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20 Native Trees to Plant
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Introduction

If you have ever flown in an airplane over Iowa, you would see that our woodlands are scattered along the rivers and streams and areas too steep to farm. You would also see a green carpet of trees within out cities and towns. Did you know that 90% of the over 2.7 million acres of forest in Iowa is owned by over 138,000 different private owners? Or that 30% of the land cover in a typical Iowa community is covered by trees? Trees are vital for the protection of our drinking water supply, critical for wildlife habitat, and help sustain employment of over 7,000 Iowans in the wood products industry.

This booklet “20 Native Trees to Plant” will help you gain a greater knowledge about Iowa’s trees and forests. “I think I shall never see a poem as lovely as a tree” was written by a World War 1 soldier, Joyce Kilmer over 80 years ago. The interest and love of our trees continues for many of us today. Learn about and enjoy Iowa’s trees. Consider ways that you can improve our environment by planting and caring for Iowa’s trees and forests. Enjoy!

The Secret Life of Trees

It Starts with Seeds

Seeds look and feel very differently from each other, but they’re all alike in important ways. Each of them is a baby plant with its own food supply, all put together in one handy, self-sealing package. They all have the same needs for growth: moisture, warmth, sunlight, food, and air. And they begin to grow in much the same way: moisture soaks the outer shell of the seed until it becomes soft, the food inside expands as the water enters the seed. If warmth is also present, the shell breaks open and growth begins.

A seed contains everything that’s needed to form a new plant. As growth begins, a small root pushes out of the seed and down into the earth to search for water. A tiny stem pushes up through the soil reaching toward the sunlight.

As the plant grows underground, it uses the food stored in the seed. As soon as it pushed out of the ground into the sunlight, it begins to make its own food. Food is make by the leaves’ tissues—chlorophyll—acting together with water, air and sunlight to make the kind of sugar that is food for the plant.

The youngest tree that grows from a seed is called a seedling. After a tree reaches a height of six feet or more and its trunk is one of two inches thick, it is called a sapling. The tree continues to grow as long as it lives.

Where Growth Takes Place

Trees have three different growing parts: the root tips, the wood layers, and the buds. The root tips cause the roots to grow longer and spread out in search of more water and minerals. The wood layers are the inside of the tree, under the bark. You’ll find wood layers in the trunk and limbs. The buds of the limbs grow longer, making the tree taller and wider. This also makes it possible for the limbs to spread out to receive more sunlight.
By looking at the cross-section of a tree trunk, you can see tree growth from the center toward the outside. Look closely at the top of a stump or the end of a log, and you can see rings in the wood. These rings are made by growing layers of wood; a new layer of wood is added each year. Each layer is made up of a band of lighter colored wood called spring wood and a band of darker wood called summer wood. The spring wood band is usually wider than the summer wood band. They are called annual rings.

Seasons Come, Seasons Go

Seasonal changes bring a lot of variety to a forest. During the spring of the year, forest life is renewed. The flowering plants, including many trees and shrubs, display their showy flowers. The broadleaf trees and shrubs bud out, then begin to cover themselves with new leaves. The evergreens develop new shoots later flare out into the new stems and needles.

During late spring and summer, all the new life that began in the spring is “growing up.” The trees in the forest have full sets of leaves. They are adding a new layer of wood around their trunks and spreading their branches wider and higher.

In the fall, the forest changes into a new kind of beauty. The leaves of broadleaf trees, shrubs, and other plants change to brilliant colors of red, yellow, and orange. Many people think frost causes this change. Actually, frost can reduce the brightness of autumn colors. The green color in leaves comes from a green material called chlorophyll. In the fall, when temperatures begin to lower (not yet freezing) and the hours of daylight shorten, the production of the green chlorophyll stops. The chlorophyll that is already in the leaves gradually breaks down until it is completely gone. Other colors in the leaves that have been there all along then show through. These colors are now seen in various shades of reds and yellows. After showing their beauty for several days or weeks, the colorful leaves fall to the ground.

Most of the trees and other plant life shed their seeds before the snow flies so the seeds will be ready to sprout into new plants when the snow melts the next spring.

Death of a Tree

We are part of a living and dying world. Plants and animals are born, grow up, get old, and die. Their places, in turn, are taken by other plants and animals. As each living thing dies, decays, and returns to the soil, it affects the area around it and changes the environment. One plant’s death may make it possible for new plants to grow where they could not before. ■

This article is taken from A Teacher’s Guide to Arbor Month. Preprinted with special permission from the Minnesota Arbor Month Committee and the Minnesota Department of Natural Resources.

American Hornbeam

Leaves: Simple, alternate two and one-half to five inches long, oval, rounded or heart-shaped, sharply and doubly serrate.

Buds: Small, one-sixth to one-fourth inches long, narrowly ovate to oblong, pointed, reddish-brown-black, slightly hairy—often downy on edges, frequently with woolly patch of down on tip.

Bark: Smooth, thin, dark bluish gray, fluted with smooth, rounded longitudinal ridges.

Distribution (Range in Iowa): Native across the state of Iowa

Site Characteristics: Moist, but sufficiently drained—rich, wet soils in bottomlands along streams.

Shade Tolerance: Tolerant

Growth Rate: Slow

Height/Spread: 20-30 feet tall, 20-30 feet spread

Growth Habit: Flat or rounded-topped

Uses: Firewood, handles, bows, wedges and sled runners.

Branching Pattern: Alternate

Fruit: Hairy, greenish nutlet attached to the base of a three-lobed leafy bract, a number of which are arranged in a spiral in a 2 to 4 inch, cone-like cluster.

Expected Age: 50-100 years old

Fall Color: Orange to red

Forest Fact: Often confused with Hophornbeam which is also commonly called Ironwood. Hornbeam is also referred to as blue beech or blue ash. Hornbeam can grow so dense in a mature woodland that it shades the ground bare of woodland plants and new forest regeneration.

Fun Fact: Relatively disease-free—great yard tree.
**Hophornbeam**

**Leaves:** Simple, alternate, two to five inches long, oval-lanceolate, acuminate, rounded or heart shaped, dark green and hairy on top, sharply and doubly serrated, veins forming at ends; petiole one-fourth of an inch long.

**Buds:** Imbricate, small, one-eighth to one-fourth long, narrowly ovate, pointed, glabrous or finely downy, green to brown, slightly gummy especially when strongly divergent, terminal absent, scales longitudinally striate.

**Bark:** Grayish brown, stringy - thin vertical strips, slightly shredded at the ends.

**Distribution (Range in Iowa):** Native throughout Iowa

**Site Characteristics:** Upland wood; wooded slopes

**Shade Tolerance:** Tolerant

**Growth Rate:** Slow

**Height/Spread:** 30 feet tall, 30 feet spread

**Growth Habit:** Upright pyramidal

**Uses:** The wood is dense, hard and beautiful, taking a high polish. However, the small size of trees limits commercial importance.

**Branching Pattern:** Alternate

**Fruit:** Long nut enclosed in a membrane, ovate, three-fourths to one inch long.

**Expected Age:** 60-90 years old

**Fall Color:** Yellow

**Forest Fact:** Can grow in dense patches shading the woodland understory bare, often removed prior to timber harvest to allow oak regeneration to occur

**Fun Fact:** Great tree for tough sites in urban and yard settings.

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**Black Maple**

**Leaves:** Opposite, simple, three to six inches wide, deepely cordate, lobes acute, sides of leaf blade characteristically droop, stipules present, three to five inches long.

