

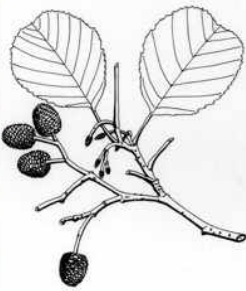





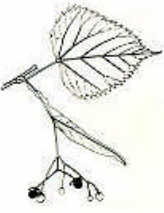









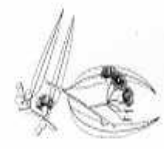







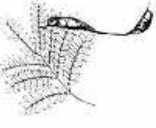



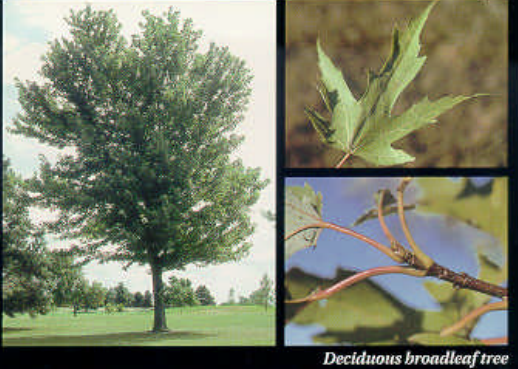

Trees and Shrubs in this guide







Deciduous Trees		
<p><i>Alnus glutinosa</i></p>  <p><i>European Alder</i></p>  <p><i>Deciduous broadleaf tree</i></p>		<p>European Alder <i>Alnus glutinosa</i> *</p> <p>About this tree: Prefers moist to wet soils Grows 50 to 70 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> 1 1/2 to 4 inches long, 1 to 2 1/2 inches wide; elliptical, doubly saw-toothed; shiny dark green <u>Fruit:</u> Cone; 3/4 inches long; clusters of 3 to 5 <u>Twig:</u> Gummy when young; 3-angled pith <u>Bark:</u> Brown, smooth, becoming furrowed</p>
<p><i>Fraxinus pennsylvanica</i></p>  <p><i>Green Ash</i></p>  <p><i>Deciduous broadleaf tree</i></p>		<p>Green Ash <i>Fraxinus pennsylvanica</i> (native)</p> <p>About this tree: Seeds eaten by wood duck, Bobwhite quail, purple finch Prefers deep moist to drought resistant soils Grows 50 to 75 feet tall Hardiness zone 2 Cultivars: Cardan</p> <p>Identification Tips: <u>Leaves:</u> Opposite; pinnately compound; 6 to 10 inches long; 5 to 9 leaflets 2 to 5 inches long, 1 to 1 1/2 inches wide <u>Fruit:</u> 1 1/4 to 2 1/4 inches long; yellowish, hanging in clusters <u>Bark:</u> Gray; furrowed scaly ridges, reddish inner layer</p>
<p><i>Tilia sp.</i></p>  <p><i>Basswood</i></p>  <p><i>Deciduous broadleaf tree</i></p>		<p>Basswood <i>Tilia sp.</i></p> <p>About this tree: Seeds and bark eaten by cottontail rabbit Prefers moist soils Grows 60 to 100 feet tall Hardiness zone 2</p> <p>Identification Tips: <u>Leaves:</u> In 2 rows; 3 to 6 inches long and almost as wide; long, pointed at tip; coarsely saw-toothed; palmately veined; dark green <u>Fruit:</u> 3/8-inch in diameter; nutlike; elliptical or rounded; gray; attached to a leafy bract <u>Twig:</u> Reddish or green; slender; slightly zigzag <u>Bark:</u> Dark gray; smooth, becoming</p>













<p><i>Populus deltoides</i> Eastern Cottonwood</p>  <p>Deciduous broadleaf tree</p> 	<p>furrowed into narrow scaly ridges</p> <p>Eastern Cottonwood <i>Populus deltoides</i> (native) *</p> <p>About this tree: Buds eaten by ruffed grouse and prairie chicken; bark eaten by beaver Grows over 100 feet tall Hardiness zone 2 Cultivars: Mighty Moe, Ohio Red, Platte, Walker</p> <p>Identification Tips: <u>Leaves:</u> 3 to 7 inches long; triangular; long-pointed, curved, coarse teeth; shiny green; leafstalks long, flattened <u>Fruit:</u> 3/8-inch elliptical capsules; splitting into 3 to 4 parts; cottony seeds <u>Bark:</u> Yellowish-green and smooth, becoming light gray, rough <u>Twig:</u> Coarse, large; pointed buds</p>
<p><i>Malus sp.</i> Crabapple</p>  <p>Deciduous broadleaf tree</p> 	<p>Crabapple <i>Malus sp.</i></p> <p>About this tree: Fruit is eaten by deer, pheasant, turkey and other birds Prefers moist to dry soils Grows 15 to 20 feet tall Hardiness zone 3 Cultivars: Midwest, Roselow, Magenta</p> <p>Identification Tips: <u>Leaves:</u> Alternate; 2 to 4 inches long; blunt jointed tip; coarsely toothed edge <u>Fruit:</u> 1 to 1 1/2 inches in diameter; apple; yellow-green <u>Twig:</u> Stout; spreading; sometimes spines on short side branches; new growth is hairy <u>Bark:</u> Lengthwise furrows and ridges; reddish-brown scales</p>
<p><i>Ulmus parvifolia Jacq.</i> Chinese Elm</p>  <p>Deciduous broadleaf tree</p> 	<p>Chinese Elm <i>Ulmus parvifolia</i> *</p> <p>About this tree: Seeds eaten by purple finch, red-breasted grosbeak and cottontail rabbit Prefers moist soils Grows 40 to 50 feet tall Hardiness zone 4</p> <p>Identification Tips: <u>Leaves:</u> In 2 rows; 3/4 to 2 inches long, 3/8 to 3/4 inch wide; elliptical; unequal at base; saw-toothed; shiny above <u>Fruit:</u> 3/8 inch long; elliptical, flat 1-seeded; with broad pale yellow wing <u>Bark:</u> Mottled brown; smooth; shedding in irregular, thin flakes</p>







