

Prairie Urban Garden - Oldman Watershed Council

Xeriscape Priority Plant List

TREES

Attribute	Response
Common Name	Limber Pine
Scientific Name	<i>Pinus flexilis</i>
Origin	Native. This tree species has a limited distribution in Canada to only a small area in Alberta and British Columbia. It can also be found in the United States to the Great Plains and western states.
Height	8 - 9 m (26-30')
Spread	5 m (16')
Life Form	Five needled coniferous evergreen tree with an irregular shaped crown or canopy.
Flower Color	Brown cone
Foliage Color	Blue-green
Flowering Period	No ornamental value
Habitat	Full sun with well drained soils. It prefers gravelly, rocky soil texture; it will not do well in water saturated soils. It is hardy to Zone 2-3.
Maintenance	Low maintenance. This tree is slow growing and small statured for a pine tree and is well suited to most properties, including smaller city lots. The name for Limber Pine comes from the flexibility of the new branches and twigs; it therefore can withstand the heavy Chinook winds without suffering damage. This characteristic sometimes also results in a very irregular tree silhouette. It is best to accept this natural form and not try to prune or trim the tree trying to create something that it is not.
Availability	Container plants of various sizes are commonly found at native plant suppliers and general plant nurseries. However, it is not common to the localized seasonal garden centers.
Special Notes	<p>Limber pine is native to southern Alberta foothills region and is a slow growing, long lived specimen. The tree is very drought & chinook tolerant.</p> <p>Ponderosa Pine (<i>Pinus ponderosa</i>) is another native, drought tolerant specimen available from native plant suppliers and general plant nurseries, but is only suitable for large lots. It is a three needled pine that can reach heights of 15- 24 m (49-79') and spread of 9 m (30'). This tree is one that will require some regular clean up from copious amounts of shed needles and many fallen cones. The tree is native to Southern interior British Columbia.</p> <p>Scots Pine (<i>Pinus sylvestris</i>) is a non-native, drought & chinook tolerant pine that is offered in a number of different cultivars/varieties ranging from dwarf to columnar forms. The species (full sized tree form) reaches a height of 15 m (49') and 9 m</p>

	(30') spread.
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Attribute	Response
Common Name	Colorado Blue Spruce
Scientific Name	<i>Picea pungens</i>
Origin	Non-native and cultivars. This selection is not a native species to Canada. It is however, native to the Midwestern and Northwestern United States.
Height	30 cm to 20 m (12"-66')
Spread	60 cm to 8 m (2'-26')
Life Form	Coniferous "evergreen" tree
Flower Color	Brown cone
Foliage Color	Blue to bluish-green needles. These are small stalked, sharp pointed needles that are singular on the stem and are angular or four-sided.
Flowering Period	No ornamental value
Habitat	Full sun to partial shade, well drained soils. It is hardy to Zone 2-3.
Maintenance	Low maintenance, pruning may be required only to "tidy up" the plant. There are many cultivars that allow for a selection to match virtually all landscape applications. Avoid trimming off the lower branches when the tree matures. Trees subjected to this treatment lose their natural appearance and create a dry, shady micro-site underneath the canopy that typically limits the home owner to a very limited number of vegetative groundcover options. Many of these involve aggressive non-native species; thus mimic nature and leave the branches intact to ground level.
Availability	Container plants are widely available in many sizes for Blue Spruce, but many of the specialty cultivars will only be available at plant nurseries. Blue Spruce is also available in larger stock from specialty tree nurseries; up to 3.7 m (12') in height. These specimens typically require truck mounted spades for planting.
Special Notes	This is a highly variable species with many cultivars ranging in heights and spread from creeping ground covers to large trees. Their blue foliage is one of its most attractive characteristics that provides for yearlong interest. Blue Spruce is a drought & chinook tolerant species that has a wide spreading, but a relatively shallow root system. It is still wind firm but creates competition limited moisture for understory plant species. For a smaller yard the 'Baby Blue Eyes' cultivar grows to 5 m (16') and a spread of 3 m (10'). The popular 'Montgomery' cultivar is even smaller and grows to about 2 m (7') height & 2 m (7') spread. The Fat Albert cultivar (10 m x 5 m) (33' x 16') is an excellent cultivar for those looking for a prominent, focal point specimen without the space for the species at 20 m x 8 m (66'x 26').