**Buds:** Plump and gray-dust-brown in color. Two axillary buds at terminal, one-half to three-fourths as long as terminal.

**Bark:** Deeply furrowed with long irregular thick plates or ridges (scaly), tremendously variable.

**Distribution (Range in Iowa):** Native western ½ of the State of Iowa

**Site Characteristics:** Moist woods; wooded slopes

**Shade Tolerance:** Tolerant

**Growth Rate:** Moderate

**Height/Spread:** 60 feet tall

**Growth Habit:** Upright to oval

**Uses:** Flooring, furniture, cabinets, veneer, musical instruments, bowling alleys and billiard cues.

**Branching Pattern:** Opposite

**Fruit:** Samara, glabrous, one to one and three-fourths inches long, somewhat horseshoe-shaped withnearly paralled or slightly divergent wings.

**Expected Age:** 120 to 150 years old

**Fall Color:** Yellow, burnt orange

**Forest Fact:** Black maple is often considered a cousin to Sugar Maple, but is more drought hardy.

**Fun Fact:** The great fall colors of black maples enhance tourism to NE Iowa by $5.9 million annually.
**Bur Oak**

**Leaves:** Simple, rounded lobes, quite variable in shape, usually marked by one deep pair of indentations which divides the leaves into two or more portions; leaves are somewhat hairy and white underneath.  
**Buds:** Shiny, oval-shaped, one-eighth to one-fourth inches long, densely covered with fine gray hairs  
**Bark:** Thick, deeply furrowed, whitish to grayish color  
**Distribution (Range in Iowa):** Native throughout the state  
**Site Characteristics:** Primarily an upland species, occasionally found on stream terraces and floodplains; most abundant forest tree in most of western and parts of north central Iowa; very adaptable to different soil types.  
**Shade Tolerance:** Intolerant  
**Growth Rate:** Slow  
**Height/Spread:** 60-80 feet tall, 55-60 feet spread  
**Growth Habit:** Rounded  
**Uses:** Pallets and railroad ties  
**Branching Pattern:** Alternate  
**Acorns:** Globe shaped, three-fifths to two inches long, sessile or short stalked; cup with a prominent fringe of soft bristles around its rim, covering one-third or more of the nut.  
**Expected Age:** 100-180 years in urban area; 200-300 years in a forest  
**Fall color:** Yellowish-brown  
**Forest Fact:** Bur oak is common across the state of Iowa. The thick bark it gets as it gets older protects it from fire.  
**Fun Fact:** The fringe of soft bristles around the cup of the acorn is where this tree gets its name; a common savanna tree in pre-pioneer forests.

**Chinkapin Oak**

**Leaves:** Alternate, simple, obvate to oblong-obvate, four to ten inches long, rarely rounded at base, lower portion of leaf with two to three pairs.  
**Buds:** Light brown, conical shaped, one-sixth to one-fourth long.  
**Bark:** Ashy-gray, rough and flaky.  
**Distribution (Range in Iowa):** Eastern to southern Iowa  
**Site Characteristics:** Exposed bluffs; rocky slopes  
**Shade Tolerance:** Intolerant  
**Growth Rate:** Slow  
**Height/Spread:** 50-75 feet tall, 40-60 feet spread  
**Growth Habit:** Pyramidal  
**Uses:** Wood is often combined with and sold as white oak. One time used by native peoples and pioneers as a source of food.  
**Branching Pattern:** Alternative  
**Fruit:** Acorn, subsessile, three-fourths to one inch long, one-half enclosed by a thin cup, scales small, depressed.  
**Expected Age:** 120-180 years old  
**Fall Color:** Yellow to orange-brown to brown.  
**Forest Fact:** Great source of mast or acorns for native wildlife. Very adaptable for yard tree use.  
**Fun Fact:** Chinkapin oak acorns are the sweetest and least bitter of any eastern oak, and can be eaten raw.
**Northern Pin Oak**

**Leaves:** Simple, alternate, sharp-lobed and bristle-tipped, 3-7 inches long and 5-7 lobes with sinuses reaching to leaf mid-vein. They are shiny, dark green and leathery.

**Buds:** Ovoid, one-fourth of an inch long

**Bark:** Dark brown to gray brown, smooth, with shallow, connected fissures.

**Distribution (Range in Iowa):**
Northern Iowa

**Site Characteristics:** Open, sandy upland woods

**Shade Tolerance:** Intolerant

**Growth Rate:** Moderate

**Height/Spread:** 50-70 feet tall,

**Uses:** Furniture, flooring, and interior finishing

**Branching Pattern:** Random

**Fruit:** Oval acorns, often striped, smooth and brown with a cap covering almost one-half. Produced every other year

**Expected Age:** 60-90 years old

**Fall Color:** Red

**Forest Fact:** Small acorns are favorite wildlife food of deer, turkey and native songbirds

**Fun Fact:** Northern pin oak is useful for rehabilitating disturbed sites because of its deep root system, low water potential threshold for stomatal closure and ability to adjust osmotically.

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**Red Oak**

**Leaves:** Simple, pointed, seven to eleven lobed, five to nine inches long, with slender petioles one to two inches long; upper surface shiny and dull green; lower surface paler and shiny except for small tufts of hairs in the axils of the bigger veins

**Buds:** One-eighth to three-eighths inches long, oval-shaped, shiny or hairy at the tip

**Bark:** “Striped look” on upper trunk, light gray to black colored on the lower trunk, thick plates and deeply furrowed; inner bark is a light red

**Distribution (Range in Iowa):** Native across the state

**Site Characteristics:** One of our most common and widely distributed oaks and lives on a variety of sites—most commonly found on moist, well-drained, sheltered slopes

**Shade Tolerance:** Intolerant

**Growth Rate:** Moderate to fast

**Height/Spread:** 70-80 feet tall, 40-60 feet spread

**Uses:** Furniture, veneer, flooring, pallets, boxes and crates, agricultural implements, lumber, firewood, and landscaping

**Branching Pattern:** Alternate

**Acorns:** One-half to one inch long; sessile; oval-shaped; cups red-brown

**Expected Age:** 80-120 years in urban areas; 150-180 in a forest

**Fall Color:** Red, orange-red, or deep reddish-brown

**Forest Fact:** One of the fastest growing oak if in the sun, it is highly valued as a timber tree.

**Fun Fact:** Valuable for wildlife.
**Shingle Oak**

**Leaves:** Simple, alternate, oblong or lanceolate, two and one-half to six inches long, acute at apex with bristle-like tip, dark green above, pale green or brown below; petiole one-fourth to five-eighths long.

**Buds:** Imbricate, round, sharp pointed, one-eighth to one-fourth long, brown, slightly hairy.

**Bark:** Grayish-brown, board low ridges separated by shallow furrows.

**Distribution (Range in Iowa):** southern 1/3 of Iowa.

**Site Characteristics:** dry hillsides

**Shade Tolerance:** Intermediate

**Growth Rate:** Slow

**Height/Spread:** 45 feet tall

**Growth Habit:** Rounded, pyramidal

**Uses:** Street tree, shingles and general construction

**Branching Pattern:** Alternate

**Fruit:** Nut, short-stalked about five-eighths inches long, one-third to one-half enclosed in thin cup with red-brown scales.

