



Shelterbelt Species Quick Facts

2025

Content provided with permission by © Treetime.ca

Contents

Evergreen Conifer Trees.....	3
Colorado Spruce.....	3
White Spruce.....	3
Scots Pine.....	3
Jack Pine.....	4
Lodgepole Pine.....	4
Deciduous Conifer Trees.....	4
Siberian Larch.....	4
Deciduous Trees.....	5
Okanese Hybrid Poplar.....	5
Laurel Leaf Willow.....	5
Golden Willow.....	5
Acute Willow.....	6
Villosa Lilac.....	6
Common Lilac.....	6
Fruit Bearing.....	7
Choke cherry.....	7
Blueberry.....	7
Low Bush Cranberry.....	7
American Plum.....	7
Saskatoon - Lee 8.....	8
Saskatoon - Northline.....	8
Saskatoon - Smoky.....	9
Red Elderberry.....	9
Siberian Crab Apple.....	9

Evergreen Conifer Trees

Colorado Spruce

Picea pungens

People are attracted to the distinctive blue green colour of this hardy evergreen. But the Blue Spruce really stands out because it is tough, long lived, and adapted to a wide range of growing conditions. Blue Spruce trees are ideally suited for use in shelterbelts, privacy screens, or as accent trees.

Zone: 2a **Height:** 27 m (90 ft) **Spread:** 6 m (20 ft)
Moisture: dry, normal **Light:** full sun **Growth rate:** slow
Life span: long **Maintenance:** low **Suckering:** none
Pollution tolerance: high
In row spacing: 3 - 4 m (10 - 12 ft) **Between row spacing:** 5 m (16 ft)
Other names: Colorado blue spruce, blue spruce



White Spruce

Picea glauca

White Spruce is a hardy, long-lived evergreen tree. It can grow in many soil types and moisture levels. It can even tolerate significant amounts of shade. White spruce requires little maintenance and is well suited for use in shelterbelts, privacy screens, hedges, and as an ornamental in an urban setting. Benefits from some shelter in early years.

Zone: 1a **Height:** 25 m (82 ft) **Spread:** 6 m (20 ft)
Moisture: dry, normal **Light:** partial shade, full sun **Growth rate:** medium
Life span: long **Maintenance:** low **Suckering:** none
Pollution tolerance: medium
In row spacing: 3 m (10ft) **Between row spacing:** 5 m (16 ft)
Other names: Alberta white spruce, Canadian spruce, cat spruce, labrador spruce.



Scots Pine

Pinus sylvestris

Scots Pine is a hardy, adaptable evergreen. This large tree has an oval crown and distinctively orange bark when mature. Scots Pine prefers dry to average moisture levels with very well-drained soil. It is the most common pine tree used in shelterbelts and windbreaks. Scots Pine is also occasionally used as a Christmas tree variety.

Zone: 2a **Height:** 15 m (49 ft) **Spread:** 5 m (16 ft)
Moisture: dry, normal **Light:** full sun **Growth rate:** medium
Life span: long **Maintenance:** low **Suckering:** none
Pollution tolerance: medium
In row spacing: 3 - 4 m (10 - 12 ft) **Between row spacing:** 5 m (16 ft)
Other names: scotch pine



Jack Pine

Pinus banksiana

Jack Pine is a cold tolerant native species that can survive on dry, sandy, or gravelly sites. Similar to Scots Pine, though somewhat larger, Jack Pine is known for its yellow-green needles, spreading crown, and irregular form. If you have a tough site to plant this tree may be right for you.

Zone: 1a	Height: 20 m (66 ft)	Spread: 8 m (25 ft)
Moisture: dry, normal	Light: full sun	Growth rate: fast
Life span: long	Maintenance: low	Suckering: none
Pollution tolerance: medium		
In row spacing: 3 - 4 m (10 - 12 ft)	Between row spacing: 5 m (16 ft)	



Lodgepole Pine

Pinus contorta var. *latifolia*

Lodgepole pine is well suited to western Canada's climate and growing conditions. This native pine is noted for its rapid growth among evergreens. And as one of Canada's hardiest conifers, it can tolerate cold, shade, drought, and poor soil conditions.

Zone: 1a	Height: 30 m (98 ft)	Spread: 6 m (20 ft)
Moisture: dry, normal	Light: full sun	Growth rate: fast
Life span: very long	Suckering: none	Pollution tolerance: medium
In row spacing: 3 - 4 m (10 - 12 ft)	Between row spacing: 5 m (16 ft)	



Deciduous Conifer Trees

Siberian Larch

Larix siberica

Siberian larch is a large, cold hardy deciduous conifer. Like the Tamarack, its needles turn golden yellow and drop in the fall, and it can handle saturated soils. If you are looking for a long-lived tree for your large property or shelterbelt with quite wet soil, this is the tree for you. This variety is often used on the south side of a shelterbelt to let sunlight in during the winter and to provide protection or shading during the summer.

