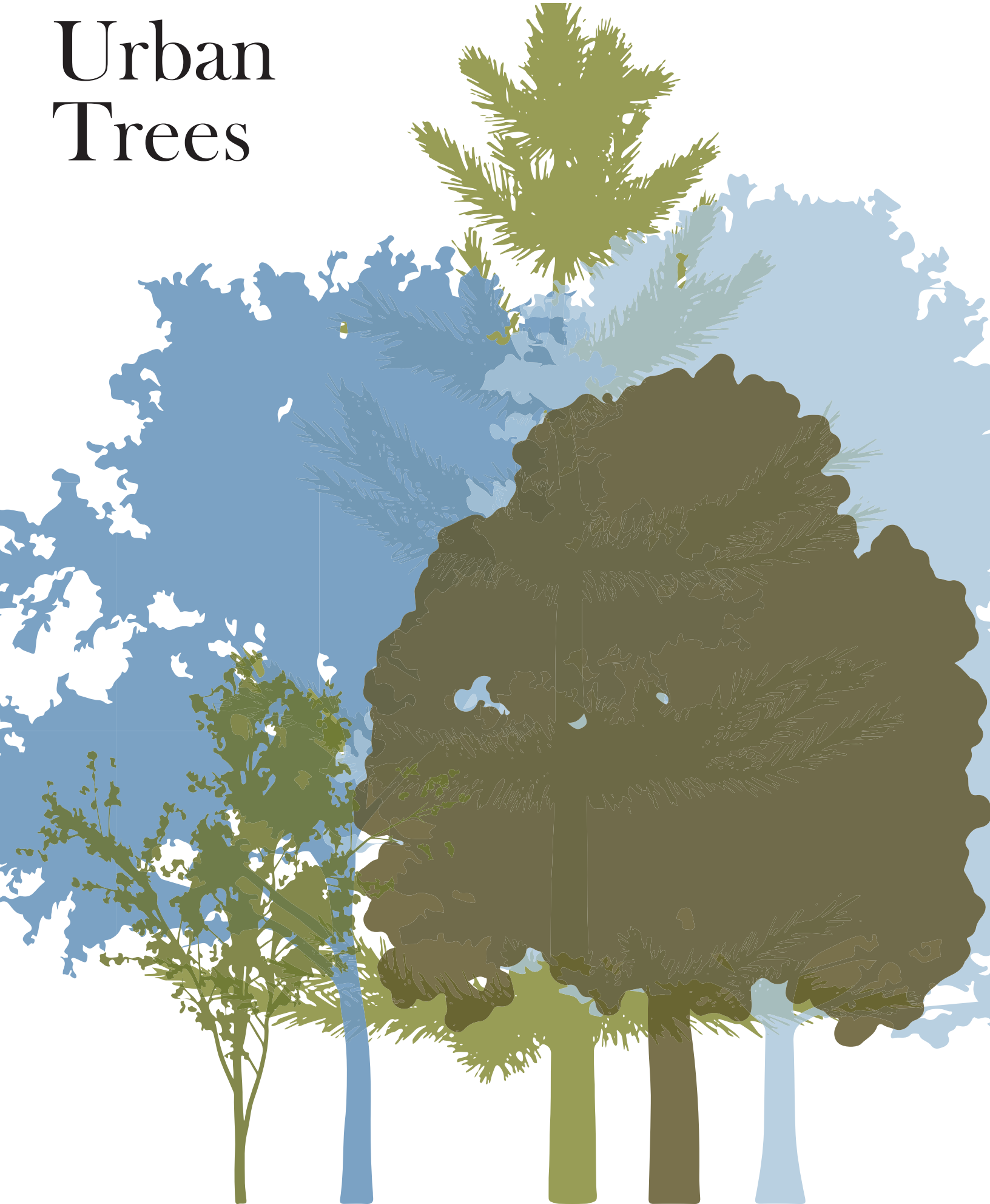


# Iowa's 10 Most Common Urban Trees



This guide is intended to help get you started by focusing on the top ten most common urban tree species in Iowa. We'll go through how to use this guide, and how to find additional resources.