	The White Spruce (<i>Picea glauca</i>) is another drought & chinook tolerant species that is native to southern Alberta foothills region and Cypress Hills. Its' foliage is green in colour and does not have quite the cultivar selection of Blue Spruce. White Spruce typically grows to a height of 18 m (59') and spreads to 6 m (20'). The 'Black Hills' cultivar <i>Picea glauca "densata"</i> is a nice selection for most yards; growing to a modest height of 9 m (30') and 5 m (16') spread.
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Attribute	Response
Common Name	Round-leaved Hawthorn
Scientific Name	<i>Crataegus chrysoarpa</i> or <i>Crataegus rotundifolia</i>
Origin	Native and hybrid species. The native species is found in all Canadian provinces but British Columbia. In the U.S.it is found across the country primarily to the Northern states. The common commercially available Hawthorn selections were developed at Agriculture Canada Plant Breeding Station in Morden, Manitoba; <i>Crataegus x mordenensis</i> varieties resulted.
Height	5 m (16')
Spread	4 m (13')
Life Form	Small deciduous tree with rounded canopy and prominent thorns.
Flower Color	White and pink
Foliage Color	Green, simple ovate leaves with double serrated margins.
Flowering Period	Mid spring
Habitat	Full sun to partial shade, well drained soils. They prefer sandy, gravelly, rocky soil textures. It is hardy to Zone 3.
Maintenance	This is a small tree with an irregular crown and does not require any significant pruning to maintain its shape. However, make sure you leave sufficient distance for the mature canopy growth if you plant it close to walkways, pathways, decks etc. Hawthorn has a significant thorn on its branches that you would not want to unwittingly walk into.
Availability	The native species is typically found only at specialty native plant suppliers and nurseries; however the hybrid cultivars can be readily found throughout general plant nurseries and seasonal garden centers in a number of different sized containers. The two most common are 'Snowbird' and 'Toba' Hawthorn. The cultivars are also available in larger stock from specialty tree nurseries; up to 5 cm (2") in caliper. These specimens typically require truck mounted spades for planting.
Special Notes	Hawthorn is susceptible to a fungus called cedar-apple rust. The fungus first establishes itself on Juniper (<i>Juniperus spp.</i>) shrubs and then produces spores that infect the Hawthorn tree. Once on the Hawthorn the fungus produces a new generation of spores and re-infects the Juniper shrub. The fungus is most prevalent during a moist/wet spring season. The fungus appears as an orange jelly-