**Expected Age:** 60-0 years old

**Fall Color:** Red-orange, brown

**Forest Fact:** This is the easiest oak to transplant and grows in tough dry locations.

**Fun Fact:** This tree has willow-like leaves.

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**Swamp White Oak**

**Leaves:** Simple, alternate, oval shaped, three to seven inches long, coarsely sinuate-dentate with six to ten pairs of coarse obtuse teeth, or sometimes lobed, dark green above, white or grayish green and velvety below, leathery in texture; petiole one-half to three-fourths inches long.

**Buds:** Imbricate, broadly ovate, light chestnut brown

**Bark:** Flaky, grayish brown, divided by deep longitudinal fissures into long flat ridges.

**Distribution (Range in Iowa):** Eastern ½ of Iowa.

**Site Characteristics:** Low, moist conditions and bottomlands.

**Shade Tolerance:** Intermediate

**Growth Rate:** Slow

**Height/Spread:** 50-70 feet tall, 50-70 feet spread

**Growth Habit:** Pyramidal to broad

**Uses:** Excellent shade tree

**Branching Pattern:** Alternate

**Fruit:** Acorn about one inch long, usually paired one-third covered by the involucre, light brown nut.

**Expected Age:** 120-160 years old

**Fall Color:** Usually yellow, sometimes red or purple

**Forest Fact:** Great wildlife tree due to its acorns which are the last to fall in the Autumn.

**Fun Fact:** Often confused with Bur or White Oak – but more tolerant of wet soils.
**White Oak**

**Leaves:** Simple, seven to nine lobed, five to nine inches long with petioles one-half to one inch long; lobes with rounded tips, surfaces green shiny

**Buds:** Blunt pointed, shiny, one-eighth to three-sixteens inches long

**Bark:** Light gray, often furrowed with blocky ridges on older trees, turning whitish with age.

**Distribution (Range in Iowa):** Native in eastern, central and southern Iowa

**Site Characteristics:** One of the most abundant native trees throughout its broad range, it lives on the drier uplands woods, but can also found on moist slopes

**Shade Tolerance:** Intolerant

**Growth Rate:** Slow

**Height/Spread:** 80-100 feet tall, 40-70 feet spread

**Growth Habit:** Rounded

**Uses:** Principal wood for mine timbers, railroad ties, flooring, firewood and whiskey barrels; it is also used for fencing and posts, and is a popular paneling and furniture choice, especially for desks and tables.

**Branching Pattern:** Alternate

**Acorns:** One-half to three-fourth inches long, oblong and sessile

**Expected Age:** 100-150 years in urban areas; 200-400 in a forest

**Fall Color:** Turns rich purple color in October, then fades to reddish-brown and then to light brown

**Forest Fact:** Highly valued timber tree used for barrels due to its dense and non porous wood.

**Fun Fact:** Valuable for wildlife; turkey, deer, squirrels and blue jays all love this tree’s sweet acorns.

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**Basswood/Linden**

**Leaves:** Simple, alternate, nearly round in outline, three to six inches long with petioles one and one-half to two inches long; margins toothed; base heart shaped and often unequal, surfaces shiny except for small tufts of hairs in the vein axils.

**Buds:** Shiny, three-sixteens to one-fourth inches long, lopsided (almost heart-shaped), with two or three usually bright red scales, the terminal bud absent.

**Bark:** Smooth, light gray on young trees; becoming shallowly furrowed with long, narrow, parallel ridges.

**Distribution (Range in Iowa):** Native throughout the state

**Site Characteristics:** Moist, upland woods throughout Iowa, especially on sheltered, north and east facing slopes in stream valleys

**Shade Tolerance:** Tolerant

**Growth Rate:** Moderate

**Height/Spread:** 75-90 feet tall, 50-60 feet spread

**Growth Habit:** Oval

**Uses:** Boxes, crates, barrels, musical instruments, Venetian blind slats and veneer

**Branching Pattern:** Alternate

**Fruit:** Dry, globe-shaped drupe one-fourth to one-third in diameter, often persisting in winter

**Expected Age:** 60-80 years in urban area; 100-120 years in a forest

**Fall color:** Yellow

**Forest Fact:** Basswood when it gets large often get hollow and makes a great wildlife den and roosting tree.

**Fun Fact:** White blossoms can be found on this tree in the spring; attracts honey bees.
Cockspur Hawthorn

Leaves: Simple, Alternate, one to four inches long, sharply serrate, shiny dark green; petiole one-fourth to one-half of an inch long.
Buds: Single or multi-branched in spine formation, sessile, round or oblong-ovoid with six exposed red to reddish brown scales.

Bark: Combination of brown and gray, often exfoliating slightly on older wood to expose an orange-red to rust-colored under bark.
Distribution (Range in Iowa): Native to eastern half of Iowa
Site Characteristics: Open, upland woods, pastures
Shade Tolerance: Intermediate
Growth Rate: Slow
Height/Spread: 20-30 feet tall, 20-35 foot spread

Growth Habit: Broad-rounded
Uses: Ornamental
Branching Pattern: Alternate
Fruit: Pome-like drupe, deep red, three-eighths to one-half of an inch in diameter.
Expected Age: 60-90 years old
Fall Color: Orange to scarlet
Forest Fact: Strong scent of flowers draws bees and other insects.
Fun Fact: The long vicious thorns not only serve as protection but also provide a bit of character in the winter months when the tree has lost its leaves.

Downy Serviceberry

Leaves: Alternate, simple, ovate, long-pointed at the tip, tapering or rounded at the base, finely toothed, smooth or slightly hairy, 2 1/2" - 4" inches long, prominent network of veins; shiny green above, yellow-green with tiny black dots below; leaf stalks wavy-edged.
Buds: Red, nearly smooth, long-pointed.
Bark: Red-brown, broken into an irregular pattern
Distribution (Range in Iowa): Native throughout state
Site Characteristics: Upland wood
Shade Tolerance: Intermediate
Growth Rate: Moderate
Height/Spread: 15-30 feet tall, 15-25 feet spread
Growth Habit: Rounded
Uses: Great for wildlife, wind-breaking, attracts birds, good landscape tree.
Branching Pattern: Alternate
Fruit: Drupes oval to ellipsoid, blue-black, up to 1/2 inch long.
Expected Age: 15-30 years old
Fall Color: Red-purple
Forest Fact: Great plant for native wildlife habitat.
Fun Fact: The fruits are edible.
**Kentucky Coffeetree**

- **Leaves**: Alternate, twice pinnately compound, two to three inches long, pointed at the tip, dark blue-green
- **Buds**: Lateral buds sunken into bark, brown, hairy, two at each leaf scar
- **Bark**: Smooth, dark brown to gray, deeply furrowed with curved scales.
- **Distribution (Range in Iowa)**: Native across the state
- **Site Characteristics**: Moist, wooded ravines, alluvium
- **Shade Tolerance**: Intolerant
- **Growth Rate**: Moderate
- **Height/Spread**: 60-75 feet tall, 40-50 feet spread
- **Growth Habit**: Oval and rounded
- **Uses**: Cabinets, railroad ties, fence posts, and rails, general construction, railway sleepers, bridge timbers, sills, interior finish, fuel.
- **Branching Pattern**: Alternate
- **Fruit**: Red-brown, flat and leathery legume bean pod, pointed, four to six inches long, hard seeds imbedded in a sweet pulp.
- **Expected Age**: 80-100 years old
- **Fall Color**: Yellow
- **Forest Fact**: Hardy tree free of insect or disease issues. Underused in yard and street plantings.
- **Fun Fact**: The seeds were used by the pioneers as a coffee substitute (“coffeetree”). When young tree appears to be a “broomstick” due to limited early branches – but within 10 years has a full set of strong branches.

