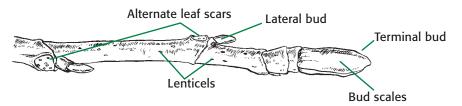
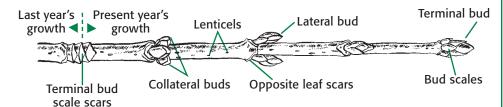


Leaf Structure

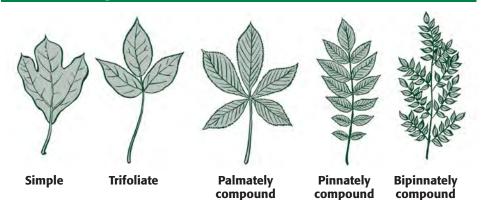
Alternate arrangement



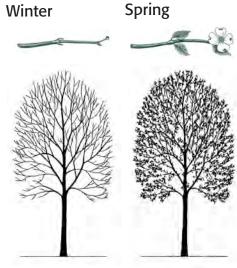
Opposite arrangement

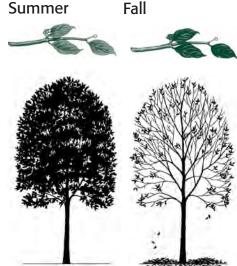


Leaf Composition

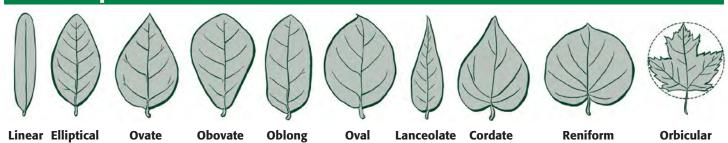


Changing Seasons



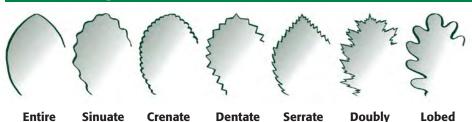


Leaf Shapes



serrate

Leaf Margins



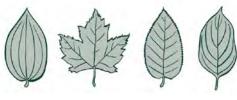
Entire

Sinuate

Crenate

Lobed

Leaf Venation



Parallel

Palmate

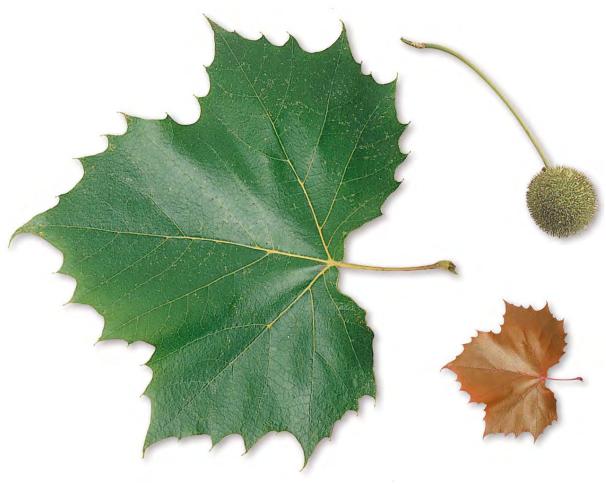
Pinnate Arcuate

Contents



American sycamore

Platanus occidentalis



Sycamore is one of the largest eastern hardwoods. Sycamore can be used to stabilize streambanks along with other bottomland species, where it provides nest sites for large birds such as bald eagle and great blue heron.

Height: 90 ft, spread 90 ft

Leaves: alternate, simple, 4"-8" in diameter with 3-5 main lobes, edges coarsely toothed, yellow-green above, paler below

Flowers: tiny; greenish, in 1–2 ball-like drooping clusters **Fruit:** many seeded ball 1"–1½" in diameter on a stem 3"–6" long; each seed attached to a hairy plume

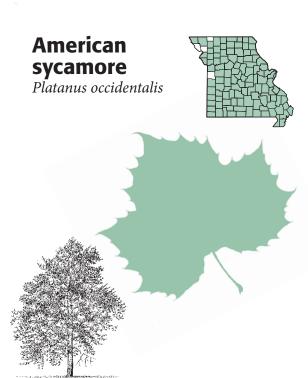
Bark: distinctive smooth whitish and mottled bark on upper trunk and branches; lower bark thin, dark brown, scaly