	<p>like gall on the Juniper and appears as flaking “car rust” with horn like projections on the leaves and fruit of the Hawthorn. The fungus needs both plant species to survive and therefore the best way to avoid this fungus is to keep Junipers and Hawthorns apart. However, the spores can spread by the wind and in the city a neighbors Juniper shrub many houses away from your property could spread the fungus to your Hawthorn tree. A second control measure is for all homeowners to remove the orange jelly-like gall at first sign and break the fungus’s life cycle.</p> <p>Two rust resistant hybrid cultivars of Hawthorn have been propagated to contend with this fungal organism. They are both hybrids called ‘Snowbird’ and ‘Toba’ Hawthorn (<i>Crataegus x mordenensis</i>). The Snowbird is white flowered and the Toba is pink flowered. The two Hawthorns will not be completely immune to the fungal infection but are less impacted than the native species. They are both drought tolerant and a nice compact selection for a small yard.</p>
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Attribute	Response
Common Name	Amur Maple
Scientific Name	<i>Acer ginnala</i>
Origin	Non-native. This tree and shrub option originated from Manchuria, north China and Japan.
Height	5–6 m (16-20’)
Spread	3–4 m (10-13’)
Life Form	Small deciduous tree with a globular canopy.
Flower Color	The flower does not provide any landscape significance; but the fruit offers striking landscape value by producing a samara (“maple key”) which is a brilliant red color during the fall season.
Foliage Color	Simple leaves with three lobes, the terminal larger than the laterals. Green in early spring & summer. Orange to red foliage in late summer & fall.
Flowering Period	Spring
Habitat	Full sun to light shade in dry to moist soils. It is hardy to Zone 3.
Maintenance	This plant can be purchased as a small tree or large multi-stemmed shrub. Once trained as a tree it will not need any significant pruning to maintain its rounded canopy. Avoid late winter and early spring pruning; when pruned it should be conducted during late summer to reduce the amount of sap flow from cut ends.
Availability	This plant is fairly common and can be found in most general plant nurseries and many seasonal garden centers. It is sold in various sized containers.
Special Notes	As previously mentioned this plant can be purchased as a large multi-stemmed shrub or small tree. As a shrub the canopy tends to

	<p>be open and irregular in form. The tree form provides an excellent choice for those xeriscape applications requiring a tree on small city lot.</p> <p>A larger and similar looking tree is the Tatarian Maple (<i>Acer tataricum</i>). It reaches heights of 7.6 m (25') and of equal spread. This specimen may even be more drought tolerant than the Amur species. Tatarian Maple is hardy to Zone 3 and is a non-native cultivar.</p>
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Attribute	Response
Common Name	Green Ash or Red Ash
Scientific Name	<i>Fraxinus pennsylvanica</i>
Origin	Native and native cultivars. The native selection in Canada originates from Nova Scotia to Saskatchewan.
Height	Up to 15 m (49')
Spread	8–10 m (26-33')
Life Form	Large deciduous tree with oval canopy.
Flower Color	Greenish yellow with no particular landscape value. The fruit is a single sided samara.
Foliage Color	Green in the spring & summer, turning yellow in the fall. The leaves provide interest on their own reflecting a pinnate compound leaf type with 7 leaflets.
Flowering Period	Spring flowering.
Habitat	Full sun to very light shade, well drained soils are preferred. It is hardy to Zone 2-3. In nature, the Green Ash is common to river bottoms but the cultivars have found a home in Alberta and are quite drought tolerant.
Maintenance	Green Ash will not require any significant pruning so long as it has been provided the adequate space to reach full maturity. This is a large tree and it should be provided with ample space.
Availability	This specimen is widely distributed in both general plant nurseries and seasonal garden centers. It is sold in a number of various sized container specimens. Green Ash is also available in larger stock from specialty tree nurseries; up to 7.5 cm (3") in caliper and 4.3 m (14') in height. These specimens typically require truck mounted spades for planting.
Special Notes	<p>Green Ash is well known for its early season start and bud breaks & leafs out in early spring. As a result it is susceptible to early spring frost damage. The damage is not usually lethal but certainly sets the plant back & stunts growth for that season.</p> <p>The samara seeds produced by Green Ash can be messy however a number of seedless cultivars have been produced to contend with this issue. The most notable species for its hardiness and cleanliness is the Patmore Green Ash which reflects the species height and spread. A narrower selection for a slightly smaller space</p>