<p><i>Ulmus pumila</i> <i>Siberian Elm</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Siberian Elm <i>Ulmus pumila</i>*</p> <p>About this tree: Prefers dry to moist soils Grows 60 feet tall Hardiness zone 3 Cultivars: Chinkota</p> <p>Identification Tips: <u>Leaves:</u> 3/4 to 2 inches long, 1/2 to 1 inch wide; narrowly elliptical; blunt-based; saw-toothed <u>Fruit:</u> 3/8 to 5/8 inch long; clustered; circular with seed in the center <u>Bark:</u> Gray or brown; rough, furrowed</p>
<p><i>Eucalyptus sp.</i> <i>Eucalyptus</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Eucalyptus <i>Eucalyptus sp.</i>*</p> <p>(depending on the species)</p> <p>About this tree: Wood used for furniture, homes Medicinal use for oil from leaves Used both as timber and ornamental tree Can grow up to 10 to 15 feet per year and 150 feet tall Hardiness zone 8</p> <p>Identification Tips: <u>Leaves:</u> Alternate; usually flattened yellowish leafstalks; blades lance-shaped, 3 to 12 inches long, 1/2 to 2 inches wide; usually dull green on both sides; thick and leathery <u>Fruit:</u> Seed capsules 4-angled, about 1-inch long; or egg shaped or cylindrical, about 1/4 to 3/4 inch long <u>Flower:</u> Flower or flowers at leaf base; numerous spreading white or cream-colored stamens <u>Bark:</u> Usually smooth, mottled gray, white, brown or greenish; sheds; brown, furrowed and non-shedding on Robusta Eucalyptus</p>
<p><i>Celtis occidentalis</i> <i>Common Hackberry</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Common Hackberry <i>Celtis occidentalis</i> (native)</p> <p>About this tree: Fruit eaten by robin, yellow-bellied sapsucker and cedar waxwing Can grow on moist to dry soils; tolerates high pH Grows 75 to 100 feet tall Hardiness zone 2 Cultivars: Oahe</p> <p>Identification Tips: <u>Leaves:</u> Alternate; 2 to 5 inches long; sharp-toothed; blue-green <u>Fruit:</u> 1/4 to 3/8 inch berry, purple-brown <u>Twig:</u> Gray-brown, zigzag shape</p>








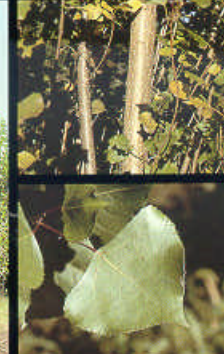

<p><i>Ilex opaca</i> <i>American Holly</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Bark: Ridged, irregular wart-like knobs</p> <p>American Holly <i>Ilex opaca</i> (native)</p> <p>About this tree: Fruit eaten by wild turkey, bluebird, cedar waxwing Prefers wet to moist, well drained soils Grows 40 to 70 feet tall Hardiness zone 5</p> <p>Identification Tips: Leaves: Evergreen; spreading in 2 rows; 2 to 4 inches long, 3/4 to 1 1/2 inches wide; elliptical; spiny-pointed; coarsely spiny-toothed; leathery Fruit: 1/4 to 3/8 inches in diameter; berrylike; bright red Twigs: Brown or gray; stout Bark: Light gray; thin</p>
<p><i>Robinia hispida</i> <i>Bristly Locust</i></p>  <p style="text-align: right;"><i>Shrub</i></p>		<p>Black Locust <i>Robinia pseudoacacia</i> (native)</p> <p>About this tree: Seeds eaten by bobwhite quail and squirrel Prefers moist to dry soils Grows 40 to 80 feet tall Hardiness zone 3 Cultivars: Steiner</p> <p>Identification Tips: Leaves: Alternate pinnately compound; 6 to 12 inches long; 7 to 19 leaflets, 1 to 1.75 inches long, 1/2 to 3/4 inches wide; paired Fruit: 2 to 4 inches long; narrowly oblong flat pod; dark brown Twig: Dark brown, with stout paired spines 1/4 to 1/2 inch long at nodes Bark: Reddish brown to almost black; thick; deeply furrowed into long rough forking ridges</p>
<p><i>Gleditsia triacanthos</i> <i>Honey-Locust</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Honey-Locust <i>Gleditsia triacanthos</i> (native)</p> <p>About this tree: Sweetish pulp edible for humans Grows 50 to 75 feet tall Hardiness zone 3</p> <p>Identification Tips: Leaves: Alternate; pinnately or bipinnately compound; yellow-green; 6 to 8 inches long; 20 to 30 oblong leaflets 3/4 to 1 1/2 inches long Fruit: Red-brown to purple; twisting; 6 to 18 inches long; bean-like pod with seeds Twig: Shiny; zigzag; stout; red-brown; 3-branched (1 to 3 inches); thorns 3-branched 2 to 3 inches long</p>