Ideal site: wet soil, intermediate sun

Value to man: erosion control, landscaping, wood products

Value to wildlife: cover, dens

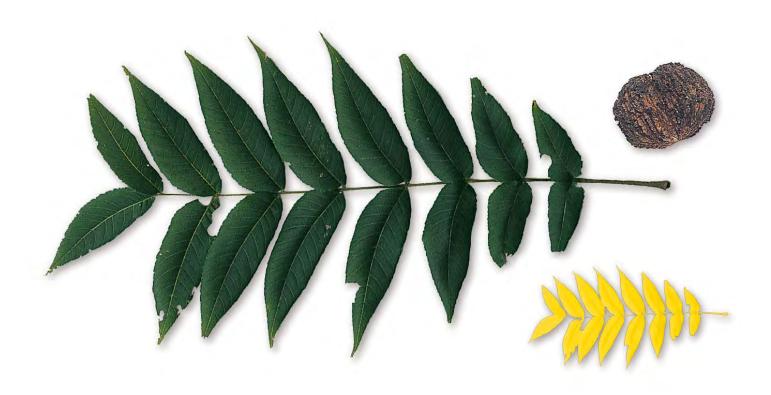
Growth rate: fast





Black walnut

Juglans nigra



Black walnut is one of the most scarce and valuable native hardwoods. It is prized for its nuts and lumber. A chemical in the leaves and nuts will kill some plants such as tomatoes and apples.

Height: 85 ft, spread 85 ft

Leaves: alternate, compound, 12"–24" long with 13–23 leaflets; each leaflet 2"–4" long, lance-shaped, edges finely

toothed, yellow-green

Flowers: yellow-green catkins

Fruit: nut, 1"-1½" in diameter, covered with a thick yellow-

green fibrous husk

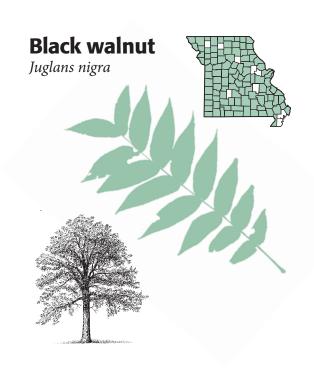
Bark: young bark smooth and gray; older bark dark brown

