

TREE SPECIES LIST

LEGEND:

Category classification:

Size Range

Small Medium small Medium Medium large Large

Class

Broadleaf

Conifer

Shape

Round Narrow Broad Multi-stemmed

Oval Irregular Pyramidal

Growth Rate

Slow Moderate Fast

Light Exposure

Sun Partial shade Shade

NAME FEATURES GROWTH NEEDS CARE

Botanical	Common	Family	Est. Mature Height (m)	Est. Mature Width (m)	Common Form	Hardiness Zones	Range	Location	Light Exposure	Soil Preference	Tolerances	Plant Care	Serious Pest/Disease
Size Range Small													
Broadleaf													
<i>Acer glabrum</i>	Douglas Maple	Sapindaceae	10-12	4-6		Zones 3-8	BC	Along streams and moist sites		Moist, well-drained		Shallow roots, wide spreading	Yes
<i>Alnus incana</i>	Speckled Alder / Mountain Alder	Betulaceae	5-8	5-8		Zones 2-6	YT NT BC AB SK MB ON OC NB NS PE NL	Residential, parks, under utility lines. Understory, forest edge.		Moist, well-drained, wet soil	Clay soil, dry sites, occasional flooding, wet sites	Intolerant of shade. Often appears in stream banks and swamps. Shallow, fibrous roots.	Yes
<i>Amelanchier</i> spp.	Serviceberries	Rosaceae	5-8	5-8		Zones 3-7	YT NT BC AB SK MB ON OC NB NS PE NL	Wet sites, residential		Acid soil, moist, well-drained	Alkaline soil, dry sites, occasional drought, wet sites, black-walnut toxicity	Intolerant of pollution. Tolerates wide range of conditions. Benefits from mulch layer to moderate soil temperatures. Shallow, suckering root.	Yes
<i>Betula neokaskana</i>	Alaska Paper Birch	Betulaceae		5-8		Zones 0-2	YT NT BC AB SK MB ON	Wet sites		Wet soil, bogs, poorly drained soil	Poorly drained sites	Shallow roots	Yes
<i>Betula occidentalis</i>	Water Birch	Betulaceae	6-8	2-4		Zones 2-4	YT NT NV BC AB SK MB	Along streams and moist sites		Moist, well-drained		Small shrubby tree, dense thickets, thickets are common. Shallow roots.	Yes
<i>Betula populifolia</i>	Gray Birch	Betulaceae	6-12	3-6		Zones 3-6	ON OC NB NS PE	Residential, parks, wide median		Moist, well-drained	Alkaline, poor soils	Considered to have a short life span. Cultivar 'Whitespire' desirable. Shallow roots.	Yes
<i>Cornus alternifolia</i>	Alternate Leaf Dogwood	Cornaceae	5-8	6-9		Zones 4-8	NS NB PE NL OC ON	Residential, parks, under utility lines. Understory, forest edge.		Moist, well-drained	Dry soil, deer	Plant in a wind protected location, a great understory plant. Taproot.	Yes
<i>Rhus typhina</i>	Staghorn Sumac	Anacardiaceae	3-5	5-8		Zones 3-8	ON OC NB NS PE	Mass plantings, for naturalizing, or on steep slopes		Dry soil, moist, well-drained	Clay soil, dry sites, occasional drought, road salt, black walnut toxicity	Very adaptable to most growing conditions, from poor soils to drought conditions. It does not tolerate wet soils. Thicket forming Taproot.	Yes
<i>Sorbus decora/ Sorbus americana</i>	Showy Mountain Ash / American Mountain Ash	Rosaceae	6-9	5-6		Zones 2-6	MB ON OC NB NS PE NL	Understory tree		Moist, well-drained	Rocky sites near water	Understory tree. Specie are difficult to distinguish from one another. Showy fruit is an important food source for wildlife.	Yes
<i>Sorbus sitchensis</i>	Silka Mountain Ash	Rosaceae	6-9	4-6		Zones 5-7	BC AB YT	Variety of sites, poor soils, wet soil		Moist, often bordering on swamps	Disturbed sites, dry sites	Slopes and hillsides. Useful in streambank regeneration. Taproot.	Yes
Conifer													
<i>Taxus brevifolia</i>	Western Yew	Taxaceae	20	5-8		Zones 5-9	BC AB	Residential, landscape, understory		Moist, well-drained	Urban pollution, occasional drought	Intolerant of road salt. Taproot.	Yes