Picture of tree

Common name

Scientific name

**Black walnut**

*Juglans nigra*


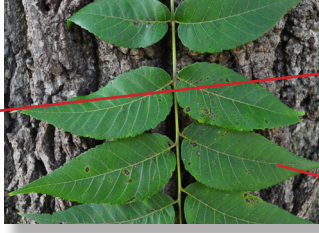

Description

Black walnut is a large tree with an open, rounded crown of dark green, aromatic foliage. It is highly valued for its form, fruit, and rich brown-colored, fine-grained wood. Black walnut wood is used to make furniture, gunstocks and veneer and is one of the most highly valued native hardwoods in Iowa. Black walnut produces a growth inhibiting toxin call juglone which affects surrounding plants. Trees are not drought tolerant and although they may grow well in some residential settings, they are by-and-large poorly adapted to highly urbanized settings such as streetscapes. The meats of the walnut are prized by humans and wildlife fortunate enough to have the ability to crack the sturdy shells.

Identifying traits

Leaf

Trunk



**Look for:**

**Twigs:** Stout with distinctive buff colored chambered pith and 3-lobed leaf scars.

**Leaves:** Pinnately compound leaves. Leaflets are broadly lance-shaped, finely saw-toothed, long-pointed, stalkless, and covered with soft hairs beneath. Leaves have the same pungent odor as the nut husks.

**Fruit:** Nearly spherical fruit, 1.5 to 2 inches in diameter borne alone or in groups of 2-3. Husk is yellowish-green with short hairs when ripe, and covers an irregular-ridged shell protecting the sweet, edible seed.

**WILDLIFE value:** Nuts serve as high quality food for squirrels and other wildlife.

**Similar in appearance:** Similar in appearance to butternut, although butternut fruit are more oval in shape and their twigs are hairy above the leaf scars where walnut is not. Butternut has darker, chocolate colored



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Deborah J.G. Brown

# Bur Oak

*Quercus macrocarpa*

Bur oak is a handsome tree common to savannas and forests in Iowa. It is a long-lived tree and may survive 100-300 years in the right setting. It may occur as an open-grown tree in savanna or prairie settings, or be tall and straight in forests. Older, even-aged stands of bur oak can form great cathedral-like canopies.



## Look for:

**Twigs:** Stout twigs with alternate branching. Twigs may be smooth or have corky ridges.

**Leaves:** Deeply lobed, alternately arranged on stems, fine hairs give whitish appearance to leaf undersides.

**Fruit:** Roundish to oblong acorn with gnarly cup extending half to over three quarters of the way around the nut.

**WILDLIFE value:** Acorns are utilized by a wide variety of wildlife and preferred over those of red oaks thanks to lower levels of tannins, making them more mild-tasting.

**Similar in appearance:** In Iowa, bur oak is perhaps most easily confused with the less common swamp white oak, which has platy bark and is fuzzy on both the upper and lower leaf surfaces. Swamp white oak also lacks the sinuses between lobes of bur oak.







# Prairie crabapple

*Malus ioensis*

Prairie crabapple was once commonly found throughout the Midwest prairies and savannas. Spectacular in bloom, deep pink flower buds open to white flowers. Their fruit is popular with a myriad of wildlife. Unfortunately, prairie crabapple is susceptible to many foliar diseases.

## Look for:

**Twigs:** New twigs are reddish brown and covered in woolly hairs, becoming gray and hairless the second year. Branches are wide-spreading with older flowering spurs developing into stout spines to 2+ inches long.

**Leaves:** Simple, alternate, dark green leaves without or with three lobes. Leaf margins are doubly toothed. If leaf diseases do not defoliate the tree during the growing season, fall color will be red.

**Fruit:** Yields abundant maroon-colored berry-like drupes. Is self-fertile, meaning it depends on insects such as bees to transfer pollen between flowers on the same tree. Can be used to pollinate apple trees.

**WILDLIFE value:** The fruits of this tree are important food for many birds and mammals.

**Similar in appearance:** It is similar to the more common cultivated apple trees, the native Plum (*Prunus*) and some Hawthorn (*Crataegus*) species. Prairie Crabapple is distinguished by the green fruits, leaves that are often scalloped around the edges and may be shallowly lobed especially near the base, plus the woolly hairs on sepals, flower stalks, leaf stalks and leaf undersides.





