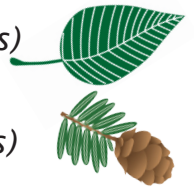


WISCONSIN URBAN TREE KEY

Broadleaf (flat leaves) & Conifers (needles/scales)



BROADLEAF TREES - IDENTIFICATION METHODS

<p>Alternate</p>	<p>Opposite</p>	<p>Petiole</p> <p>Simple</p>	<p>Leaf</p> <p>Leaflet</p> <p>Pinnately compound</p>	<p>Bipinnately compound</p>
Leaf arrangement		Leaf type		

SAMPLE

Species name

Leaf

Fruit or flower

Small tree <25ft at maturity

Leaf length

Orange = NR40 regulated invasive tree in Wisconsin

OPPOSITE LEAVES



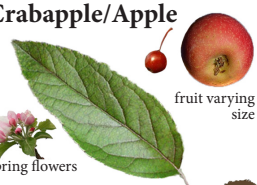
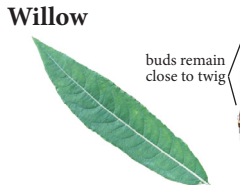








<p>Norway Maple</p> <p>fruits are wide, unlike other maples</p> <p>petioles produce milky sap when broken</p> <p>3-6"</p> <p>some varieties have purple leaves</p>	<p>Silver Maple</p> <p>mature trees have peely, grey bark</p> <p>4-6"</p>	<p>Sugar Maple</p> <p>buds are pointy</p> <p>petioles don't produce milky sap</p> <p>4-6"</p>	<p>Amur Maple</p> <p>2-2.5"</p>
<p>Freeman Maple</p> <p>most don't produce fruits</p> <p>cross between silver and red maples</p> <p>3-5"</p>	<p>Red Maple</p> <p>fruit often reddish</p> <p>2-5"</p>	<p>Boxelder</p> <p>3-7 leaflets</p> <p>only maple with compound leaves</p> <p>2-4" (leaflets)</p>	<p>Japanese Tree Lilac</p> <p>prominent lenticels on the bark</p> <p>bushy, fragrant late spring flowers</p> <p>3-4"</p>
<p>Buckeye/Horsechestnut</p> <p>some husks have spines</p> <p>3-6" (leaflets)</p>	<p>Northern Catalpa</p> <p>showy white flowers</p> <p>leaves are huge!</p> <p>7-12"</p> <p>Pods 12-24" long!</p>	<p>Green Ash</p> <p>leaflets have very short petioles</p> <p>5-9 leaflets</p> <p>3-5" (leaflets)</p>	<p>White Ash</p> <p>leaflets have obvious petioles</p> <p>5-9 leaflets</p> <p>3-5" (leaflets)</p>

ALTERNATE LEAVES






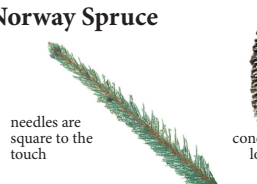

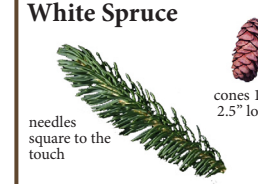

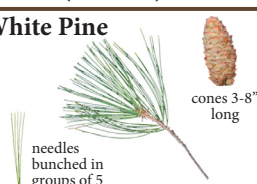




(CONTINUED ON BACK)