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**Hackberry**

- **Leaves**: Simple, alternate, wider at the base of the leaf, two and one-half to four inches long with petioles one-third to one-half inches long, margins toothed, veins forming a network near the margin, often has nipple-like growths
- **Buds**: About one-eighth of an inch long, oval to triangular shaped, closely appressed to the twig, the terminal absent, usually three or four visible bud scales, light brown, finely and rather inconspicuously hairy
- **Bark**: Grayish color with warty like growth
- **Distribution (Range in Iowa)**: Native throughout the state
- **Site Characteristics**: Moist, low-lying woods; adaptable to most soils
- **Shade Tolerance**: Tolerant
- **Growth Rate**: Slow
- **Height/Spread**: 40-60 feet tall, 40-50 feet spread
- **Growth Habit**: Upright
- **Uses**: Furniture, millwork, sporting goods, and veneer for plywood and containers; good for wildlife
- **Branching Pattern**: Alternate
- **Fruit**: A dark purple drupe about one-third of an inch in diameter; small, hard, one-seeded pit surrounded by a thin flesh that tastes something like a prune or date
- **Expected Age**: 80-100 years in urban areas; 100-120 in a forest
- **Fall Color**: Yellowish-green
- **Forest Fact**: Limited commercial value – but hardy and adaptable tree for yards and street areas.
- **Fun Fact**: Hackberries are a favorite food of robins, flickers, cardinals, cedar waxwings, brown thrashers, and several other small birds.
Nannyberry

**Leaves:** Simple, alternate, one to three inches long, pointed and finely-toothed; petiole three-eighths to one and one-fourth inches.

**Buds:** Terminal-present, five to seven scaled, imbricate, narrowly ovate, sharply pointed with silky hair at apex.

**Bark:** Smooth but streaked with fissures, gray. Old age leads to ridges, furrows and scales.

**Distribution (Range in Iowa):** Eastern 2/3’s of Iowa

**Site Characteristics:** Moist or rocky wooded slopes

**Shade Tolerance:** Tolerant

**Growth Rate:** Moderate

**Height/Spread:** 20-30 feet tall, 10-20 foot spread

**Growth Habit:** Rounded

**Uses:** Handles

**Branching Pattern:** Alternate

**Fruit:** Berry-like pone, orange-shaped, one-fourth to one-third in diameter.

**Expected Age:** 60-90 years old

**Fall Color:** Orange to red

**Forest Fact:** Understory tree that has fragrant white flowers in the spring. Can have a single trunk or be multi-stemmed. Fruit is a favorite of native songbirds. Great underused tree for yards.

**Fun Fact:** The fruit makes a delicious pie—as long as you get to picking before the birds do!

Ohio Buckeye

**Leaves:** Opposite, palmately compound, five leaflets, elliptic to obovate, three to six inches long, finely serrate, medium to dark green; petiole about three to six inches long.

**Buds:** Imbricate, ovoid, sessile, terminal about two-thirds of an inch long, brown with prominently keeled scales, hairy on margins, lateral buds smaller, sticky to the touch.

**Bark:** Ash gray, deeply fissured and plated.

**Distribution (Range in Iowa):** Eastern Iowa and along the Des Moines/Raccoon River Valleys

**Site Characteristics:** Moist or sandy lowland woods

**Shade Tolerance:** Tolerant

**Growth Rate:** Moderate

**Height/Spread:** 20 to 40 feet tall, 20 to 40 feet spread, can get up to 80 feet spread

**Growth Habit:** rounded

**Uses:** Artificial limbs, boxes, crating, trunks, signs, and flooring.

**Branching Pattern:** Opposite

**Fruit:** capule, light brown, one to two inches long, broadly round with a prickly cover.

**Expected Age:** 60-80 years old

**Fall Color:** Brown-red to orange

**Forest Fact:** favorite food of native wildlife

**Fun Fact:** Holding a “buckeye nut” in your pocket is considered good luck.
**Pagoda Dogwood**

**Leaves:** Simple, opposite but crowded at the ends of branches, whorled-looking, elliptic-ovate, two to five inches long, wide, medium to dark green beneath, five to six pairs of veins; petiole: one to two inches long.

**Buds:** Flower, one-fourth long, purplish, vegetative, slightly hairy.

**Bark:** Smooth, purplish-green

**Distribution (Range in Iowa):** Eastern ½ of Iowa

**Site Characteristics:** Moist, upland woods

**Shade Tolerance:** Tolerant

**Growth Rate:** Slow

**Height/Spread:** 15 to 25 feet tall, 20-30 feet spread

**Growth Habit:** Rounded

**Uses:** Weaving shuttles, spool and bobbin heads, small pulleys, skewers, golf club heads, tool handles, charcoal for gunpowder, red dye from bark of roots, medicine from stem bark.

**Branching Pattern:** Layered

**Fruit:** Drupe, bluish black, one-fourth to one-third across.

**Expected Age:** 40-60 years old

**Fall Color:** Deep red

**Forest Facts:** Only native dogwood tree species in Iowa.

**Fun Fact:** Prefers acid soils, but tolerates alkaline soils.

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**Shagbark Hickory**

**Leaves:** Compound, eight to fourteen inches long, leaflets five in a bunch, finely toothed, and shiny; the terminal three leaflets four to seven inches long, with the other two smaller.

**Buds:** Oval-shaped, the terminal bud one-half to three-fourth inches long and the laterals smaller; the outer bud scales are dark brown and smaller; the outer bud scales are dark brown and almost shiny; the inner scales yellowish-brown and hairy.

**Bark:** Slate gray, bark runs vertically and curves away from the trunk at one or both ends—giving the tree a “shaggy” appearance

**Distribution (Range in Iowa):** Native west to the Des Moines and Raccoon rivers in central Iowa to the Missouri River in southern Iowa.

**Site Characteristics:** Upland, well-drained woodlands

**Shade Tolerance:** Intermediate

**Growth Rate:** Moderate

**Height/Spread:** 70-80 feet tall, 30-40 feet spread

**Uses:** Handles of striking tools (hammers, axes, etc.) charcoal, firewood, skis and other sporting goods.

**Branching Pattern:** Alternate

**Fruit:** A nut one to two and one-half inches long, one-eighth to one-half of an inch thick, which splits open at maturity; it is green at first, then turns almost black.

**Expected Age:** 80-100 years in urban areas; 150-200 in a forest

**Fall Color:** Yellowish-green

**Forest Facts:** Great wildlife tree

**Fun Fact:** It was the principal wood used for pioneer wagon wheels, valued as firewood.
Witchhazel

Leaves: Alternate, simple, obovate or elliptic, obtusely short-acuminate, narrowed toward the base and subcordate, three to six inches long, medium to dark green with five to seven pairs of veins, petioles one-fourth to one-half long.

Buds: Naked, brownish, tomentose, flower buds—stalked, globose, usually three or four on a stalk.

Bark: Smooth gray to grayish brown.

Distribution (Range in Iowa): Eastern ½ of Iowa

Site Characteristics: Moist, wooded, north-facing slopes

Shade Tolerance: Intermediate

Growth Rate: Moderate

Height/Spread: 15-20 feet tall, 15-20 feet spread

Growth Habit: Rounded and vase-shaped

Uses: As a traditional remedy, used internally and as a liniment, it is applied to varicose veins and hemorrhoids and any swollen engorged tissues. Used also to treat diarrhea—still commonly used as a remedy today.