	is the Prairie Spire which grows to a height of about 13.7 m (45') and a spread of 3.7–6 m (12-20'). Both of these cultivars are seedless.
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Attribute	Response
Common Name	Black Chokecherry
Scientific Name	<i>Prunus virginiana</i> var. <i>melanocarpa</i>
Origin	Native and native cultivars. The native species (<i>Prunus virginiana</i>) is more commonly thought of as large shrub species and can be found throughout most of southwestern Canada and much of the United States. The variety 'melanocarpa' and a number of cultivars are produced as a tree form.
Height	7.6 m (25')
Spread	4.6 m (15')
Life Form	Small to medium sized deciduous tree with a globular canopy.
Flower Color	A member of the Rose family this tree presents with a raceme, narrow, elongated cluster of white flowers.
Foliage Color	Simple, elliptical leaves with serrated margins. The leaves are green in the spring and change to a reddish-purple color in the summer months.
Flowering Period	Early spring
Habitat	Full sun and well drained soils. It does well on sandy to gravelly type soils and although this species is drought tolerant it is equally well suited to more mesic conditions. It is hardy to Zone 2-3.
Maintenance	This selection is going to require some regular care and attention. Firstly, the tree produces a berry-like (drupe) fruit type that in certain landscape applications appears "messy" in the fall when they drop to the ground, and as such may require clean-up. In spite of this apparent drawback the berries will attract birds to your yard looking for edibles. Secondly, the tree suckers from underground reproductive buds. These suckers increase with root disturbance and if the shoots are not clipped at ground level they create an un-tidy appearance around the trunk. However, the tree is both drought & Chinook tolerant and the value provided by the purplish foliage is well worth any modest maintenance requirements.
Availability	This is a widely distributed tree species that comes in a number of different sized container specimens and is easily located in most nurseries and garden centers. Chokecherry is also available in larger stock from specialty tree nurseries; up to 7.5 cm (3") in caliper. These specimens typically require truck mounted spades for planting.
Special Notes	The native species tends to appear more shrub like (with a similar height to spread size) than the varieties of 'melanocarpa' and

	<p>cultivars, such as the Schubert Chokecherry (<i>Prunus virginiana</i> var. <i>melanocarpa</i> 'Schubert'). A smaller sized variety of this tree is the Spur Schubert Chokecherry (<i>P. virginiana</i> var. <i>melanocarpa</i> 'Spur Schubert') which grows to 6.0 m (20') in height and 4.0 m (13') in spread.</p> <p>Pincherry (<i>Prunus pensylvanica</i>) is another native species that is suitable for small spaces (4.5 m (15') in height and 2.7 m (9') in spread). The leaves remain green all summer and change to orange-reddish tones in the fall. However, this species is not as widely available as the Chokecherry but can be found at most plant nurseries.</p> <p>A final selection worth mentioning within the genus <i>Prunus</i> is called Muckle Plum (<i>Prunus x nigrella</i> 'muckle'). This is a sterile cross between Russian Almond (<i>Prunus tenella</i>) and Canada Plum (<i>Prunus nigra</i>). It is a small tree, 4.5 m (15') ht. x 3 m (10') spread for those locations with limited space. It is noteworthy because it does not produce fruit or sucker. This species is not common and is limited to only general plant nurseries and not the seasonal garden centers.</p>
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Attribute	Response
Common Name	Bur Oak
Scientific Name	<i>Quercus macrocarpa</i>
Origin	Native. Bur Oak can be found in Alberta and extends eastward to New Brunswick. It follows a similar distribution in the U.S., occurring in Montana and eastward to the state of Maine. It can be found as far south as Texas.
Height	15 m (49')
Spread	12 m (39')
Life Form	Large deciduous tree with an upright oval canopy.
Flower Color	No significant landscape value. However, produces an acorn fruit type which is always a favorite with young children.
Foliage Color	Dark green changing to shades of yellow-orange in the fall. The leaves are simple with deeply lobed margins.
Flowering Period	Spring
Habitat	Full sun to partial shade, well drained soils. It is hardy to Zone 3.
Maintenance	This tree requires very little maintenance. This is large tree and adequate space must be provided for its eventual mature size.
Availability	The tree is fairly common in most general plant nurseries and can be purchased in different sized containers. It is not common at the seasonal garden centers. Bur Oak is also available in larger stock from specialty tree nurseries; up to 5 cm (2") in caliper These specimens typically require truck mounted spades for planting.
Special Notes	This tree is for the patient homeowner; this is a long lived tree and

