sun but will tolerate some shade. It is also tolerant of poor and sandy soils as well as drought. The Southern red oak is moderately resistant to damage by deer. The leaf easily recognizable by its elongated, narrow tip (terminal lobe), which often referred to as a "witches' finger." A relatively fast-growing oak. This southern species will do well in our region as the climate warms. In general, oaks are a keystone species, meaning that entire ecosystems depend on them for survival. They can live for centuries, providing food and habitat for hundreds of species of wildlife, cleaning the air for future generations! If you have the space, choose this tree! Leave a legacy of clean air and water.

Photos (Clockwise from top left): David Stephens, Bugwood.org; Vern Wilkins, Indiana University, Bugwood.org; Vern Wilkins; David Stephens, Bugwood.org; David Stephens







### Bur Oak Quercus macrocarpa

Height: 70-90' | Spread: 60-80' | Light: 📿 | Moisture: Moderate, well-drained

Bur oak is named for its furry, "bur like" acorn caps that cover large, gold-ball sized acorns. It may take up to 35 years this tree to bear a first crop of acorns. It is of the white oak group. The leaves of bur oak also are large, so they are easy to rake. This species is resistant to oak wilt and a number of other problems and is capable of withstanding a wide range of harsh conditions (one of the most drought resistant oaks). Twigs are sometimes ridged with corky wings. The bur oak is the "most western of the eastern oaks", extending all the way to the foothills of the Rockies! In general, oaks are a keystone species, meaning that entire ecosystems depend on them for survival. They can live for centuries, providing food and habitat for hundreds of species of wildlife, and cleaning the air for future generations. If you have the space, choose this tree! Leave a legacy of clean air and water!





Photos (Clockwise from top): Jason Sharman, Vitalitree, Bugwood.org; T. Davis Sydnor, The Ohio State University, Bugwood.org; Johnny N. Dell, Bugwood.org; T. Davis Sydnor





## Bald Cypress Taxodium distichum

#### Height: 50-70' Spread: 20-45' | Light: • Moisture: medium-wet

Bald cypress is a majestic long-lived, pyramidal conifer (cone-bearing tree) with soft, ferny foliage that enhances many landscapes. Although they resemble a needled evergreen (same family as redwoods), they are deciduous, which means that their feathery leaves turn copper-colored and fall to the ground in the winter. (The tree becomes "bald" and leafless as the common name suggests!) Bald cypress prefer "wet feet" or moist areas. In the deep South, large stands are a familiar sight growing directly in swampy water, with their branches heavily draped with Spanish moss. Bald cypresses often develop distinctive, knobby root growths ("knees") which protrude above the water surface around the tree. In cultivation, however, they also grow well in drier, upland soils or as street trees. Trunks feature an attractive, exfoliating bark and are buttressed (flared or fluted) at the base.



Photos: Shaun Winterton, USDA APHIS PPQ, Aquarium and Pond Plants of the World, Edition 3, Bugwood.org;