Branching Pattern: Alternate

Fruit: Capsule, one-half long, dehiscing at the distal end

Expected Age: 20-40 years old

Fall Color: Golden yellow

Forest Fact: Low growing – small tree in the woodland understory

Fun Fact: Has supposed magical healing powers from sap extract: Used in making divining rods and worn to mend a broken heart.

Right Tree, Right Place

Why are you considering tree planting? Trees are for a lifetime, so it pays to spend time now making sure you get the best to start with. Think clearly about the purpose of your new tree.

Choose your planting site carefully. Look up, look around, and look down. Is the site wet or dry, sunny or shady? The tree you plant today could eventually reach 40 to 100 feet in height depending on the species selected. Give your tree plenty of room to grow. Your planting site should be 15 to 30 feet away from buildings and power lines so that it won’t cause damage and need massive pruning later. Consider locations of sewers and underground utilities—call 1-800-292-8989 two working days before you dig to get exact locations.

Select the best species. Select the species and cultivar (variety) to plant that best matches the reasons why you are planting and the site conditions.

Types of Trees. Trees come in three forms: bareroot, containerized and ball and burlap (B&B). Bareroot trees, although less expensive, have no soil around their roots and need to be planted promptly—most commonly available bareroot tree seedlings 8 to 18 inches tall. Containerized landscape trees—placed or grown in a pot, cost a bit more, but have some flexibility in storage and planting timing. Balled & burlap landscape trees with the original soil around their roots are most expensive, but usually result in better survival. When receiving your tree, look at the form, examine it for broken branches. Are the leaves and buds healthy and green? Are the roots moist?

The best time to plant. Trees can be planted anytime the ground and weather conditions permit (ex. ground not frozen or temperature not 100 degrees F). Actually, the best time to plant trees in Iowa is during the early Spring (April 1-May 30) and the late summer and early fall (August 15-November 15). Great care should be exercised to keep tree roots out of direct sunlight and strong drying winds when the temperature exceeds 50 degrees F.

Planting a seedling. Dig a hole a little deeper then the length of the roots. Place the seedling in the hole with all the roots pointing into the hole, fill around it with soil. Then gently pull the trunk of the seedling up slightly to straighten out the roots. Squeeze the air pockets out of the soil, (but don’t pack it too tight) and water thoroughly.

22 23
Planting a landscape tree. Dig a hole at least twice as wide as the roots and deep enough to allow roots to sit on level with or slightly higher than the surrounding area. Remove all the containers, or the wire baskets, place tree in hole and remove or pull back the burlap. Fill in the hole with excess soil, tap the soil, and water thoroughly.

Give special care to your tree during early weeks of life. Use mulch like wood chips, to conserve moisture, reduce weed competition and eliminate potential dangers from lawn mowers and weed eaters.

Do not use grass clippings. Water your tree at least once every 7-10 days heavily to encourage deep roots—do not water every day—shallow roots will result. Approximately 5-12 gallons per week is needed to keep your tree thriving.

Glossary

Acid soil - Soil with a pH of 1.0 to 6.9; contains little lime
Acuminate - Tapering to a slender point
Alkaline soil - Soil with a pH of 7.1 to 14.0
Apex - Narrowed or pointed end
Cordate - Shaped like a heart
Divergent - Spreading apart; pointing away
Drupe - A stone fruit, such as a plum
Fissures - A narrow opening or crack of considerable length and depth
Gabrous - Smooth, shiny; not hairy
Imbricate - Lying lapped over each other in a regular order
Lobed - Divided into rounded, incompletely separate sections
Ovate - Shaped like an egg
Petiole - Supporting stalk of a leaf
Samara - A light, winged fruit
Serrate - Notched or toothed on the end
Sinuate dentate - Having between wavy and pointed pointed projections
Sinus - Indentation between two leaf lobes
Stipules - Either of a pair of appendages born at the base of a leaf
Terminal buds - Situated at the end of a branch
Tomentose - Covered with densely matted hairs
Understory - Vegetative layer between forest canopy and ground cover

For more information...

Check out the following sources for even more information about trees:


Forest and Shade Trees fo Iowa by Peter J. Van Der Linden and Donald R. Farrar. Iowa State University Press, Ames, 1984.


For a listing of trees that grow naturally in Iowa, see: http://www.ag.iastate.edu/departments/forestry/ext/native.html.

For additional information about many species, including information on where they grow and range maps, see: http://www.na.fs.fed.us/spfo/pubs/silvics_manual/table_of_contents.htm.

For more information on Plant Hardiness Zones, see The United States National Arboretum USDA Plant Hardiness Zone Map at: http://www.ars-grin.gov/ars/Beltsville/na/hardzone/ushzmap.html.
# Trees & Shrubs