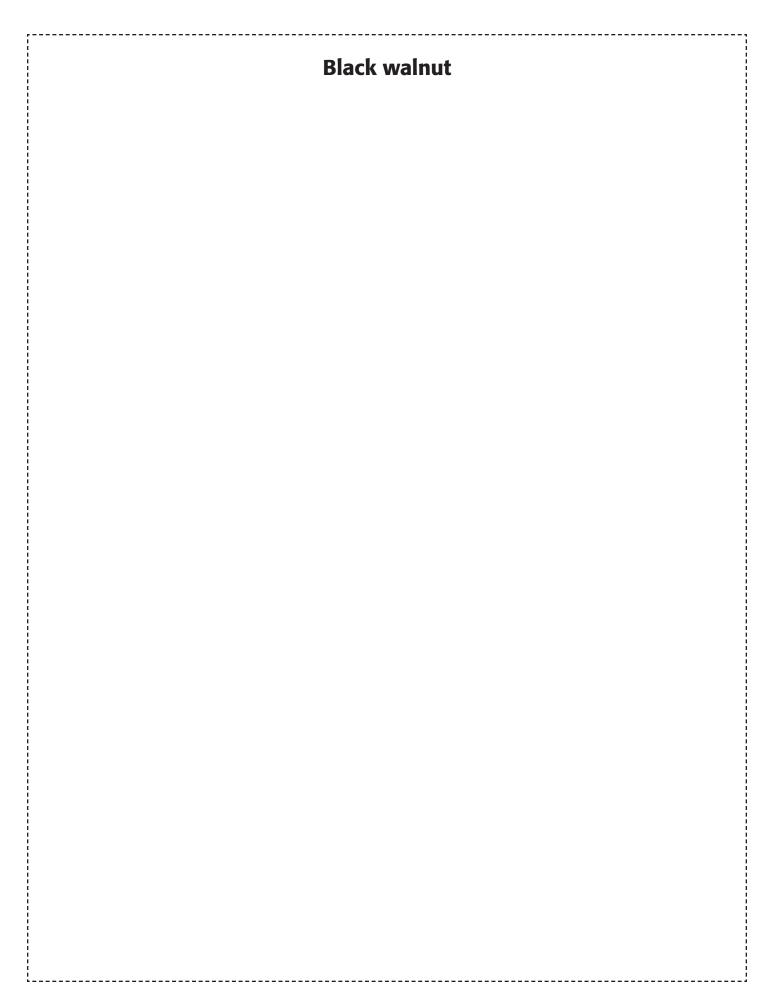
and furrowed

Ideal site: moist soil, full sun

Value to man: wood products, food Value to wildlife: food, cover, dens

Growth rate: medium





Eastern redbud

Cercis canadensis



Redbud is a small to medium understory tree found in nearly every county in Missouri. It is very showy in the spring when the leafless twigs are covered with masses of pink flowers.

Height: 30 ft, spread 30 ft

Leaves: alternate, simple, heart-shaped, 3"–5" long, dark green **Flowers:** purplish-pink, pea-like, appear before the leaves in

spring

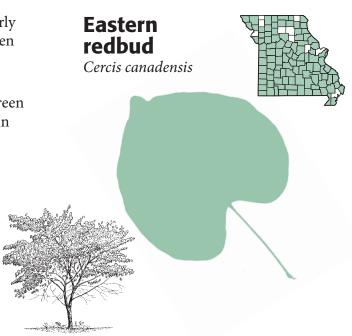
Fruit: flat pod, 3" long containing small seeds

Bark: dark gray or brown with reddish inner bark showing

Ideal site: average soil, shade

Value to man: windbreaks, landscaping

Value to wildlife: food Growth rate: medium





Eastern red cedar

Juniperus virginiana



A true juniper found on a variety of sites throughout Missouri. It can quickly colonize old fields and fence rows and it is also found on dry limestone glades where it forms nearly pure stands.

Height: 60 ft, spread 40 ft

Leaves: 1/16" long, scale-like or needle-like, longer on new

growth, dark green

Fruit: small, round, fleshy, bluish berry-like cone

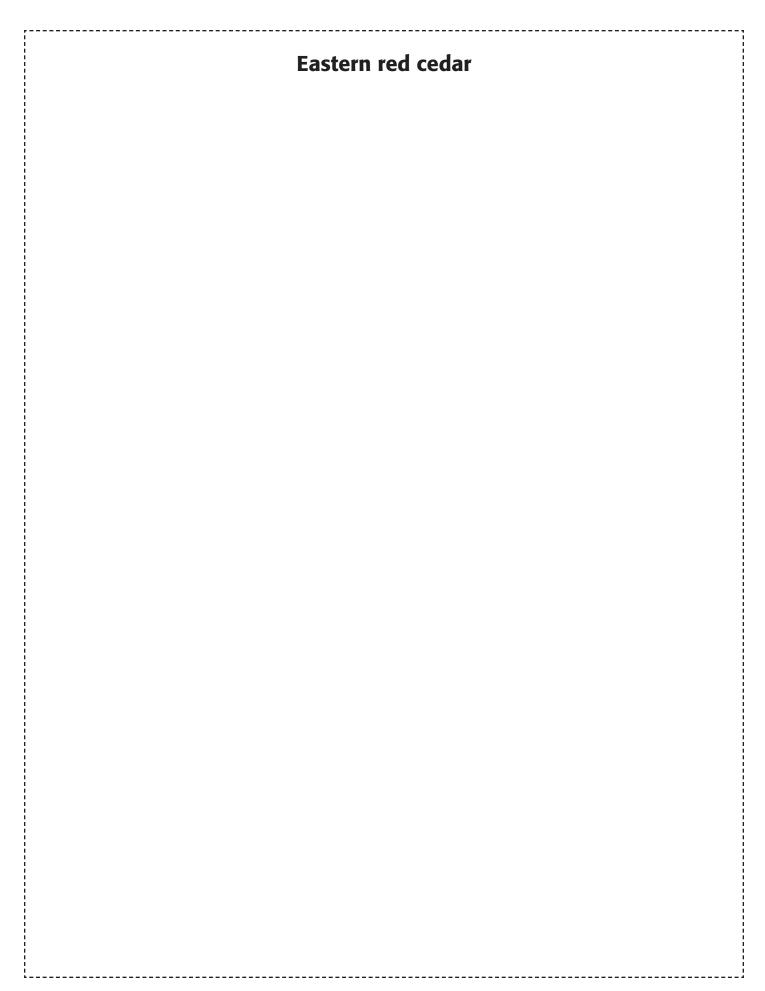
Bark: thin, light reddish-brown, shreddy **Ideal site:** wide soil range, full sun