Size Range Small medium

Botanical	Common	Family	Est. Mature Height (m)	Est. Mature Width (m)	Common Form	Hardiness Zones	Range	Location	Light Exposure	Soil Preference	Tolerances	Plant Care	Serious Pest/Disease
Broadleaf													
<i>Aesculus glabra</i>	Ohio Buckeye	Sapindaceae	6-12	6-12		Zones 3-8	ON OC PE NS NB	Urban, residential and parks, wide median, restricted sites		Acid soil, moist, well-drained	Alkaline soil, dry sites, occasional drought, wet sites, black walnut toxicity	Messy fruit/plant parts. Taproot.	No
<i>Prunus pensylvanica</i>	Pin Cherry	Rosaceae	5-8	8-12		Zones 2-5	BC NT AB SK MB ON OC NB NS PE NL	Recently disturbed sites, rivers		Moist, sandy soil, well-drained	Dry sites, occasional drought	Short-lived tree. Grows best in cool climates and well-drained sandy soils. Intolerant of shade. Taproot.	Yes
Conifer													
<i>Thuja occidentalis</i>	Eastern White Cedar	Chamaecyparidaceae	15-18	3-5		Zones 3-7	ON OC NB NS PE	Variety of sites, poor soils, wet soil, landscapes, urban		Moist, well-drained	Dry sites, road salt	Susceptible to wind, snow and ice damage. Shallow root.	Yes

Size Range Medium

Botanical	Common	Family	Est. Mature Height (m)	Est. Mature Width (m)	Common Form	Hardiness Zones	Range	Location	Light Exposure	Soil Preference	Tolerances	Plant Care	Serious Pest/Disease
Broadleaf													
<i>Gleditsia triacanthos f. inermis</i>	Thornless Honey Locust	Fabaceae	10-30	10-30		Zones 3-8	ON OC NB NS PE NL MB SK	Urban, residential, parks, wide median		Moist, well-drained soil	Alkaline soil, clay soil, dry sites, occasional flooding, road salt, wet sites, black walnut toxicity	Commonly planted beyond its range due to its tolerance of drought and alkaline soils. Look for thornless cultivars, shorter lived species. Shallow root.	Yes
Conifer													
<i>Picea rubens</i>	Red Spruce	Pinaceae	20-30	6-10		Zones 3-7	OC NB NS PE	Parks, naturalized		Cool, moist sites	Shade tolerant, understory tree.	Susceptible to windthrow. Taproot.	Yes
<i>Pinus contorta</i>	Lodgepole Pine	Pinaceae	24-30	8-10		Zones 4-8	YT BC AB	Open stands, mixed stands		Wide range of soils, dry sites, wet sites	Wet sites, recently burned areas	Taproot.	Yes

Size Range Medium large

Botanical	Common	Family	Est. Mature Height (m)	Est. Mature Width (m)	Common Form	Hardiness Zones	Range	Location	Light Exposure	Soil Preference	Tolerances	Plant Care	Serious Pest/Disease
Broadleaf													
<i>Ostrya virginiana</i>	Ironwood, Hop-horn-beam	Betulaceae	8-12	5-12		Zones 3-9	MB ON OC NB NS PE	Residential, parks, urban		Moist, well-drained	Alkaline soil, dry sites	Naturally occurs in dry woodland, understory areas. Intolerant of salt. Tolerant species once established. Shallow Root.	No
<i>Populus balsamifera</i>	Balsam Poplar	Salicaceae	25	8-10		Zones 2-6	YT NT NV BC AB SK MB ON OC NB NS PE NL	Parks, residential		Moist, well-drained	Wet sites	Commonly in rural areas for shelterbelts and windbreaks	Yes
Conifer													
<i>Abies lasiocarpa</i>	Subalpine Fir	Pinaceae	30-40	4-6		Zones 0-2	YT BC AB	Early successional tree. Open landscape.		Moist, well-drained	Variety of soils	Shallow roots, weak wood	Yes
<i>Picea mariana</i>	Black Spruce	Pinaceae	8-12	6-9		Zones 2-6	NS NB PE NL OC ON MB SK AB BC YT NT NV	Wide range of landscapes		Acid soil, moist, well-drained soil, wet soil	Occasional drought, wet sites	Performs best in cold northern climates, can be stressed by warm summers. Shallow root system benefits from mulch layer. Prone to windthrow.	Yes
<i>Pinus banksiana</i>	Jack Pine	Pinaceae	9-15	3-6		Zones 2-6	NS NB PE NL OC ON MB SK AB NT	Poor sites, coarse soils		Acid soil, moist, sandy soil, well-drained	Alkaline soil, dry sites, road salt	Susceptible to ice damage, avoid planting in wet sites. Prone to windthrow. Taproot.	Yes
<i>Tsuga mertensiana</i>	Mountain Hemlock	Pinaceae	45	4-6		Zones 5-8	BC	Landscape tree, residential, parks		Moist, well-drained	Dry sites	Useful in protecting steep slopes against erosion. Shallow roots.	Yes