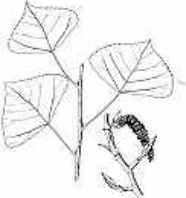


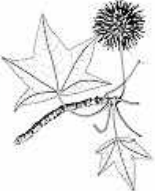



<p><i>Acer rubrum</i> <i>Red Maple</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>	<p><u>Bark:</u> Grayish brown-black; long; irregular; vertical plates</p> <p>Red Maple <i>Acer rubrum</i> (native)</p> <p>About this tree: Grows well on a wide range of soil types Fast growing; grows 50 to 70 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Opposite; broadly ovate with 3 shallow short-pointed lobes turning red, orange and yellow in autumn <u>Fruit:</u> Paired single-winged seeds form a 'V' <u>Twig:</u> Shiny red; numerous small lenticels</p>
<p><i>Acer saccharinum</i> <i>Silver Maple</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>	<p>Silver Maple <i>Acer saccharinum</i> (native)</p> <p>About this tree: Seeds used by songbirds and small mammals Prefers moist or moderately drained soils Grows 60 to 80 feet tall; 1 to 3 feet per year Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Deeply separated into 5 doubly-toothed lobes; opposite, simple, silvery below <u>Fruit:</u> Pair of wide, curved single winged seeds joined at base to form a 'V' <u>Bark:</u> Light gray; on older trees plates separated by narrow fissures</p>
<p><i>Acer saccharum</i> <i>Sugar Maple</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>	<p>Sugar Maple <i>Acer saccharum</i> (native)</p> <p>About this tree: Good wildlife value Prefers moderately well to well drained soils; high shade tolerance; poor drought tolerance Grows 60 to 100 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Opposite; simple; 3 to 5 lobed; pointed; slightly coarsely toothed <u>Bark:</u> Grayish brown to black; deeply furrowed into hard scaly ridges <u>Fruit:</u> Pair of single winged seeds join at base to form a 'V'</p>



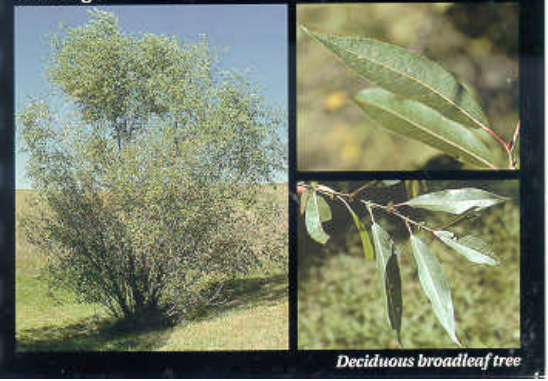



<p><i>Morus alba var. tatarica</i> <i>Russian Mulberry</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Russian Mulberry <i>Morus alba var. tatarica</i> *</p> <p>About this tree: Hardy variety of white mulberry Wood is hard and durable Grows to 50 feet tall Wide zone of hardiness</p> <p>Identification Tips: <u>Leaves:</u> Alternate, heart-shaped and lobed; 2 to 4 inches long and half as wide <u>Fruit:</u> White to dark red; less than 1 inch long and juicy <u>Flower:</u> Catkins, drooping; up to 1 inch long <u>Twig:</u> Red-brown when young; gray on older trees</p>
<p><i>Quercus macrocarpa</i> <i>Bur Oak</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Bur Oak <i>Quercus macrocarpa</i> (native)</p> <p>About this tree: Acorns eaten by turkey, blue jay, grouse and wood duck Prefers dry uplands to moist floodplains Grows 50 to 80 feet tall Hardiness zone 2</p> <p>Identification Tips: <u>Leaves:</u> 4 to 10 inches long, 2 to 5 inches wide; obovate, lower half deeply divided into 2 to 3 lobes on each side; dark green <u>Fruit:</u> Large acorns; broadly elliptical, enclosed by large deep fringed cup with conspicuous fringe <u>Bark:</u> Light gray; thick, rough, deeply furrowed into scaly ridges</p>
<p><i>Quercus rubra</i> <i>Northern Red Oak</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Northern Red Oak <i>Quercus rubra</i> (native)</p> <p>About this tree: Acorns eaten by turkey, blue jay and ruffed grouse Prefers dry uplands Grows 75 to 100 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Alternate; simple; pinnately (7-11) lobed; dark green; 4 to 9 inches long <u>Fruit:</u> Egg-shaped, brown acorn; 1/3 enclosed by shallow cup; dark margin on cup scales <u>Bark:</u> Dark gray-black, shallow, wide-flat ridges</p>