# Eastern White Pine

*Pinus strobus*

White pine was found at the time of Euroamerican settlement in select, isolated areas of the bluffland region of northeast Iowa. Logging of the pineries in northern Minnesota and Wisconsin in the 1800s, resulted in an abundance of lumber for settlers to build homes, barns and other structures on the prairies of Iowa. White pine grows quickly, but has the ability to live beyond 300 years of age under the right conditions. However, most live to be 100-150 years. White pines often form a supercanopy in mature forests, towering over surrounding trees.



## Look for:

**Twigs:** Slender, orange-brown, smooth or slightly hairy, becoming gray.

**Leaves:** Needles, blue-green, 3-5 inches long, soft and flexible, borne in bundles of five.

**Fruit:** Cone up to 8 inches in length, approximately 3-4 times longer than wide.

**WILDLIFE value:** Young pine stands provide important winter cover for deer and birds. Mature trees provide roosts for wild turkeys, ruffed grouse, owls and other raptors. Where mature white pine stands occur near lakes and rivers, they are important nesting platforms for osprey and bald eagle.

**Similar in appearance:** The soft blue-green needles, 3-5 inches long, in bundles of 5 readily distinguish white pine from other evergreens in our area.





# Hackberry

*Celtis occidentalis*

This versatile tree is commonly planted as an ornamental and in windbreaks. Hackberry trees have an extensive root system that helps it survive periods of drought. These trees are adapted to a wide variety of sites and tolerant of urban conditions such as air pollution. Branches tend to droop in mature trees giving the tree a cylindrical appearance. Leaves often have small, rounded galls caused by tiny jumping insects. Fresh cut wood gives off a fruit-like fragrance. Although not highly sought, hackberry is used in the furniture industry for small pieces such as end tables, chairs, and cabinetry.



## Look for:

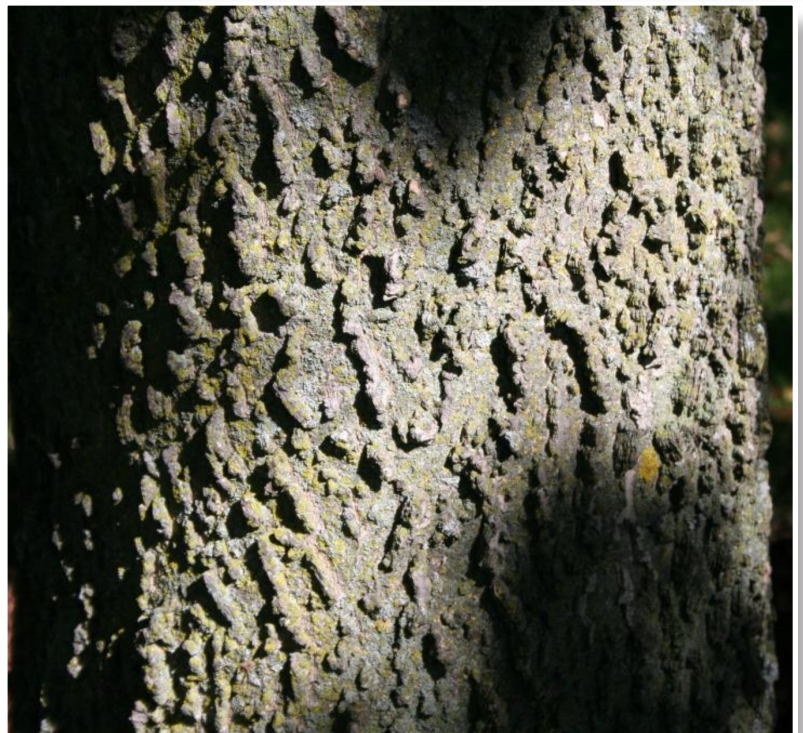
**Twigs:** Light brown slender, mostly hairy, slightly zigzag.

**Leaves:** Ovate, long-pointed, usually sharp-toothed except toward the unequal sided, rounded base. 2 1/2 to 4 inches long and 1 1/2 inches wide. Shiny green above with paler and often hairy veins below, sometimes having a rough texture.