## Native in Iowa

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Height</th>
<th>Growth Rate</th>
<th>Shade Tolerance</th>
<th>Natural Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Basswood</td>
<td>Tilia americana</td>
<td>80 ft 24 m</td>
<td>fast</td>
<td>tolerant</td>
<td>moist, upland woods &amp; slopes; protected bluffs &amp; ravines</td>
</tr>
<tr>
<td>American Elm</td>
<td>Ulmus americana</td>
<td>70 ft 21 m</td>
<td>medium</td>
<td>intermediate</td>
<td>woods; especially alluvial flats</td>
</tr>
<tr>
<td>American Hazelnut</td>
<td>Corylus americana</td>
<td>15 ft 5 m</td>
<td>medium</td>
<td>intermediate</td>
<td>woodland openings and borders</td>
</tr>
<tr>
<td>American Hornbeam</td>
<td>Carpinus caroliniana</td>
<td>35 ft 11 m</td>
<td>slow</td>
<td>very tolerant</td>
<td>moist, but sufficiently drained</td>
</tr>
<tr>
<td>Balsam Fir</td>
<td>Abies balsamifera</td>
<td>50 ft 15 m</td>
<td>slow</td>
<td>very tolerant</td>
<td>steep, N-facing bluffs, limited to extreme NE Iowa</td>
</tr>
<tr>
<td>Balsam Poplar</td>
<td>Populus balsamifera</td>
<td>50 ft 15 m</td>
<td>fast</td>
<td>very intolerant</td>
<td>moist woods; woodland edges</td>
</tr>
<tr>
<td>Beaked Hazelnut</td>
<td>Coryluscomuta</td>
<td>6 ft 2 m</td>
<td>medium</td>
<td>intermediate</td>
<td>N-facing wooded slopes; algific talus slopes</td>
</tr>
<tr>
<td>Bebb Willow</td>
<td>Salix bebbiana</td>
<td>25 ft 8 m</td>
<td>fast</td>
<td>intolerant</td>
<td>moist ground; N-facing talus slopes; fens</td>
</tr>
<tr>
<td>Bigtooth Aspen</td>
<td>Populus grandidentata</td>
<td>45 ft 14 m</td>
<td>fast</td>
<td>very intolerant</td>
<td>moist to dry; usually upland woods</td>
</tr>
<tr>
<td>Bitternut Hickory</td>
<td>Carya cordiformis</td>
<td>70 ft 21 m</td>
<td>slow</td>
<td>intolerant</td>
<td>upland woods; wooded slopes; bluffs</td>
</tr>
<tr>
<td>Black Ash</td>
<td>Fraxinus nigra</td>
<td>50 ft 15 m</td>
<td>medium</td>
<td>intolerant</td>
<td>moist, wooded slopes; alluvium</td>
</tr>
<tr>
<td>Black Cherry</td>
<td>Prunus serotina</td>
<td>50 ft 15 m</td>
<td>medium</td>
<td>intolerant</td>
<td>moist, wooded slopes; upland woods</td>
</tr>
<tr>
<td>Black Maple</td>
<td>Acer nigrum</td>
<td>60 ft 18 m</td>
<td>medium</td>
<td>very tolerant</td>
<td>moist woods; wooded slopes</td>
</tr>
<tr>
<td>Black Oak</td>
<td>Quercus velutina</td>
<td>60 ft 18 m</td>
<td>medium</td>
<td>intermediate</td>
<td>upland woods; sandy, alluvial flats</td>
</tr>
<tr>
<td>Black Walnut</td>
<td>Juglans nigra</td>
<td>80 ft 24 m</td>
<td>fast</td>
<td>intolerant</td>
<td>moist woodlands; especially alluvial woods</td>
</tr>
<tr>
<td>Black Willow</td>
<td>Salix nigra</td>
<td>50 ft 15 m</td>
<td>fast</td>
<td>very intolerant</td>
<td>streambanks; lake margins; alluvial woods</td>
</tr>
<tr>
<td>Blackhaw Viburnum</td>
<td>Viburnum prunifolium</td>
<td>12 ft 4 m</td>
<td>slow</td>
<td>intermediate</td>
<td>woodland borders</td>
</tr>
<tr>
<td>Blackjack Oak</td>
<td>Quercus marilandica</td>
<td>35 ft 11 m</td>
<td>slow</td>
<td>intermediate</td>
<td>upland woods; SE Iowa</td>
</tr>
<tr>
<td>Blue Ash</td>
<td>Fraxinus quadrangulata</td>
<td>40 ft 12 m</td>
<td>medium</td>
<td>intermediate</td>
<td>rocky bluffs</td>
</tr>
<tr>
<td>Boxelder</td>
<td>Acer negundo</td>
<td>50 ft 15 m</td>
<td>fast</td>
<td>tolerant</td>
<td>alluvial woods; moist, disturbed areas; riparian areas</td>
</tr>
<tr>
<td>Buffaloberry</td>
<td>Sheperdia argentea</td>
<td>8 ft 2 m</td>
<td>medium</td>
<td>intermediate</td>
<td>dry uplands; loess bluffs; prairie-woodland edges</td>
</tr>
<tr>
<td>Bur Oak</td>
<td>Quercus macrocarpa</td>
<td>100 ft 30 m</td>
<td>slow</td>
<td>intermediate</td>
<td>dry uplands; slopes</td>
</tr>
<tr>
<td>Butternut</td>
<td>Juglans cinerea</td>
<td>60 ft 18 m</td>
<td>slow</td>
<td>intolerant</td>
<td>moist, wooded slopes; alluvial woods</td>
</tr>
</tbody>
</table>
## Trees & Shrubs Native in Iowa

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Height</th>
<th>Growth Rate</th>
<th>Shade Tolerance</th>
<th>Natural Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada Plum</td>
<td>Prunus nigra</td>
<td>20 ft</td>
<td>medium</td>
<td>intolerant</td>
<td>steep, N- or E-facing, wooded slopes</td>
</tr>
<tr>
<td>Canadian Yew</td>
<td>Taxus canadensis</td>
<td>3 ft</td>
<td>slow</td>
<td>tolerant</td>
<td>rocky bluffs; moist wooded slopes</td>
</tr>
<tr>
<td>Chinkapin Dwarf Oak</td>
<td>Quercus prinoides</td>
<td>20 ft</td>
<td>slow</td>
<td>intolerant</td>
<td>dry ridges; rocky bluffs</td>
</tr>
<tr>
<td>Chinkapin Oak</td>
<td>Quercus muhlenbergii</td>
<td>50 ft</td>
<td>slow</td>
<td>intolerant</td>
<td>exposed bluffs; rocky slopes</td>
</tr>
<tr>
<td>Chokecherry</td>
<td>Prunus virginiana</td>
<td>20 ft</td>
<td>medium</td>
<td>very intolerant</td>
<td>open woods; woodland borders; rocky bluffs</td>
</tr>
<tr>
<td>Cockspur Hawthorn</td>
<td>Crataegus crus-galli</td>
<td>20 ft</td>
<td>slow</td>
<td>intermediate</td>
<td>open, upland woods; pastures</td>
</tr>
<tr>
<td>Common Juniper</td>
<td>Juniperus communis</td>
<td>10 ft</td>
<td>medium</td>
<td>intolerant</td>
<td>dry, wooded bluffs; rocky slopes</td>
</tr>
<tr>
<td>Common Pawpaw</td>
<td>Asimina triloba</td>
<td>25 ft</td>
<td>medium</td>
<td>----</td>
<td>wooded alluvium; wooded slopes: limited to southern IA</td>
</tr>
<tr>
<td>Common Persimmon</td>
<td>Diospyros virginiana</td>
<td>40 ft</td>
<td>slow</td>
<td>very tolerant</td>
<td>sandstone bluffs</td>
</tr>
<tr>
<td>Cottonwood</td>
<td>Populus deltoides</td>
<td>100 ft</td>
<td>very fast</td>
<td>very intolerant</td>
<td>moist habitats; usually on alluvium; riparian areas</td>
</tr>
<tr>
<td>Coyote Willow</td>
<td>Salix exigua</td>
<td>25 ft</td>
<td>fast</td>
<td>intolerant</td>
<td>streambanks; sandbars; alluvial bottoms</td>
</tr>
<tr>
<td>Dotted Hawthorn</td>
<td>Crataegus punctata</td>
<td>25 ft</td>
<td>slow</td>
<td>intermediate</td>
<td>open woods; pastures</td>
</tr>
<tr>
<td>Downy Hawthorn</td>
<td>Crataegus mollis</td>
<td>30 ft</td>
<td>slow</td>
<td>intermediate</td>
<td>open, upland woods; sandy alluvium; openings</td>
</tr>
<tr>
<td>Downy Serviceberry</td>
<td>Amelanchier arborea</td>
<td>25 ft</td>
<td>medium</td>
<td>tolerant</td>
<td>moist, wooded slopes; rocky, wooded slopes</td>
</tr>
<tr>
<td>Eastern Red Cedar</td>
<td>Juniperus virginiana</td>
<td>40 ft</td>
<td>medium</td>
<td>very intolerant</td>
<td>dry, open woods; rocky bluffs; pastures</td>
</tr>
<tr>
<td>Eastern Redbud</td>
<td>Cercis canadensis</td>
<td>15 ft</td>
<td>slow</td>
<td>tolerant</td>
<td>wooded ravines; wooded bluffs; alluvium; southern IA</td>
</tr>
<tr>
<td>Eastern Wahoo</td>
<td>Euonymus atropurpureus</td>
<td>15 ft</td>
<td>medium</td>
<td>tolerant</td>
<td>moist woods</td>
</tr>
<tr>
<td>Elderberry</td>
<td>Sambucus canadensis</td>
<td>8 ft</td>
<td>fast</td>
<td>intermediate</td>
<td>edges of moist woods; shorelines; fencerows</td>
</tr>
<tr>
<td>Fleshy Hawthorn</td>
<td>Crataegus succulenta</td>
<td>30 ft</td>
<td>slow</td>
<td>intermediate</td>
<td>open woods; woodland edges</td>
</tr>
<tr>
<td>Gray Dogwood</td>
<td>Cornus racemosa</td>
<td>10 ft</td>
<td>medium</td>
<td>tolerant</td>
<td>upland woods</td>
</tr>
<tr>
<td>Green Ash</td>
<td>Fraxinus pennsylvanica</td>
<td>60 ft</td>
<td>fast</td>
<td>tolerant</td>
<td>alluvial or low, moist woods</td>
</tr>
<tr>
<td>Hackberry</td>
<td>Celtis occidentalis</td>
<td>60 ft</td>
<td>slow</td>
<td>intermediate</td>
<td>moist low woods; open, disturbed soil</td>
</tr>
<tr>
<td>Heart-Leaved Willow</td>
<td>Salix rigida</td>
<td>10 ft</td>
<td>fast</td>
<td>very intolerant</td>
<td>streambanks; wet lowlands; ditches</td>
</tr>
</tbody>
</table>
# Trees & Shrubs Native in Iowa