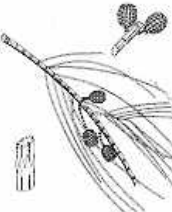


<p><i>Quercus palustris</i> Pin Oak</p>    <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Pin Oak <i>Quercus palustris</i> (native)</p> <p>About this tree: Acorn eaten by turkey, wood duck, grouse and blue jay Tolerates poorly drained, wet sites Grows 50 to 90 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> 3 to 5 inches long, 2 to 4 inches wide; 5 to 7 deep lobes nearly to midvein <u>Fruit:</u> 1/2 inch long; nearly round; acorn; 1/4 to 1/3 enclosed by thin saucer-shaped cup</p>
<p><i>Quercus acutissima</i> Sawtooth Oak</p>    <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Sawtooth Oak <i>Quercus acutissima</i></p> <p>About this tree: Excellent for wildlife Prefers moderately to well drained soils; poor shade tolerance; fair drought tolerance Grows 35 to 70 feet tall; medium growth rate Hardiness zone 5 Cultivars: Gobbler</p> <p>Identification Tips: <u>Leaves:</u> Shiny; 3 to 8 inches long with bristle-like teeth <u>Fruit:</u> Small acorns; long, spreading scales enclose two-thirds of the nut <u>Bark:</u> Gray brown; deeply ridged</p>
<p><i>Quercus shumardii</i> Shumard Oak</p>    <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Shumard Oak <i>Quercus shumardii</i> (native)</p> <p>About this tree: Acorn eaten by turkey, wood duck and blue jay Prefers moist, well drained soils Grows 60 to 90 feet tall Hardiness zone 4</p> <p>Identification Tips: <u>Leaves:</u> 3 to 7 inches long, 2 1/2 to 5 inches wide; usually deeply divided nearly to midvein into 5 to 9 lobes; shiny dark green above, paler below with tufts of hair at base of veins <u>Fruit:</u> 5/8 to 1 inch long, egg-shaped; 1/4 to 1/3 enclosed by shallow cup <u>Twig:</u> Hairs on the buds</p>





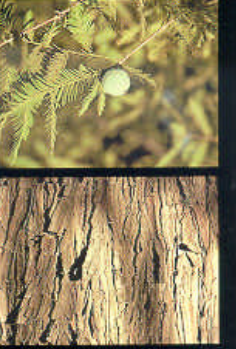

<p><i>Quercus alba</i> <i>White Oak</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>White Oak <i>Quercus alba</i> (native)</p> <p>About this tree: Acorns eaten by turkey, blue jay and ruffed grouse Prefers moist, well drained upland soils Grows 80 to 100 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> 4 to 9 inches long; 2 to 4 inches wide; elliptical; 5 to 9 lobed; bright green above, whitish or gray-green below <u>Fruit:</u> 3/8 to 1 1/4 inches long; egg-shaped; about 1/4 enclosed by shallow warty cup <u>Bark:</u> Light gray; shallowly fissured</p>
<p><i>Elaeagnus angustifolia</i> <i>Russian-Olive</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Russian-Olive <i>Elaeagnus angustifolia</i> *</p> <p>About this tree: Fruit eaten by cedar waxwings, robins, grosbeaks and pheasants Can grow on moist to dry soils Grows 20 to 30 feet tall Hardiness zone 3 Cultivars: King Red</p> <p>Identification Tips: <u>Leaves:</u> 1 1/2 to 3 1/4 inches long; lance-shaped; dull; gray-green above, silver below <u>Fruit:</u> Berry-like; 3/8 to 1/2 inch in diameter; yellow to brown <u>Twig:</u> Silvery; often ending in short spine <u>Bark:</u> Gray-brown; fissured; shedding in long strips</p>
<p><i>Maclura pomifera</i> <i>Osage-Orange</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Osage-Orange <i>Maclura pomifera</i> (native)</p> <p>About this tree: Seeds eaten by quail and squirrels Grows 35 to 50 feet tall Excellent fuel wood Hardiness zone 4</p> <p>Identification Tips: <u>Leaves:</u> Alternate; simple; 3 to 5 inches long; glossy bright green; leaf margins entire <u>Fruit:</u> Large; yellow-green; 3 to 5 inches in diameter <u>Twig:</u> Stout; orange-brown; zigzag shape; 1/4 to 1/2 inch spines <u>Bark:</u> Deeply furrowed; yellow-orange-brown</p>



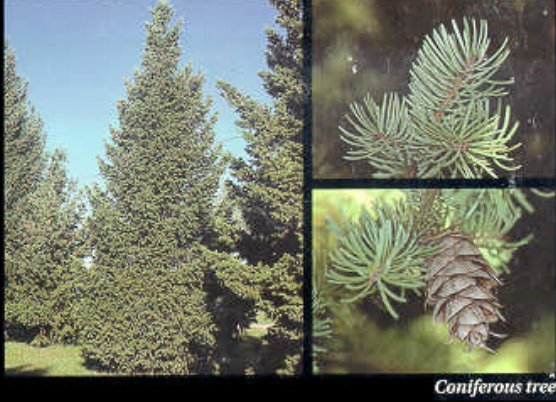
<p><i>Carya illinoensis</i></p>  <p><i>Pecan</i></p>  <p><i>Deciduous broadleaf tree</i></p>		<p>Pecan <i>Carya illinoensis</i> (native)</p> <p>About this tree: Edible fruit Prefers moist, well drained, bottomland soils Grows to 100 feet tall Hardiness zone 4</p> <p>Identification Tips: <u>Leaves:</u> Pinnately compound; 20 to 22 inches long; 11 to 17 leaflets, each 2 to 7 inches long; finely saw-toothed margin; alternate <u>Fruit:</u> Nut; oblong; 1 to 2 inches long; pointed at tip, both ends <u>Bark:</u> Light brown to gray; deeply, irregularly furrowed</p>
<p><i>Punica granatum</i></p>  <p><i>Pomegranate</i></p>  <p><i>Deciduous broadleaf tree</i></p>		<p>Pomegranate <i>Punica granatum</i></p> <p>About this tree: Cultivated for its attractive flowers Tolerates heat and alkaline soils Grows to 20 feet tall Hardiness zone 7</p> <p>Identification Tips: <u>Leaves:</u> Simple; blades 1 to 3 1/2 inches long; oval to elliptical to lanceolate; margin entire; surface bright green <u>Fruit:</u> Berry 2 to 4 inches in diameter; thick, leathery, reddish yellow rind; juicy pulp <u>Flower:</u> Showy; red to orange; 5 to 7 petals <u>Bark:</u> Gray to brown on older limbs</p>
<p><i>Populus sp.</i></p>  <p><i>Hybrid Poplar</i></p>  <p><i>Deciduous broadleaf tree</i></p>		<p>Hybrid Poplar <i>Populus sp.</i></p> <p>About this tree: Grows very fast, upright, not as spreading as cottonwoods Disease resistant Crossbred specifically in many cases for fast growth in windbreaks Cultivars: Northwest, Norway, Imperial, Robusta</p> <p>Identification Tips: <u>Leaves:</u> Variable but usually triangular; 2 to 5 inches long and wide; usually green above, light green below; toothed margin; flattened leafstalks <u>Twig:</u> Short; hairless <u>Bark:</u> Smooth gray to off-white; deeply furrowed in old trees</p>