	<p>should be expected to live for about 200-300 years. You can expect moderate growth rate when it is young but it will slow down in later years and “settle in for the long run”.</p> <p>It is a native species that is common in eastern Canada and as far west as southeast Saskatchewan. It is a hardy species and does very well in Alberta. The tree produces a deep taproot which allows it to access deep water resources and thus is drought tolerant once established.</p>
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Attribute	Response
Common Name	Swedish Columnar Aspen
Scientific Name	<i>Populus tremula 'Erecta'</i>
Origin	Non-native. This selection was first discovered in the forests of Sweden; but is also native to Europe, Asia, and Siberia.
Height	9–12 m (30-39')
Spread	2 m (7')
Life Form	Tall, narrow deciduous tree.
Flower Color	Produces a green catkin which has no significant ornamental value.
Foliage Color	Dark green changing to shades of golden yellow in the fall. The leaves are circular with wavy margins.
Flowering Period	Spring
Habitat	This is full sun selection. It is moderately drought tolerant once established. Aspen prefers dry to moist soils, but well drained soils. It is hardy to Zone 3.
Maintenance	The Swedish Columnar Aspen has a very narrow canopy and as such should not need much in the way of pruning. It is a fast growing specimen with most of its energy targeted towards height growth. These two attributes have proven Swedish Columnar Aspen a favorite for many city homeowners. It provides a privacy screen between neighbors in a relatively short period of time. The narrow canopy works well with minimal distances between property lines. However, this tree has a tendency to reproduce by suckers; but if root disturbance is minimized then so too are the young juvenile suckers. What suckers that do develop are easily clipped and contained with minimal effort.
Availability	This selection is probably one of the most widely accessible tree species. It can be found at virtually all general plant nurseries and seasonal garden centers. These trees are sold in a number of different sized containers. Swedish Columnar Aspen is also available in larger stock from specialty tree nurseries; up to 5 cm (2”) in caliper These specimens typically require truck mounted spades for planting
Special Notes	Swedish Columnar Aspen is hardy to Southern Alberta and is

	<p>relatively drought tolerant once established.</p> <p>A related specimen called Trembling Aspen (<i>Populus tremuloides</i>) is a native species to Alberta that provides for a medium to large shade tree; 9-12 m (30-39') in height and 7.6 m (25') in spread. Trembling Aspen requires a moderate level of maintenance; it is fast growing and may require some pruning to maintain a tidy oval canopy structure. In its natural habitat the tree reproduces prolifically by suckers. In a landscape application it is better behaved and can be easily reined in by clipping the juvenile suckers and minimizing root disturbance.</p> <p>Trembling Aspen should be planted away from the house so that the extensive root system does not interfere with the foundation.</p>
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Attribute	Response
Common Name	Western Mountain Ash
Scientific Name	<i>Sorbus scopulina</i>
Origin	Native and non-native. Western Mountain Ash is native to Saskatchewan, Alberta, British Columbia, Yukon and NWT. The Showy Mtn. Ash is also a Canadian native; but is original to the province of Saskatchewan and extends into central and eastern Canada. The European Mtn. Ash as you would expect is a non-native selection commonly found commercially in Canada.
Height	5.5–10.0 m (18-33')
Spread	5 m (16')
Life Form	Medium, multi-stemmed deciduous tree with a globular canopy.
Flower Color	Cluster of white flowers
Foliage Color	Green compound leaves with serrated leaflet margins
Flowering Period	Spring
Habitat	Full sun to light shade; it is highly variable growing in moist soils to dry rocky & poor soil conditions. It is hardy to Zone 2-3.
Maintenance	This tree does not require much in the way of pruning maintenance. However, all Mountain Ash trees produces a large number of orange-reddish berries and if it is planted too close to the driveway, walkways or deck the fruit landing on these hardscapes can appear untidy and un-kept.
Availability	The Western Mtn. Ash is available at native plant suppliers and nurseries. It is sold in various sized containers. The introduced European Mtn. Ash and the native Showy Mtn. Ash and are generally common throughout most plant nurseries and seasonal garden centers in a variety of sized containers.
Special Notes	Alberta is home to another species of <i>Sorbus</i> called Sitka Mountain