<p>Honeylocust</p> <p>sometimes bipinnately compound</p> <p>leaflets opposite, but leaves alternate</p> <p>0.5-1" (leaflets)</p> <p>Pods 6-8" long</p>	<p>Black Locust</p> <p>leaflets opposite, but leaves alternate</p> <p>1-2" (leaflets)</p> <p>Pods 2-4" long</p>	<p>Kentucky Coffeetree</p> <p>bipinnately compound</p> <p>leaflets opposite, but leaves alternate</p> <p>1-3" (leaflets)</p> <p>Pods 6-10" long</p>	<p>Black Walnut</p> <p>leaflets opposite, but leaves alternate</p> <p>2-4" (leaflets)</p>	<p>Mountain-Ash</p> <p>leaflets have jagged edges</p> <p>leaflets opposite, but leaves alternate</p> <p>2-3" (leaflets)</p>
<p>Shagbark Hickory</p> <p>leaflets opposite, but leaves alternate</p> <p>3-7" (leaflets)</p>	<p>Basswood/Am. Linden</p> <p>4-6"</p>	<p>Littleleaf Linden</p> <p>1-3"</p>	<p>Hackberry</p> <p>bark is very corky</p> <p>leaf bottoms have nipple galls</p> <p>2-5"</p>	<p>Sumac</p> <p>fruits stay through winter at stem end</p> <p>leaflets opposite, but leaves alternate</p> <p>2-4" (leaflets)</p>
<p>Ironwood/Hophornbeam</p> <p>2-5"</p>	<p>Black Cherry</p> <p>black fungus common on branches</p> <p>bark is dark, scaly and has lenticels</p> <p>2-5"</p>	<p>Chokecherry</p> <p>black fungus common on branches</p> <p>1-3.5"</p>	<p>Witchhazel</p> <p>fall/winter flowers</p> <p>2.5-6"</p>	<p>Callery Pear</p> <p>buds very hairy</p> <p>glossy leaves</p> <p>1.5-3"</p>

ALTERNATE LEAVES

Quaking Aspen  1-3" flat petiole flower	Cottonwood  3-5" flat petiole flower	European Alder  2-4" flowers remain in winter	Elm  3-8" uneven leaf base fruits have flat, papery wings many varieties of urban elm	Siberian Elm  1-2.5" uneven leaf base fruits have flat, papery wings
Crabapple/Apple  1-4" fruit varying size spring flowers	Willow  2-6" buds remain close to twig	Serviceberry  2-4" usually multi-stemmed trunk showy spring flowers	Hawthorn  2-3" leaf shape varies and leaves are often glossy showy spring flowers not all trees have thorns, but many do	
Beech  2.25-4.75" long, copper buds leaves thin like paper distinctive smooth bark	Sycamore / Plane tree  4-9" distinctive scaly bark	Ginkgo  2-4" twigs have many spurs where leaves grow stinky fruit	Redbud  3-4.5" showy spring flowers pods 2-3" long	Musclewood  1-5" smooth, groovy bark
Paper Birch  2-4" bark peely with black lines (lenticels)	River Birch  1.5-3.25" reddish bark that peels in plates	Buckthorn  1-3.5" leaves often glossy and remain green into fall	Mulberry  2-5" leaf shape varies and leaves are often glossy two types of mulberry - only white mulberry invasive, but more common	
White Oak  5-9"	Swamp White Oak  2.75-6" leaf underside very light colored acorns on longer stalks (0.5-4") than white oak	Bur Oak  4.75-7" end 1/3 of leaf often widest part acorns very hairy	Red Oak  5-10"	Pin Oak  2-6"

CONIFERS

Arborvitae/White Cedar  often a small tree 0.5-1" (scales)	Red Cedar  two types of foliage - scales and needles 0.1-0.2" (scales/needles)	Larch/Tamarack  soft needles dropped in winter 0.75" - 1.25" (needles)	Bald Cypress  soft needles dropped in winter 0.5-0.75" (needles)	Balsam Fir  needles flat to the touch cones 2-4" long and grow upright on upper branches 0.5-1" (needles)
Norway Spruce  needles are square to the touch cones 4-7" long! branches sag 0.5-1" (needles)	White Spruce  needles square to the touch cones 1.5-2.5" long 1-3"	Blue Spruce  needles square to the touch and very sharp cones 3-4" long 0.5-1" (needles)	White Fir  needles flat to the touch cones 3-6" long and grow upright on upper branches 1-2.5" (needles)	
White Pine  needles bunched in groups of 5 cones 3-8" long 2-5" (needles)	Jack Pine  needles bunched in groups of 2 cones 1-1.5" long 0.75-1.5" (needles)	Scots Pine  needles bunched in groups of 2 which twist together cones 1-3" long 1-2" (needles)	Austrian Pine  needles bunched in groups of 2 cones 2-4" long 3-7" (needles)	Red Pine  needles bunched in groups of 2 and break when bent cones 2-2.5" long 4.5-7" (needles)