**Fruit:** Orange-red to dark-purple in color, slender-stalked at leaf base, fruit type is a drupe, with the seed thinly surrounded by sweet flesh.

**WILDLIFE value:** Mature trees are used by a variety of birds for nesting cover. Fruit persists throughout the winter providing an important food source for birds and small mammals. Young stands provide good cover for deer, small mammals, and birds.

**Similar in appearance:** Easily identified by its light brown to gray, warty bark. Elm and similar species have less deeply furrowed bark. Hackberry leaves have three main veins, and are more sharply pointed than those of elms.





# Honey Locust

*Gleditsia triacanthos*

Honey locust is a hardy, fast-growing tree commonly used as an ornamental tree. Like many other trees native to floodplain terrace settings, honey locusts are tolerant of the stressful conditions related to urban settings like parking lot islands and sidewalk tree squares. Honey locusts in natural areas are easily recognized by the large, branched spines on the trunk and the zigzag branching pattern. Trees bear large dark brown pods with heavy seed crops occurring every other year. Thornless and fruitless cultivated varieties have been developed and are highly recommended and widely used in landscape settings.



## Look for:

**Twigs:** Shiny brown, stout, zigzag with long spines (except thornless variety).

**Leaves:** Bi-pinnately compound, many small oblong leaflets, paired and stalkless, with finely wavy edges. Shiny, dark-green above, dull yellowgreen beneath.

**Fruit:** Flat pod, slightly curved and twisted, 6-16 inches in length, contains many beanlike, flattened dark-brown seeds.

**WILDLIFE value:** High. Wildlife consume the honey-like, sweet pulp of the pods. Soft bark of young trees is eaten by deer and rabbits during winter months.

**Similar in appearance:** Kentucky coffee tree is somewhat similar in appearance to the honey locust, although honey locust twigs are zigzag in appearance, the pods are longer and narrower, and the leaflets are smaller.







# Northern Red Oak

*Quercus rubra*

A medium to tall tree growing up to 80 feet tall with a trunk diameter capable of up to 3 feet. Trunks of the trees tend to be straight, with large spreading branches and a large, broadly rounded crown. Red oaks commonly grow on moist, loamy soils, often on north-facing slopes, although they can tolerate many urban conditions including dry, acidic soils and some salt spray. In comparison to other oaks, the north red oak is fairly fast growing, and with adequate sunlight will reach full potential. Although less so than northern pin oak, northern red oak is susceptible to “oak wilt” disease, which is commonly spread by insects (beetles) or through the roots systems of adjoining trees.

## Look for:

**Twigs:** Slender in stature, smooth, reddish-brown in color, star-shaped pith in cross section.

**Leaves:** Leaf stalk is typically 1-2 inches long. Elliptical, 7-11 lobes, bristled tips with sinuses extending less than half of the way to the midvein. Smooth, dull green surface, lighter on the underside with tufts of hairs evident in the vein angles underneath.

**Fruit:** In pairs or as a single acorn with or without stalks. Ovoid-shaped nut up to 1 1/2 inches long and pale brown with gray stripes. Reddishbrown cup with tight scales covering 1/4 of the nut.

**WILDLIFE value:** Red oak trees provide cover and nesting sites for a variety of wildlife. Acorns are sought by a wide variety of wildlife, although acorns of red and pin oak are typically less preferred than those of white oak species. Deer and rabbits browse on the leaves and seedlings.

**Similar in appearance:** Members of the red oak subgenus readily hybridize, causing difficulty in positive identification, especially between pin oak and red oak. The shallow acorn cup and shallow lobes on the leaves are generally good identifying characteristics for northern red oak.





# Silver Maple

*Acer saccharinum*

Silver maples grow at an extremely fast pace in relation to other trees. Limbs and branches are often brittle making the tree very susceptible to wind and ice damage. For landscape purposes, silver maples are hybridized with red maples to create a visually pleasing, fast growing ornamental tree (*Acer freemanii*). The dense, shallow root system makes this tree highly susceptible to wind damage



## Look for:

**Twigs:** Pendulous branchlets turning up at the ends; twigs with slightly unpleasant odor when crushed.

**Leaves:** Deeply five-lobed, long-pointed with V-shaped sinuses. Leaves are double-toothed, pale-green above and silvery-white below.