<p><i>Populus nigra 'italica'</i> <i>Lombardy Poplar</i></p>   <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Lombardy Poplar <i>Populus nigra 'italica'</i></p> <p>About this tree: Prefers moist soil Tree grows rapidly but is short-lived in more humid regions Roots are invasive and may sucker profusely Grows to 100 feet tall Hardiness zone 4</p> <p>Identification Tips: <u>Leaves:</u> 2 to 4 inches long and wide; triangular; wavy sawtoothed; green above, light green below; flattened leafstalks <u>Twigs:</u> Stout; hairless; orange, turning gray <u>Bark:</u> Gray to whitish; smooth on young trees and dark deep furrows on old trees</p>
<p><i>Liquidambar styraciflua</i> <i>Sweetgum</i></p>   <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Sweetgum <i>Liquidambar styraciflua</i> (native)</p> <p>About this tree: Grows 60 to 100 feet tall; 2 to 3 feet per year Excellent fall color Tolerates a wide range of soils Hardiness zone 6</p> <p>Identification Tips: <u>Leaves:</u> Alternate; star-shaped with pointed lobes; brilliant fall colors <u>Fruit:</u> Globe-shaped, tight cluster of capsules persist on tree over winter <u>Twig:</u> Moderately stout with corky wing-like ridges; buds large and shiny <u>Other:</u> Strongly pyramidal growth form</p>
<p><i>Plantanus occidentalis</i> <i>American Sycamore</i></p>   <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>American Sycamore <i>Plantanus occidentalis</i> (native)</p> <p>About this tree: Seed eaten by purple finch Prefers moist bottomland soils; tolerates poorly drained soils Grows 75 to 100 feet tall Hardiness zone 4</p> <p>Identification Tips: <u>Leaves:</u> 4 to 8 inches long and wide; broadly ovate; 3 or 5 shallow, broad, short-pointed lobes <u>Fruit:</u> 1 inch in diameter; usually 1 brown ball hanging on long stalk; composed of narrow nutlets with hair tufts <u>Bark:</u> Smooth, whitish and brown mottled; peeling off in large thin flakes</p>




<p><i>Juglans nigra</i> <i>Black Walnut</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Black Walnut <i>Juglans nigra</i> (native)</p> <p>About this tree: Nuts eaten by squirrel, red and gray fox Prefers moist, well drained soils Grows 70 to 90 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Pinnately compound; 12 to 24 inches long; 15 to 23 leaflets up to 5 inches long <u>Fruit:</u> Single or paired, about 2 inches in diameter; thick green or brown husk <u>Twig:</u> Brown; stout; with buff colored chambered pith <u>Bark:</u> Dark brown; deeply furrowed ridges</p>
<p><i>Salix nigra</i> <i>Black Willow</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Black Willow <i>Salix nigra</i> (native)</p> <p>About this tree: Prefers wet soils Grows 60 to 100 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> 3 to 5 inches long, narrowly lance-shaped; shiny green on both sides <u>Fruit:</u> 3/16 inch long; reddish-brown capsules; hairless <u>Twig:</u> Brownish; easily detached at base <u>Bark:</u> Dark brown or blackish; deeply furrowed into scaly, forking ridges</p>
<p><i>Salix alba var. vitellina</i> <i>Golden Willow</i></p>  <p style="text-align: right;"><i>Deciduous broadleaf tree</i></p>		<p>Golden Willow <i>Salix alba var. vitellina</i></p> <p>About this tree: Rapid growth rate with no suckering Good winter density for a deciduous hardwood Tolerates wide range of soils Grows to 60 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Narrow lance-shaped; finely toothed; 4 to 6 inches long <u>Flower:</u> Male catkins 1 to 2 inches long with females 2 to 3 inches long <u>Twig:</u> Bright yellow to orange <u>Buds:</u> Covered by a single non-resinous scale</p>