<table>
<thead>
<tr>
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<th>Natural Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honeylocust</td>
<td>Gleditsia triacanthos</td>
<td>70 ft</td>
<td>fast</td>
<td>intolerant</td>
<td>alluvial woods; old pastures; sandy prairies</td>
</tr>
<tr>
<td>Hoptree / Water Ash</td>
<td>Ptelea trifoliata</td>
<td>15 in</td>
<td>slow</td>
<td>intermediate</td>
<td>along streams; rocky bluffs; sandy habitats</td>
</tr>
<tr>
<td>Hortulan Plum</td>
<td>Prunus hortulana</td>
<td>15 in</td>
<td>medium</td>
<td>very intolerant</td>
<td>road cuts; low woods</td>
</tr>
<tr>
<td>Inland Serviceberry</td>
<td>Amelanchier interior</td>
<td>20 in</td>
<td>medium</td>
<td>tolerant</td>
<td>dry sandstone ledges</td>
</tr>
<tr>
<td>Ironwood</td>
<td>Ostria virginiana</td>
<td>30 ft</td>
<td>slow</td>
<td>tolerant</td>
<td>upland wood; wooded slopes</td>
</tr>
<tr>
<td>Kentucky Coffeetree</td>
<td>Gymnocladus dioicus</td>
<td>60 ft</td>
<td>medium</td>
<td>intermediate</td>
<td>moist, wooded ravines; alluvium</td>
</tr>
<tr>
<td>Margaret’s Hawthorn</td>
<td>Crataegus margaretta</td>
<td>30 ft</td>
<td>slow</td>
<td>intolerant</td>
<td>upland woods; slopes; open alluvial woods</td>
</tr>
<tr>
<td>Meadow Willow</td>
<td>Salix petiolaris</td>
<td>10 in</td>
<td>fast</td>
<td>very intolerant</td>
<td>moist prairie remnants; marsh edges; fens</td>
</tr>
<tr>
<td>Mexican Plum</td>
<td>Prunus mexicana</td>
<td>20 in</td>
<td>medium</td>
<td>very intolerant</td>
<td>roadsides; fencerows</td>
</tr>
<tr>
<td>Missouri River Willow</td>
<td>Salix eriocephala</td>
<td>40 in</td>
<td>fast</td>
<td>intolerant</td>
<td>streambanks; wet lowlands; ditches</td>
</tr>
<tr>
<td>Mountain Maple</td>
<td>Acer spicatum</td>
<td>20 in</td>
<td>slow</td>
<td>tolerant</td>
<td>steep, moist, N- &amp; E-facing wooded slopes</td>
</tr>
<tr>
<td>Nannyberry</td>
<td>Viburnum lentago</td>
<td>15 in</td>
<td>medium</td>
<td>intermediate</td>
<td>upland woods</td>
</tr>
<tr>
<td>Northern Pin Oak</td>
<td>Quercus ellipsoidalis</td>
<td>50 ft</td>
<td>medium</td>
<td>tolerant</td>
<td>open, sandy, upland woods</td>
</tr>
<tr>
<td>Ohio Buckeye</td>
<td>Aesculus glabra</td>
<td>50 ft</td>
<td>medium</td>
<td>tolerant</td>
<td>moist or sandy, lowland woods</td>
</tr>
<tr>
<td>Pagoda Dogwood</td>
<td>Cornus alternifolia</td>
<td>20 in</td>
<td>slow</td>
<td>tolerant</td>
<td>moist, upland woods</td>
</tr>
<tr>
<td>Paper Birch</td>
<td>Betula papyrifera</td>
<td>70 ft</td>
<td>fast</td>
<td>intolerant</td>
<td>steep, sheltered, rocky bluffs; N-facing slopes; NE Iowa</td>
</tr>
<tr>
<td>Peachleaf Willow</td>
<td>Salix amygdaloides</td>
<td>40 ft</td>
<td>fast</td>
<td>intolerant</td>
<td>along streams</td>
</tr>
<tr>
<td>Pear Hawthorn</td>
<td>C. calpodendron</td>
<td>30 in</td>
<td>slow</td>
<td>intermediate</td>
<td>prairie openings in upland woods; edges</td>
</tr>
<tr>
<td>Pecan</td>
<td>Carya illinoensis</td>
<td>70 ft</td>
<td>slow</td>
<td>intermediate</td>
<td>alluvial woods; SE Iowa</td>
</tr>
<tr>
<td>Pignut Hickory</td>
<td>Carya glabra</td>
<td>70 ft</td>
<td>slow</td>
<td>intermediate</td>
<td>dry, upland woods</td>
</tr>
<tr>
<td>Pin Cherry</td>
<td>Prunus pennsylvanica</td>
<td>30 in</td>
<td>fast</td>
<td>very intolerant</td>
<td>woods; clearings</td>
</tr>
<tr>
<td>Pin Oak</td>
<td>Quercus palustris</td>
<td>60 ft</td>
<td>slow</td>
<td>intolerant</td>
<td>alluvial woods</td>
</tr>
<tr>
<td>Post Oak</td>
<td>Quercus stellata</td>
<td>30 ft</td>
<td>slow</td>
<td>intolerant</td>
<td>dry, open, upland woods; SE Iowa</td>
</tr>
</tbody>
</table>
## Trees & Shrubs Native in Iowa