	<p>Ash (<i>Sorbus sitchensis</i>). This species is found in Alberta, B.C. and Yukon. It is not commercially available in Alberta.</p> <p>The orange-reddish berries that occur in late summer and early fall may appear as maintenance concerns for some whereas others see it as a wonderful color contrast to the equally distinctive and attractive green foliage. Also, the fruit is very palatable and will attract a number of birds to your yard for these edible treats.</p> <p>An attractive non-native cultivar that is well suited to a smaller yard is called European Mountain Ash (<i>Sorbus aucuparia</i>). This variety provides a small, narrow canopy and overall form called Pyramidal Mountain Ash (<i>Sorbus aucuparia</i> 'Fastigiata'). The Pyramidal form is about 6.0 – 7.5 m (20-25') in height and 2– 3 m (7-10') in spread. The Showy Mountain Ash (<i>Sorbus decora</i>) is commercially available and provides a nice round canopy growing to 9m (30") and 5m (17') spread.</p>
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Attribute	Response
Common Name	Flowering Crabapple
Scientific Name	<i>Malus x astringens</i> cultivars
Origin	Non-native cultivars
Height	5-10 m (16-33')
Spread	1–5 m (90 cm – 16')
Life Form	Small deciduous trees with more or less globular canopies.
Flower Color	White, Red and Pink
Foliage Color	Green, purplish-red simple leaves with serrated margins.
Flowering Period	Mid to late spring
Habitat	Full sun, well drained soils. Cultivar specific but hardy to Zones 2-3.
Maintenance	<p>Most cultivars of Crabapple will require a moderate level of pruning maintenance and depending on the cultivar selection will have the fruit to contend with at the end of the growing season. Pruning is best done late winter season. Fire-blight is a bacterial disease that is associated with most Crabapples. The disease is most prevalent during warm, moist periods of active plant growth. The disease enters the plant via openings in the flower, actively growing terminal buds and any open wounds from pruning or damaged bark/stem surfaces. The following maintenance procedures can reduce the incidence of infection:</p> <ol style="list-style-type: none"> 1) Prune only when the tree is dormant; mid to late winter. 2) Do not fertilize the tree; particularly nitrogen. This reduces excessive terminal leader growth. 3) Do not over water. 4) Remove suckers as they represent an area of active terminal bud growth. <p>There are a number of fire-blight resistant varieties produced today</p>

	and should be used if you have any concerns with following the maintenance schedule outlined above.
Availability	Crabapples are widely found in most plant nurseries and garden centers. There are a number of different cultivars to select from so species selection will vary. They are produced in a number of different sized containers.
Special Notes	<p>There are only a couple species of Crabapples that are native to Canada. The Crabapples found in plant nurseries and garden centers are hybrid cultivars of non-native species. However, once established they are drought & Chinook tolerant. Their growth forms range from small to medium sized trees; perfect for most urban yards.</p> <p>Thunderchild Crabapple (<i>Malus</i> 'Thunderchild') is a medium sized tree reaching about 4.5 m (15') in height and 3.7 m (12') in spread. The selection produces attractive dark purple foliage and a mass of pink flowers in the spring. Thunderchild Crabapple develops a small dark purple fruit (pome). It is reported as a fire-blight resistant cultivar.</p> <p>Spring Snow Crabapple (<i>Malus</i> 'Spring Snow') is slightly larger than Thunderchild growing to 7.6 m (25') in height and 4.6 m (15') in spread. It produces green foliage and a cluster of white flowers in the spring. This cultivar will appeal to those wanting to avoid any cleanup associated with fruit production since this is a fruitless variety. However, this species is not a fire-blight resistant cultivar and proper maintenance procedures should be followed closely.</p>