<p><i>Salix purpurea</i> <i>Purpleosier Willow</i></p>  <p><i>Deciduous broadleaf tree</i></p>		<p>Purpleosier Willow <i>Salix purpurea</i></p> <p>About this tree: Fair wildlife value Tolerates poorly drained soils; good shade tolerance; poor drought tolerance Grows 10 to 20 feet tall Hardiness zones 3 to 8 Cultivars: Streamco</p> <p>Identification Tips: <u>Leaves:</u> In pairs, not quite opposite; smooth tongue shaped; finely-toothed near the tip only; blue-green above and pale below; 2 to 4 inches long <u>Catkins:</u> Small, arise in almost opposite pairs, and mature in early spring before the leaves come out</p>		
<p>Coniferous Trees</p>		<p><i>Casuarina sp.</i> <i>Casuarina</i></p>  <p><i>Coniferous tree</i></p>		<p>Casuarina <i>Casuarina sp.</i>*</p> <p>About this tree: Provides perching and nesting for birds Tolerates dry or wet soil, salinity, heat and wind Grows 50 to 100 feet tall; grows up to 8 to 10 feet per year Hardiness zone 8</p> <p>Identification Tips: <u>Leaves:</u> Scale-like; 1/8 inch long <u>Fruit:</u> Light brown, warty ball <u>Bark:</u> Light gray brown; smoothish on small trees, later becoming furrowed</p>
<p><i>Thuja occidentalis</i> <i>Northern White Cedar (Arborvitae)</i></p>  <p><i>Coniferous tree</i></p>		<p>Northern White Cedar (<i>Arborvitae</i>) <i>Thuja occidentalis</i> (native)</p> <p>About this tree: Foliage, twigs eaten by White-tailed deer, fruit eaten by various birds Prefers neutral to alkaline soils, limestone origin Grows 40 to 70 feet tall Hardiness zone 2</p> <p>Identification Tips: <u>Leaves:</u> Evergreen; opposite; 1/16 to 1/8 inch long; scalelike; dull yellow-green; foliage sprays fanlike <u>Fruit:</u> Cone; 3/8 inch long; elliptical; upright from short curved stalk <u>Bark:</u> Light red-brown; thin; fibrous</p>		







<p><i>Cupressus arizonica</i></p>  <p><i>Arizona Cypress</i></p>  <p><i>Coniferous tree</i></p>		<p>Arizona Cypress <i>Cupressus arizonica</i> (native)</p> <p>About this tree: Used for erosion control, windbreaks, urban landscaping, posts, stakes and corral poles Prefers moist gravelly soils on slopes and benches Grows 40 to 60 feet Hardiness zone 6</p> <p>Identification Tips: <u>Leaves:</u> Minute blue-green to gray-green; scale-like; sharp pointed; finely toothed on the margins; shunlike odor when bruised <u>Fruit:</u> Dark reddish brown cones about one inch long that remain on the tree for many years, become gray with age <u>Bark:</u> Reddish brown with irregular, narrow, thin, curling scales that peel; on older tree's, bark becomes furrowed</p>
<p><i>Taxodium distichum</i></p>  <p><i>Baldcypress</i></p>  <p><i>Coniferous tree</i></p>		<p>Baldcypress <i>Taxodium distichum</i> (native)</p> <p>About this tree: Well adapted to wet sites, but can be planted on dry sites; wood very resistant to decay; develops 'knees' under saturated conditions Grows 60 to 100 feet tall Hardiness zone 4</p> <p>Identification Tips: <u>Leaves:</u> Needle-like; delicate; arranged in 2 ranks in a feather-like fashion along small branchlets; branchlets with fine needles fall in the autumn <u>Fruit:</u> Globe-shaped, woody cone, 1 inch in diameter; cones disintegrate at maturity <u>Twig:</u> Reddish-brown; rough, with several short peg-like branches <u>Bark:</u> Dark reddish-brown with long loose shreddy ridges</p>




<p><i>Cupressocyparis leylandii</i> Leland Cypress</p>  <p><i>Coniferous tree</i></p>	<p>Leland Cypress <i>Cupressocyparis leylandii</i></p> <p>About this tree: Used as Christmas trees, hedgerows, windbreaks and landscaping Adapted to a wide range of soil textures; prefers moist, well drained soils Grows 60 to 70 feet tall Hardiness zone 5</p> <p>Identification Tips: <u>Leaves:</u> Blue-green to gray-green needles, 1/8 inch long; acute; appressed with the apices of the lateral pairs often free <u>Fruit:</u> Cone, 1/2 to 3/4 inch in diameter with 8 scales; each scale contains approximately 5 seeds per scale <u>Bark:</u> Reddish-brown and scaly</p>
<p><i>Abies concolor</i> Concolor Fir</p>  <p><i>Coniferous tree</i></p>	<p>Concolor Fir <i>Abies concolor</i> (native)</p> <p>About this tree: Provides winter cover for wildlife Prefers dry to moist soils Grows 75 to 100 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Needles; slat; linear; 2-ranked; blue-green; 1 1/2 to 2 1/2 inches long <u>Fruit:</u> Cone; erect; olive brown; cylindrical; 3 to 5 inches long <u>Twig:</u> Stout; yellow-green with clustered blunt, red-brown resinous buds <u>Bark:</u> Ash, gray-brown color; flattened ridges</p>
<p><i>Pseudotsuga menziesii</i> Douglas-Fir</p>  <p><i>Coniferous tree</i></p>	<p>Douglas-Fir <i>Pseudotsuga menziesii</i> (native)</p> <p>About this tree: Winter cover for wildlife Prefers well drained, loamy soils Grows 80 to 200 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Needles; flexible; flattened; light green-bluegreen; blunt tip; 3/4 to 1 1/4 inch long <u>Fruit:</u> Cone, tan-brown; 2 to 3 inches long; clustered pairs; 3 points; protruding bracts <u>Twig:</u> Slender; gray-brown; long; sharp-pointed buds <u>Bark:</u> Reddish brown; deep furrows</p>