Value to man: windbreaks, erosion control, wood products

Value to wildlife: food, cover

Growth rate: slow





Flowering dogwood

Cornus florida



A beautiful tree with showy early spring flowers, red berries and scarlet fall foliage. Dogwood should be planted where it is shaded. Flowering dogwood is Missouri's state tree.

Height: 40 ft, spread 35 ft

Leaves: opposite, simple, egg-shaped, 3"-5" long, edges

slightly wavy, dark green

Flowers: small, surrounded by 4 large white petal-like bracts;

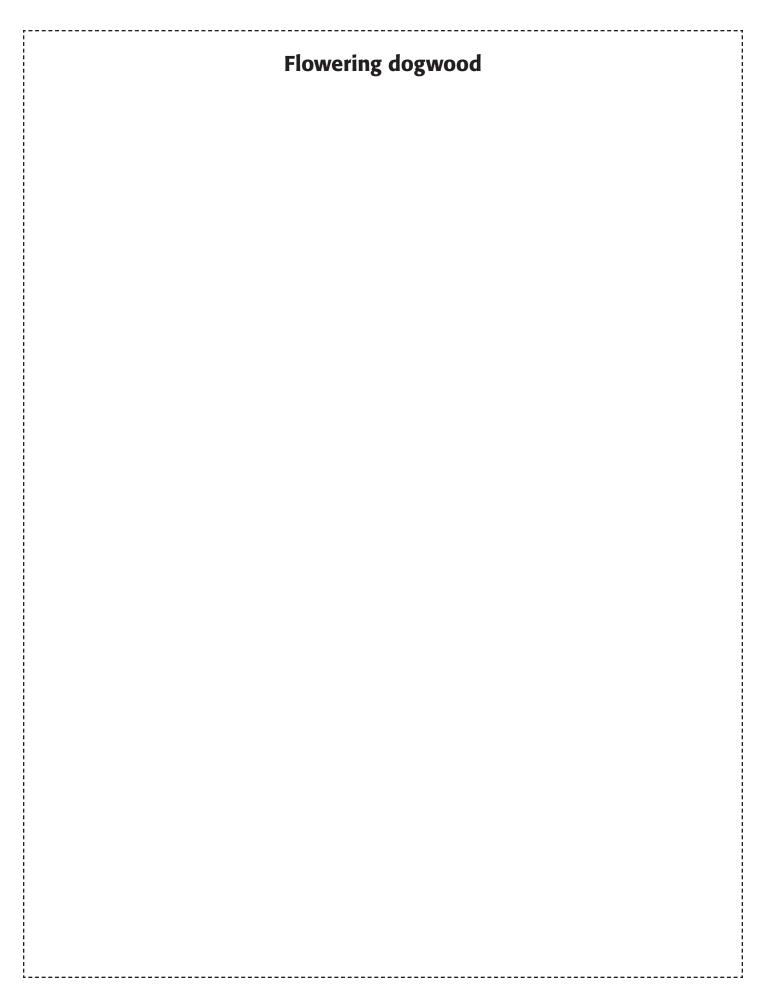
appear before the leaves in early spring **Fruit:** scarlet, egg-shaped berries, ½" long

Bark: purplish-green on young twigs; older bark reddish-

brown, rough, broken into small square plates

Ideal site: moist soil, shade Value to man: landscaping Value to wildlife: food Growth rate: medium





Northern red oak

Quercus rubra



Northern red oak is one of the most widespread and commercially important of the oaks. The tree is found throughout Missouri except in the southernmost counties of the Bootheel.