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Prairie Crabapple</td>
<td>Malus ioensis</td>
<td>22 ft 7 m</td>
<td>medium</td>
<td>intolerant</td>
<td>dry, bushy uplands; open woods; prairie remnants</td>
</tr>
<tr>
<td>Prickly Ash</td>
<td>Z. americanum</td>
<td>12 ft 4 m</td>
<td>slow</td>
<td>intolerant</td>
<td>edges; upland woods; openings</td>
</tr>
<tr>
<td>Pussy Willow</td>
<td>Salix discolor</td>
<td>15 ft 5 m</td>
<td>fast</td>
<td>intolerant</td>
<td>streambanks; low prairies; marsh edges</td>
</tr>
<tr>
<td>Quaking Aspen</td>
<td>Populus tremuloides</td>
<td>40 ft 12 m</td>
<td>fast</td>
<td>very intolerant</td>
<td>open woods; moist prairies; woodland edges</td>
</tr>
<tr>
<td>Red Maple</td>
<td>Acer rubrum</td>
<td>50 ft 15 m</td>
<td>medium</td>
<td>tolerant</td>
<td>wooded bluffs</td>
</tr>
<tr>
<td>Red Mulberry</td>
<td>Morus rubra</td>
<td>35 ft 11 m</td>
<td>medium</td>
<td>tolerant</td>
<td>moist, alluvial woods; wooded slopes</td>
</tr>
<tr>
<td>Red Oak</td>
<td>Quercus rubra</td>
<td>70 ft 21 m</td>
<td>medium</td>
<td>intermediate</td>
<td>moist, upland woods</td>
</tr>
<tr>
<td>Red-Osier Dogwood</td>
<td>Cornus stolonifera</td>
<td>8 ft 2 m</td>
<td>fast</td>
<td>tolerant</td>
<td>shores; lake &amp; pond margins; fens</td>
</tr>
<tr>
<td>River Birch</td>
<td>Betula nigra</td>
<td>80 ft 24 m</td>
<td>fast</td>
<td>intolerant</td>
<td>alluvial woods; stream margins</td>
</tr>
<tr>
<td>Rock Elm</td>
<td>Ulmus thomasii</td>
<td>70 ft 21 m</td>
<td>medium</td>
<td>intermediate</td>
<td>bases of moist, wooded slopes</td>
</tr>
<tr>
<td>Rough-Leaf Dogwood</td>
<td>Cornus drummondii</td>
<td>8 ft 2 m</td>
<td>medium</td>
<td>tolerant</td>
<td>moist woods; along streams; woodland borders</td>
</tr>
<tr>
<td>Roundleaf Dogwood</td>
<td>Cornus rugosa</td>
<td>8 ft 2 m</td>
<td>medium</td>
<td>tolerant</td>
<td>rich, upland woods; N-facing, wooded slopes</td>
</tr>
<tr>
<td>Roundleaf Serviceberry</td>
<td>A. sanguinea</td>
<td>20 ft 6 m</td>
<td>medium</td>
<td>tolerant</td>
<td>sandstone ledges; algific slopes</td>
</tr>
<tr>
<td>Sandbar Willow</td>
<td>Salix interior</td>
<td>30 ft 9 m</td>
<td>fast</td>
<td>intolerant</td>
<td>streambanks; sandbars; alluvial bottoms</td>
</tr>
<tr>
<td>Saskatoon Serviceberry</td>
<td>Amelanchier alnifolia</td>
<td>18 ft 5 m</td>
<td>medium</td>
<td>tolerant</td>
<td>thickets; margin of lakes</td>
</tr>
<tr>
<td>Shagbark Hickory</td>
<td>Carya ovata</td>
<td>70 ft 21 m</td>
<td>slow</td>
<td>intermediate</td>
<td>dry, upland woods; bluffs; statewide</td>
</tr>
<tr>
<td>Shellbark Hickory</td>
<td>Carya laciniosa</td>
<td>70 ft 21 m</td>
<td>slow</td>
<td>very tolerant</td>
<td>alluvial woods; southern Iowa</td>
</tr>
<tr>
<td>Shining Oak</td>
<td>Quercus imbricaria</td>
<td>45 ft 14 m</td>
<td>slow</td>
<td>intermediate</td>
<td>bottomlands; dry hillsides; southern Iowa</td>
</tr>
<tr>
<td>Shining Willow</td>
<td>Salix lucida</td>
<td>25 ft 8 m</td>
<td>fast</td>
<td>intolerant</td>
<td>low, moist ground; lakeshores; streambanks; fens</td>
</tr>
<tr>
<td>Showy Mountainash</td>
<td>Sorbus decora</td>
<td>20 ft 6 m</td>
<td>medium</td>
<td>intolerant</td>
<td>hedges; woodland margins; sandstone outcrops</td>
</tr>
<tr>
<td>Silky Dogwood</td>
<td>Cornus obliqua</td>
<td>10 ft 3 m</td>
<td>medium</td>
<td>tolerant</td>
<td>wet thickets; low woods; wet prairies</td>
</tr>
<tr>
<td>Silver Maple</td>
<td>Acer saccharinum</td>
<td>120 ft 36 m</td>
<td>very fast</td>
<td>tolerant</td>
<td>alluvial woods; riparian areas</td>
</tr>
<tr>
<td>Slippery Elm</td>
<td>Ulmus rubra</td>
<td>60 ft 18 m</td>
<td>medium</td>
<td>tolerant</td>
<td>wooded slopes &amp; bluffs</td>
</tr>
</tbody>
</table>
## Trees & Shrubs Native in Iowa

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Height</th>
<th>Growth Rate</th>
<th>Shade Tolerance</th>
<th>Natural Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smooth Sumac</td>
<td>Rhus glabra</td>
<td>15 ft</td>
<td>medium</td>
<td>intermediate</td>
<td>woodland openings; edges; disturbed areas</td>
</tr>
<tr>
<td>Speckled Alder</td>
<td>Alnus incana</td>
<td>30 ft</td>
<td>medium</td>
<td>intermediate</td>
<td>sandy soil in alluvial woods; streamsides; seeps</td>
</tr>
<tr>
<td>Staghorn Sumac</td>
<td>Rhus typhina</td>
<td>20 ft</td>
<td>medium</td>
<td>intermediate</td>
<td>dry openings in woods; edges; rocky slopes</td>
</tr>
<tr>
<td>Sugar Maple</td>
<td>Acer saccharum</td>
<td>60 ft</td>
<td>medium</td>
<td>very tolerant</td>
<td>moist woods; wooded slopes</td>
</tr>
<tr>
<td>Swamp White Oak</td>
<td>Quercus bicolor</td>
<td>70 ft</td>
<td>slow</td>
<td>intermediate</td>
<td>alluvial woods</td>
</tr>
<tr>
<td>Sycamore</td>
<td>Platanus occidentalis</td>
<td>100 ft</td>
<td>fast</td>
<td>intermediate</td>
<td>alluvial woods</td>
</tr>
<tr>
<td>White Ash</td>
<td>Fraxinus americana</td>
<td>70 ft</td>
<td>medium</td>
<td>intermediate</td>
<td>upland woods</td>
</tr>
<tr>
<td>White Oak</td>
<td>Quercus alba</td>
<td>100 ft</td>
<td>slow</td>
<td>intermediate</td>
<td>uplands woods; dry slopes</td>
</tr>
<tr>
<td>White Pine</td>
<td>Pinus strobus</td>
<td>90 ft</td>
<td>medium</td>
<td>intermediate</td>
<td>sandy or rocky, steep, wooded slopes &amp; ledges</td>
</tr>
<tr>
<td>Wild Plum</td>
<td>Prunus americana</td>
<td>20 ft</td>
<td>fast</td>
<td>very intolerant</td>
<td>fencerows; woodland edges; open woods</td>
</tr>
<tr>
<td>Witchhazel</td>
<td>Hamamelis virginiana</td>
<td>10 ft</td>
<td>medium</td>
<td>intermediate</td>
<td>moist, wooded, N-facing slopes</td>
</tr>
<tr>
<td>Yellow Birch</td>
<td>Betula alleghaniensis</td>
<td>100 ft</td>
<td>medium</td>
<td>intermediate</td>
<td>N-facing, rocky, wooded slopes</td>
</tr>
</tbody>
</table>

**Adapted from:**

*Trees and Shrubs Native to Iowa*
*Iowa State University Forestry Extension*
*Ames, IA 2001*

*Manual of Woody Landscape Plants; Their Identification, Ornamental Characteristics, Culture, Propagation and Uses*
*Michael A. Dirr*
*Athens, GE 1990*