<p><i>Juniperus scopulorum</i> Rocky Mountain Juniper</p>  <p><i>Coniferous tree</i></p> 	<p>Rocky Mountain Juniper <i>Juniperus scopulorum</i> (native)</p> <p>About this tree: Foliage and fruit eaten by mammals and birds Can grow on dry to moist soils Grows 25 to 50 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Small; scale-like; opposite; smooth edges; 1 to 2 inches long <u>Fruit:</u> Small; fleshy; berry-like; 2 to 3 inches in diameter; bright blue <u>Twig:</u> Slender, 4-sided; becoming rounded with age <u>Bark:</u> Thin; reddish-brown; weathering to grayish</p>
<p><i>Pinus nigra</i> Austrian Pine</p>  <p><i>Coniferous tree</i></p> 	<p>Austrian Pine <i>Pinus nigra</i></p> <p>About this tree: Prefers dry, drought resistant soils Grows 75 to 100 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Evergreen, 3 1/2 to 6 inches long; 2 in bundle; stiff; shiny dark green; silvery white buds <u>Fruit:</u> Cone, 2 to 3 inches long, 1 to 1 1/4 inches wide; egg-shaped; shiny, yellow-brown; almost stalkless <u>Bark:</u> Dark brown; thick; rough; furrowed into irregular scaly plates <u>Buds:</u> Large, silvery buds</p>
<p><i>Pinus strobus</i> Eastern White Pine</p>  <p><i>Coniferous tree</i></p> 	<p>Eastern White Pine <i>Pinus strobus</i> (native)</p> <p>About this tree: Prefers sandy-loam soils; avoid clay-wet soils Grows 60 to 100 feet tall, 50 to 80 feet wide; growth rate is 3 to 5 feet per year Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Needles in bundles of 5; 3 to 5 inches long; slender; flexible <u>Fruit:</u> Cones; 4 to 8 inches long; cylindrical; often curved <u>Twig:</u> Orange brown <u>Bark:</u> Dark grayish brown; deeply furrowed on older trees; 1 to 2 inches thick with ridges</p>

<p><i>Pinus eldarica</i> <i>Eldarica Pine</i></p>  <p style="text-align: right;"><i>Coniferous tree</i></p>	<p>Eldarica Pine <i>Pinus eldarica</i></p> <p>About this tree: Prefers fine sands, silt loams to silty clay loams, and very well drained to moderately well drained soils Fast growth if irrigated Hardiness zone 7</p> <p>Identification Tips: <u>Leaves:</u> Needles 4 to 6 inches long borne in bundles of 2 or rarely 3; new growth blue-green, older growth darker green <u>Fruit:</u> Cones; reddish brown to brown; borne singly or in whorls of 3 to 6; cones are ovate-conic, approximately 4 inches in length; unarmed <u>Bark:</u> Silvery gray and shiny when young; becoming reddish brown; fissured and scaly on older trunks</p>
<p><i>Pinus taeda</i> <i>Loblolly Pine</i></p>  <p style="text-align: right;"><i>Coniferous tree</i></p>	<p>Loblolly pine <i>Pinus taeda</i> (native)</p> <p>About this tree: Seeds eaten by Bobwhite quail and mourning dove Tolerates poorly drained to well drained soils Grows 80 to 100 feet tall Hardiness zone 7</p> <p>Identification Tips: <u>Leaves:</u> Needles; 5 to 9 inches long; 3 in bundle; stout, stiff, often twisted <u>Fruit:</u> 3 to 5 inches long; conical <u>Bark:</u> Blackish-gray; thick, deeply furrowed into scaly ridges exposing brown inner layers</p>
<p><i>Pinus ponderosa</i> <i>Ponderosa Pine</i></p>  <p style="text-align: right;"><i>Coniferous tree</i></p>	<p>Ponderosa Pine <i>Pinus ponderosa</i> (native)</p> <p>About this tree: Seeds eaten by birds, mammals Can grow on dry soils Grows 75 to 100 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Needles; stout; flexible; yellow-green; 5 to 10 inches long; clusters of 2 or 3 <u>Fruit:</u> Cone, tan-brown; 3 to 6 inches long; scales with prickles <u>Twig:</u> Stout; orange-brown; turpentine odor when broken <u>Bark:</u> Black, yellow-orange (old); wide, shallow-furrowed; flaky plates</p>

<p><i>Pinus resinosa</i> Red Pine</p>  <p style="text-align: right;"><i>Coniferous tree</i></p>		<p>Red Pine <i>Pinus resinosa</i> (native)</p> <p>About this tree: Seeds used by songbirds and small mammals Prefers well-drained, sandy soils Grows 70 to 80 feet tall Hardiness zone 2</p> <p>Identification Tips: <u>Leaves:</u> Needles; to 6 1/2 inches long; 2 in a bundle; dark green, snap cleanly <u>Fruit:</u> Egg-shaped cones, 1 1/2 to 2 1/4 inches long <u>Bark:</u> Reddish-brown or gray; with broad, flat, scaly plates; becoming thick</p>
<p><i>Pinus sylvestris</i> Scotch Pine</p>  <p style="text-align: right;"><i>Coniferous tree</i></p>		<p>Scotch Pine <i>Pinus sylvestris</i></p> <p>About this tree: Prefers sandy to loam soils Grows 50 to 75 feet tall Hardiness zone 2</p> <p>Identification Tips: <u>Leaves:</u> Needles; 1 1/2 to 2 3/4 inches long; 2 in bundle; stiff; slightly flattened; twisted; blue-green <u>Fruit:</u> Cone; 1 1/4 to 2 1/2 inches long; egg-shaped; pale yellow-brown <u>Bark:</u> Reddish-brown; thin; becoming gray and shredding in papery plates</p>
<p><i>Pinus echinata</i> Shortleaf Pine</p>  <p style="text-align: right;"><i>Coniferous tree</i></p>		<p>Shortleaf Pine <i>Pinus echinata</i> (native)</p> <p>About this tree: Seeds are eaten by mourning dove and Bobwhite quail Prefers dry ridges, sandy loams and silt loams Grows 30 to 70 feet tall Hardiness zone 6</p> <p>Identification Tips: <u>Leaves:</u> Needles; 4 1/2 inches long; 2 or sometimes 3 in bundle; slender, flexible; dark blue-green <u>Fruit:</u> 1 1/2 to 2 1/2 inches long; conical <u>Bark:</u> Reddish-brown; large scaly plates</p>