Size Range Large

Botanical	Common	Family	Est. Mature Height (m)	Est. Mature Width (m)	Common Form	Hardiness Zones	Range	Location	Light Exposure	Soil Preference	Tolerances	Plant Care	Serious Pest/Disease
Broadleaf													
<i>Acer nigricorn</i>	Black Maple	Sapindaceae	18-22	12-16		Zones 4-8	ON	Residential, parks, natural landscapes		Acid soil, moist, well-drained	Dry soil	Intolerant of salt, drought, and pollution. Shallow roots.	Yes
<i>Acer rubrum</i>	Red Maple	Sapindaceae	10-20	10-15		Zones 3-9	NS NB PE NL OC ON	Urban, residential, parks, wide median		Acid soil, moist, well-drained	Alkaline soil, clay soil, occasional flooding, wet sites	Chlorosis can be a problem in high pH soils and drought conditions. Surface roots.	Yes
<i>Acer saccharum</i>	Sugar Maple	Sapindaceae	18-20	12-16		Zones 4-9	NS NB PE OC ON	Natural, parks, residential		Moist, well-drained	Alkaline soil, clay soil, black walnut toxicity	Commonly planted, intolerant of pollution. Shallow roots.	Yes
<i>Betula alleghaniensis</i>	Yellow Birch	Betulaceae	18-22	18-22		Zones 3-7	MB ON OC NB NS PE NL	Residential, parks		Acid soil, moist, well-drained	Alkaline soil, wet sites, black walnut toxicity	Performs best in areas where summers are cool. Shallow roots.	Yes
<i>Betula papyrifera</i>	Paper Birch	Betulaceae	15-20	20-45		Zones 2-6	YT NT NV BC AB SK MB ON OC NB NS PE NL	Residential parks		Acid soil, moist, well-drained	Alkaline soil, clay soil, occasional flooding, wet sites, road salt	Performs best in northern climates, stressed by hot summers. Shallow roots.	Yes
<i>Carya cordiformis</i>	Bitternut Hickory	Juglandaceae	15-20	12-15		Zones 4-9	ON OC NB NS PE	Urban, residential, parks, wide median		Moist, well-drained	Dry sites, occasional flooding	Develops a long taproot, may make it more challenging to transplant	No
<i>Fagus grandifolia</i>	American Beech	Fabaceae	15-20	15-20		Zones 3-9	ON OC NB NS PE	Residential, park		Acid soil, moist, well-drained	Alkaline soil	Intolerant of salt, drought and wet sites. Long lived species. Surface roots.	Yes
<i>Fraxinus pennsylvanica</i>	Green Ash	Oleaceae	15-20	8-12		Zones 2-9	SK MB ON OC NB NS	Shade and street tree		Moist, well-drained, wet soil	Dry sites, occasional drought, occasional flooding, road salt, poor soils, wind, wet sites	Weak wood, susceptible to the Emerald Ash Borer. If in your municipality, it is not recommended. Taproot.	Yes
<i>Gymnocladus dioica</i>	Kentucky Coffeetree	Fabaceae	18-22	12-15		Zones 3-9	ON OC NB NS PE NL MB SK	Urban, residential, parks, wide median		Deep rich soils, moist, well-drained	Urban pollution, drought	Can be planted well beyond its natural range. Taproot.	No
<i>Liriodendron tulipifera</i>	Tuliptree	Magnoliaceae	20-30	10-15		Zones 4-9	ON	Urban, residential, parks, wide median		Acid soil, moist, well-drained soil	Alkaline soil, black walnut toxicity	Highly susceptible to ice damage, weak wood and branch structure. Intolerant of dry sites. Taproot.	Yes
<i>Platanus occidentalis</i>	Sycamore	Plantaceae	20-30	15-20		Zones 4-9	ON OC	Urban, residential, parks, wide median		Alkaline soil, wet soil	Clay soil, occasional flooding, road salt, wet sites, black walnut toxicity	Intolerant of shady sites. Susceptible to frost cracks. Often planted outside of its natural range. Shallow roots.	Yes
<i>Populus tremuloides</i>	Quaking Aspen	Salicaceae	12-15	6-9		Zones 2-6	YT NT BC AB SK MB ON OC NB NS PE NL	Residential, parks, sheltered locations		Moist, well-drained, wet soil	Dry sites	Excessive sucker growth, highly susceptible to ice damage. Does not tolerate summer heat or pollution. Shallow root.	Yes
<i>Quercus alba</i>	White Oak	Fabaceae	15-25	30		Zones 3-9		Residential, parkway		Moist, well-drained	Dry sites	Does not tolerate wet sites, deep taproot	Yes