Height: 90 ft, spread 85 ft

Leaves: alternate, simple, 5"–8" long, oblong, 7–10 bristle-

tipped toothed lobes, shiny dark green

Flowers: male flowers in yellow-green catkins; female flowers

inconspicuous

Fruit: acorn, 1" long with a flat, saucer-like cap

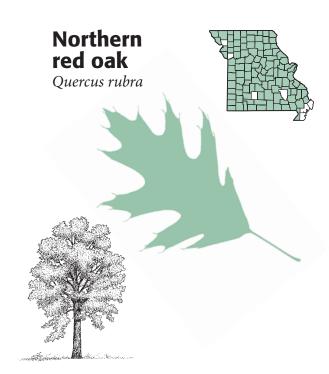
Bark: smooth, dark brown on young trees becoming wide, flat ridges separated by shallow fissures; rough and furrowed on old trees

Ideal site: moist soil, intermediate sun

Value to man: windbreaks, landscaping, wood products

Value to wildlife: food, cover, dens

Growth rate: medium





Pin oak

Quercus palustris



Under natural conditions a medium-sized tree of moist valleys, along streams, ponds and swamps, but also found on dry locations. Pin oak grows faster than other oak species and has become a much planted ornamental.

Height: 65 ft, spread 65 ft

Leaves: alternate, simple, 3"-7" long, 5-7 bristle-tipped toothed lobes, lobes deeply divided, shiny dark green

Flowers: male flowers in yellow-green catkins; female flowers

inconspicuous

Fruit: acorn, ½" long with a thin cap

Bark: thin, smooth gray bark on young trees; older bark

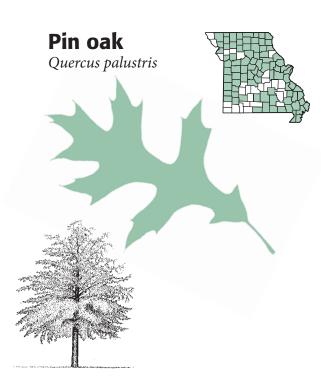
shallowly fissured

Ideal site: wet soil, full sun

Value to man: windbreaks, landscaping, wood products

Value to wildlife: food, cover, dens

Growth rate: fast





Shagbark hickory



Shagbark hickory grows best on bottomland soils, but it can also be found throughout the state on dry upland sites. The wood is used for the handles of axes, hammers, and hatchets and for smoking meat.

Height: 85 ft, spread 45 ft

Leaves: alternate, compound, 8"-14" long, 5 (rarely 7) leaflets; each leaflet 4"-8" long, elliptical, broadest above the middle, edges finely toothed, dark yellow-green

Flowers: male flowers in catkins, female flowers in spikes at the end of branches

Fruit: nut 1"-2½" in diameter, covered with a thick 4-part husk **Bark:** gray, smooth on young trees; older bark breaks into long, thin shaggy plates that curve away from the trunk

Ideal site: average soil, intermediate sun Value to man: wood products, food Value to wildlife: food, cover, dens

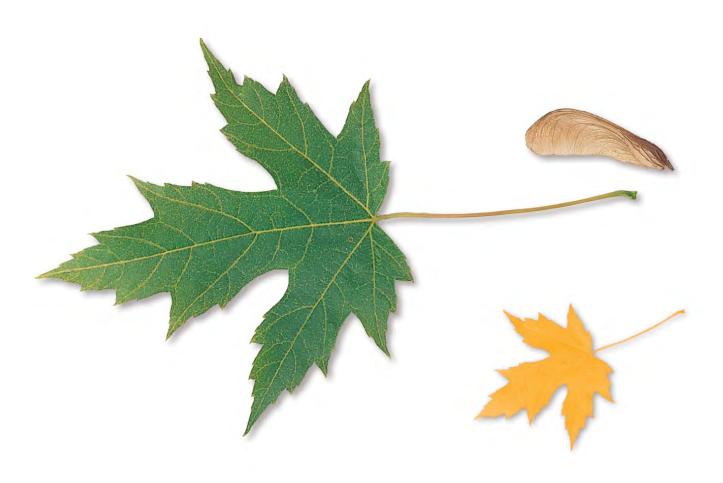
Growth rate: slow





Silver maple

Acer saccharinum



Silver maple is a large, fast-growing tree found in bottomlands. The wood is used commercially as a "soft" hardwood.