<p><i>Pinus elliottii</i> Slash Pine</p>  <p><i>Coniferous tree</i></p>		<p>Slash Pine <i>Pinus elliottii</i> (native)</p> <p>About this tree: Seeds eaten by Bobwhite quail and mourning dove Prefers poorly drained sandy soils Grows 60 to 100 feet tall Hardiness zone 7</p> <p>Identification Tips: <u>Leaves:</u> Needles; 7 to 10 inches long; 2 and 3 in bundle; stout; stiff; shiny green <u>Fruit:</u> 2 1/2 to 6 inches long; narrowly shaped; shiny dark brown <u>Bark:</u> Purplish-brown; flattened, scaly plates; rough and furrowed</p>
<p><i>Pinus virginiana</i> Virginia Pine</p>  <p><i>Coniferous tree</i></p>		<p>Virginia Pine <i>Pinus virginiana</i> (native)</p> <p>About this tree: Good wildlife value Prefers well drained soils Poor shade tolerance Good drought tolerance Grows 30 to 40 feet tall Hardiness zone 4</p> <p>Identification Tips: <u>Leaves:</u> Needles, 1 1/2 to 3 inches long; stout; gray-green; in bundles of two; twisted <u>Fruit:</u> Dark reddish-brown; ovoid; lustrous; 1 1/2 to 2 1/2 inches long, with a sharp spine at the end of each scale <u>Bark:</u> Shallow fissures; dark brown loose scales</p>
<p><i>Juniperus virginiana</i> Eastern Redcedar</p>  <p><i>Coniferous tree</i></p>		<p>Eastern Redcedar <i>Juniperus virginiana</i> (native)</p> <p>About this tree: One of the best conifers for wildlife habitat Well adapted to most soils Grows 25 to 60 feet tall Hardiness zone 3</p> <p>Identification Tips: <u>Leaves:</u> Two types, usually on the same tree -- scale-like and awl shaped <u>Fruit:</u> Blue berrylike cone, 1/4 to 1/3 inch in diameter <u>Twig:</u> 4-sided</p>

<p><i>Picea pungens</i> <i>Colorado Blue Spruce</i></p>  <p style="text-align: right;"><i>Coniferous tree</i></p>	<p>Colorado Blue Spruce <i>Picea pungens</i> (native)</p> <p>About this tree: Winter cover for wildlife Prefers upland dry soils Grows 75 to 100 feet tall Hardiness zone 2</p> <p>Identification Tips: <u>Leaves:</u> Needles; stiff; spirally arranged; 4-sided; 3/4 to 1 1/2 inches long; very prickly; sharp pointed <u>Fruit:</u> Cone, oblong; tan-brown; cylindrical; 3 to 4 inches long; papery scales <u>Twig:</u> Stout; orange to gray-brown <u>Bark:</u> Silvery gray-brown</p>
<p><i>Picea abies</i> <i>Norway Spruce</i></p>  <p style="text-align: right;"><i>Coniferous tree</i></p>	<p>Norway Spruce <i>Picea abies</i></p> <p>About this tree: Foliage, twigs eaten by White-tailed deer; needles eaten by grouse; winter cover for many species Prefers moist soil Grows 75 to 100 feet tall Hardiness zone 2</p> <p>Identification Tips: <u>Leaves:</u> Needles; 1/2 to 1 inch long; stiff; 4-angled; sharp-pointed; shiny, dark green with whitish lines; drooping foliage <u>Fruit:</u> Cones; 4 to 6 inches long; cylindrical; light brown; hanging down <u>Bark:</u> Reddish-brown; scaly</p>
<p><i>Picea glauca</i> <i>White Spruce</i></p>  <p style="text-align: right;"><i>Coniferous tree</i></p>	<p>White Spruce <i>Picea glauca</i> (native)</p> <p>About this tree: Foliage, twigs eaten by White-tailed deer; needles eaten by grouse; winter cover for many species Prefers moist, sandy loam soils Grows 50 to 60 feet tall; 1 to 3 feet per year Grows 3 to 6 feet tall</p> <p>Identification Tips: <u>Leaves:</u> Needles 1/2 to 3/4 inches long; stiff; 4-angled, sharp pointed; blue-green, with whitish lines <u>Fruit:</u> Cones, 1 to 2 inches long <u>Twig:</u> Orange-brown; slender; peglike bases <u>Bark:</u> Gray or brown; inner bark whitish</p>

* indicates the plant may be considered weedy or invasive in some parts of the US and may not be appropriate for conservation uses in certain areas. Check with your local Conservation District or state department of natural resources for more information on weediness and recommendations for use.

This guide is primarily intended as an identification tool. Persons intending to use these plants for conservation or landscape should consult additional sources of information for use, establishment, and management of the species.

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