<i>Quercus macrocarpa</i>	Bur Oak	Fabaceae	21-24	21-24		Zones 3-9	SK MB ON OC NB NS PE	Residential and parks, wide median		Moist, well-drained, secs	Dry sites, occasional drought, occasional flooding	Adaptable to many soils. Taproot.	Yes
<i>Quercus rubra</i>	Northern Red Oak	Fabaceae	18-22	18-22		Zones 3-6	ON OC NB NS PE	Residential and parks, wide median		Moist, well-drained	Dry sites, pollution, salt	Intolerant of shade and competition, although shade tolerant when young. Taproot.	Yes
<i>Tilia americana</i>	American Basswood	Tiliaceae	18-24	9-18		Zones 3-8	MB ON OC NB NS PE	Residential and parks, wide median		Moist, well-drained	Clay soil, dry sites, occasional drought	Susceptible to ice damage. Surface roots not a problem.	Yes
<i>Ulmus americana</i>	White Elm	Ulmaceae	35	20-30		Zones 3-9	MB ON OC NB NS PE	Urban, residential, parks, wide median		Moist, well-drained	Dry sites, road salt, poor soil	Heat and wind tolerant. Surface roots.	Yes
Conifer													
<i>Abies balsamea</i>	Balsam Fir	Pinaceae	15-18	9-12		Zones 3-5	NS NB PE NL OC ON MB SK AB	Residential, parks, pure stands		Acid soil, moist, well-drained	Wet sites, wide variety of soils	Cold hardy, does not do well in hot, dry sites. Performs poorly in dry, exposed sites.	Yes
<i>Chamaecyparis nootkatensis</i>	Yellow Cedar	Chamaecyparidaceae	25	4-6		Zones 4-7	BC	Landscape tree, naturalized sites, wet sites		Moist, wet soils	Shade tolerant, understory tree	Planted widely outside its native range as an ornamental. Taproot.	Yes
<i>Larix laricina</i>	Tamarack, Eastern Larch	Pinaceae	12-24	9-15		Zones 2-5	NS NB PE NL OC ON MB SK AB BC YT NT NV	Residential, parks		Wet soil, poorly draining soils	Clay soil, occasional flooding, wet sites	Intolerant of pollution, best in cool climates with adequate soil moisture. Dislikes heat and drought. Shallow root system. Prone to windthrow.	Yes
<i>Picea engelmannii</i>	Engelmann Spruce	Pinaceae	35	7-10		Zones 3-8		Slopes, streams, open stands		Moist, well-drained	Slopes, various elevations	Performs best in cool climates. Shallow roots.	Yes
<i>Picea glauca</i>	White Spruce	Pinaceae	12-18	5-6		Zones 2-6	NS NB PE NL OC ON MB SK AB BC YT NT NV	Wide range of landscapes		Moist, well-drained	Alkaline soil, clay soil	Shallow roots benefit from mulch layer	Yes
<i>Picea sitchensis</i>	Silka Spruce	Pinaceae	55	8-10		Zones 7-8	BC YT	Stream flood plains, wet sites, open stands		Acid soil, well-drained	Wet sites, salt spray	Shallow roots	Yes
<i>Pinus ponderosa</i>	Ponderosa Pine	Pinaceae	30-40	8-10		Zones 3-7	BC AB	Pure open stands, mixed stands		Moist, well-drained	Dry sites, occasional drought, very windfirm	Fire-resistant from thick bark. Taproot.	Yes
<i>Pinus strobus</i>	Eastern White Pine	Pinaceae	15-25	6-14		Zones 3-7	ON OC NB NS PE	Residential, parks, wide median		Acid soil, moist, well-drained	Variety of sites, dry, sandy, moss, bogs	Intolerant of shade, wet soils, salt, clay soils. Quick to establish.	Yes
<i>Pseudotsuga menziesii</i>	Douglas Fir	Pinaceae	12-24	5-9		Zones 4-6	BC AB	Residential, screening, large landscape		Moist, well-drained	Road salt	Intolerant of hot, dry sites. Prefers cooler climate. Taproot.	Yes
<i>Tsuga canadensis</i>	Eastern Hemlock	Pinaceae	12-20	8-10		Zones 3-7	NS NB PE OC ON	Parks, residential		Moist, well-drained		Intolerant of pollution, heat, drought, urban conditions. Shelter from strong winter winds. Shallow root.	Yes
<i>Tsuga heterophylla</i>	Western Hemlock	Pinaceae	50-80	8-10		Zones 5-8	BC AB	Open stands, mixed stands		Moist, well-drained	Wet sites	Susceptible to forest fire damage. Windthrow. Regenerates well. Shallow root.	Yes