Height: 90 ft, spread 90 ft

Leaves: opposite, simple, 4"-6" in diameter, 5 lobes, edges

coarsely toothed, pale green above, silvery below **Flowers:** in clusters along twigs, reddish green

Fruit: winged seed in pairs

Bark: silvery-gray on young trees; older bark gray, breaking

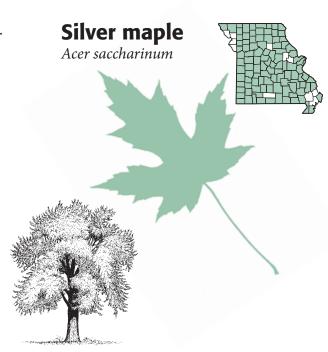
into long thin scaly plates

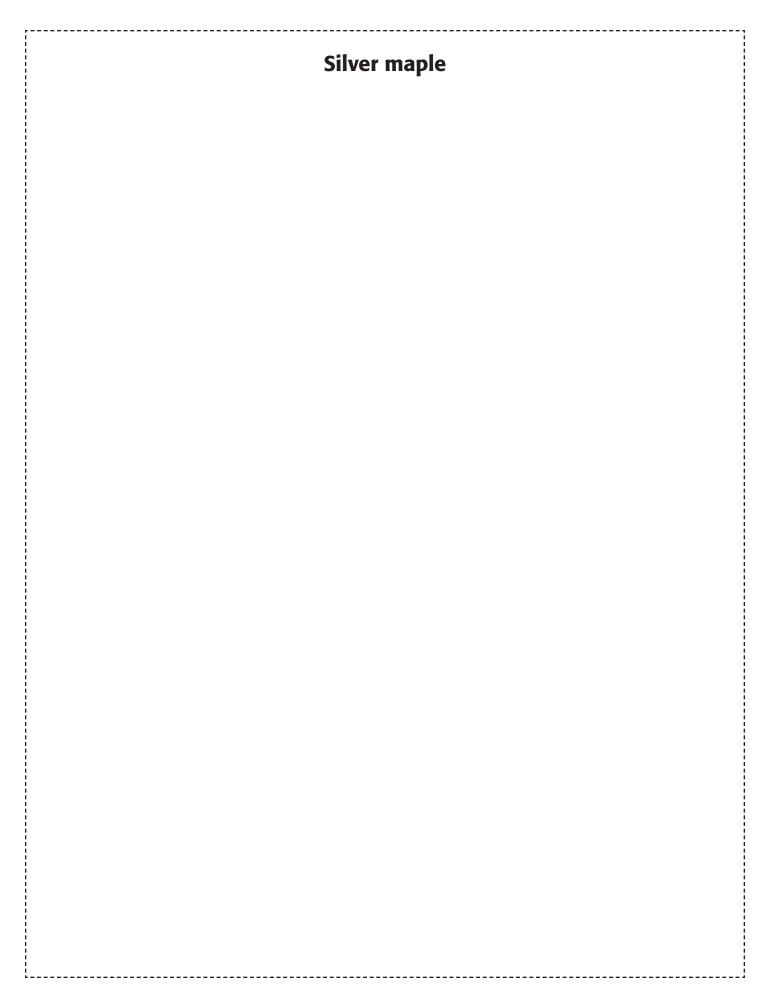
Ideal site: wet soil, intermediate sun

Value to man: erosion control, wood products

Value to wildlife: food, dens

Growth rate: fast





White oak

Quercus alba



The most important hardwood lumber tree in the United States and Missouri, setting the standard of lumber for all other oaks. The wood is outstanding for making tight barrels for whiskey and other liquids.

Height: 85 ft, spread 85 ft

Leaves: alternate, simple, 5"–9" long, 7–9 rounded lobes,

edges smooth, bright green

Flowers: male flowers in yellow-green catkins; female flowers

inconspicuous

Fruit: acorn, ¾" long, shiny brown with a thick warty cap **Bark:** light gray; rough with long, loose scales; becoming

blocky on very old trees

Ideal site: moist soil, intermediate sun **Value to man:** landscaping, wood products

Value to wildlife: food, cover, dens

Growth rate: slow