**Fruit:** Fruit consists of winged nutlets 1 1/2-2 1/2 inches long, forming a wide-spreading pair with a long stalk.

**WILDLIFE value:** Although not known high for its wildlife value, the seeds serve as an abundant food source for many birds and small animals. Squirrels have been known to eat the buds and seeds when other food sources are depleted, and beaver will also use the tree as a food source. Silver maples are noted as a preferred nesting tree for Baltimore orioles while cavity-nesting birds and mammals also find silver maples favorable.

**Similar in appearance:** Silver maples are similar in appearance to red maples but are easily distinguished by having a much larger fruit, and more deeply lobed leaves.





# Sugar maple

*Acer saccharum*

Sugar maples tend to grow best on well drained, rich, loam soils. They are prized for their brilliant fall foliage, wood for furniture making, and sap which is gathered to produce syrup in the spring when air temperatures fluctuate between above and below freezing. This tree can tolerate some atmospheric pollution, however, they do not tolerate compaction and are sensitive to salt spray. They also tend to perform poorly in wide open settings where there is potential for drought or exposure to excessive wind.



## Look for:

**Twigs:** Slender with opposite branching.

**Leaves:** Five (occasionally 7) palmate lobes extending half way in to the leaf, dull, dark green above, somewhat paler beneath. Leaves are set in opposite pairs on the shoot.

**Fruit:** Seeds are samara often called “helicopters”. They are fused in pairs and hang in clusters. Seeds are round in shape and have wings which point forward. They mature in the late summer and fall months.

**WILDLIFE value:** Along with other maples, sugar maples offer wildlife an abundant food source. Thanks to their longevity, sugar maples have the potential to provide cavities for birds and mammals as trees mature.

**Similar in appearance:** Sugar maple seeds mature in summer and fall, whereas red and silver maple seeds mature in spring and early summer. The non-native Norway maple is similar in appearance but gives off a milky sap from broken leaf stems and has flat seeds.





# Sycamore

*Platanus occidentalis*

The sycamore is a stately tree capable of growing to massive proportions. Mature trees have an enlarged base and a straight trunk, which can easily outsize other hardwood tree species. Although commonly under 100 feet in height, sycamores are capable of exceeding 150 feet making them one of the tallest of North American trees. The sycamore is a fast-growing tree, tolerant of a wide variety of conditions, however it tends to have weak limbs and is susceptible to wind and ice damage. The smooth, white, gray and olive mottled bark has a tendency to peel off in flakes, creating an attractive mosaic of colors. The aggressive roots of sycamore may cause damage if planted too close to sidewalks and trails.



## Look for:

**Twigs:** Greenish in color, slender, zigzag in shape, look for ring scars at nodes.

**Leaves:** Broadly ovate in shape with 3 or 5 shallow, broad, short-pointed lobes. Leaf edges are wavy with scattered teeth.

**Fruit:** Individual brown spherical clusters on long stalks composed of many narrow nutlets with hair tufts.

**WILDLIFE value:** Relatively low value, though fruit is consumed by a number of songbirds including purple finch, chickadee, wild turkey, and junco, as well as mammals such as muskrat, beaver, and squirrels. Older sycamore trees can be valuable for cavity-nesting birds and animals.

**Similar in appearance:** Leaves are similar in appearance to maple leaves, but sycamores can be distinguished by the smooth, whitish and mottled bark that peels off in large thin flakes. Sycamore leaves are more shallowly lobed, and typically much larger and coarser textured than those of maples.





# Additional Resources

Iowa DNR Forestry

<https://www.iowadnr.gov/Conservation/Forestry>

Plant and Insect Diagnostic Clinic

<https://hortnews.extension.iastate.edu/pidc>

Missouri Botanical Gardens

<https://www.missouribotanicalgarden.org/plantfinder/plantfindersearch.aspx>

The Morton Arboretum

<https://mortonarb.org/>



IOWA DEPARTMENT OF  
NATURAL RESOURCES

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