Zone: 1b	Height: 20 m (66 ft)	Spread: 8 m (25 ft)
Moisture: normal, wet	Light: partial shade, full sun	Growth rate: slow
Life span: medium	Maintenance: low	Suckering: none
Pollution tolerance: low		
Fall Colour: yellow needles, loses needles		

Other names: Altaian larch, Russian larch



Deciduous Trees

Okanese Hybrid Poplar

Populus X Okanese

Okanese Poplar is an excellent shelterbelt tree. It's one of the hardiest and fastest growing trees you can plant on the prairie. This hybrid poplar is disease resistant, drought and cold tolerant, produces no fuzz, and requires little maintenance. Okanese poplar also makes for a good privacy screen on larger properties.

Zone: 2a	Height: 18 m (60 ft)	Spread: 8 m (26 ft)
Moisture: any	Light: full sun	Hybrid: yes
Fuzz/fluff: no	Growth rate: very fast	Life span: medium
Maintenance: low	Suckering: high	Pollution tolerance: high
In row spacing: 2.4 - 3 m (8 - 10 ft)		Between row spacing: 5 m (16 ft)



Laurel Leaf Willow

Salix pentandra

Round-shaped tree with attractive dark green leaves. This cold hardy tree can withstand bitter winters and still put on lots of growth every summer. Laurel Leaf Willow prefers moist to wet ground and full sun, though it can tolerate partial shade too. This species is also known as one of the more salt-tolerant species for those with saline soils. Willows are important to native pollinators each spring as they have higher amounts of pollen and nectar early each growing season when other food sources are scarce.

Zone: 2b	Height: 15 m (49 ft)	Spread: 8 m (25 ft)
Moisture: normal, wet	Light: partial shade, full sun	Fuzz/fluff: yes
Catkins: yes	Growth rate: fast	Life span: medium
Maintenance: low	Suckering: medium	Pollution tolerance: high
In row spacing: 2.4 - 3 m (8 - 10 ft)		Between row spacing: 5 m (16 ft)
Other names: bay willow, bay-leaf willow, laurel willow		



Golden Willow

Salix alba vitellina

An attractive accent tree that's perfectly suited for those moist or wet areas on your property. The fast-growing tree has glossy narrow leaves that turn gold in fall, furrowed brown bark and showy gold branches that especially stand out in the winter. Golden Willow is commonly used for windbreaks, shelterbelts, and ornamental planting. Golden Willow attracts a variety of birds and mammals with its twigs and buds.

Do not plant near buildings or buried services

Zone: 2a	Height: 15 m (49 ft)	Spread: 15 m (50 ft)
Moisture: normal, wet	Light: full sun	Fuzz/fluff: yes
Catkins: yes	Fall colour: golden yellow	Bark: bright yellow
Growth rate: fast	Life span: medium	Maintenance: low
Suckering: medium	Pollution tolerance: high	
In row spacing: 2.4 - 3 m (8 - 10 ft)		Between row spacing: 5 m (16 ft)

Other names: basket willow, blue willow, cricket bat willow, duck willow, velvet osier, white osier, white willow



Acute Willow

Salix acutifolia

Acute Willow is a very fast-growing small tree that can reach growth rates of up to 6 feet per year. It's a great choice for developing a quick, hardy shelterbelt, windbreak, or privacy screen. Acute Willow will grow multi-stemmed but can be pruned to a single stem for a smaller footprint. It prefers moist areas and requires almost no maintenance.

Zone: 2a **Height:** 12 m (40 ft) **Spread:** 11 m (35 ft)
Moisture: normal, wet **Light:** partial shade, full sun **Fuzz/fluff:** yes
Catkins: yes **Bark:** younger branches are bright brown-red
Growth rate: fast **Life span:** short **Maintenance:** low
Suckering: low **Pollution tolerance:** medium
In row spacing: 2.4 m (8 ft) **Between row spacing:** 5 m (16 ft)
Other names: acute leaf willow, acute leafed willow, long-leaved violet willow



Flowering Shrubs

Villosa Lilac

Syringa villosa

Villosa Lilac is a relatively large and cold hardy shrub. It provides excellent privacy and wind protection. Its fragrant, pin flowers grow in clusters at the end of its branches during mid to late summer and fade to a light pink over time. Grows quickly and is drought resistant, making it suitable for the outer row of a shelterbelt. Roots are non-suckering, and it does not compete with nearby crops. Villosa Lilac is relatively salt tolerant.

Zone: 2a **Height:** 5 m (16 ft) **Spread:** 3 m (10 ft)
Moisture: dry, normal **Light:** full sun **Growth rate:** medium
Life span: medium **Maintenance:** low **Suckering:** low
Pollution tolerance: high **Flowers:** fragrant purple clusters
In row spacing: 0.9 m (3 ft) **Between row spacing:** 5 m (16 ft)



Common Lilac

Syringa vulgaris

Common Purple Lilac is a popular lilac. This large shrub provides excellent privacy or wind protection in an attractive package. Lilac flowers are pleasantly fragrant and add a beautiful lavender colour to your property. Common Purple Lilac is cold hardy, easy to grow, and can tolerate most soil types.

Some people alternate villosa and common purple lilacs to create the impression that the hedge is in flower for almost a full month with the common purple flowering about 2 weeks sooner than the Villosa Lilac.

Zone: 2a **Height:** 5 m (16 ft) **Spread:** 2.7 m (9 ft)
Moisture: dry, normal **Light:** full sun **Flowers:** dark purple,
extremely fragrant **Growth rate:** fast **Life span:** medium
Maintenance: low **Suckering:** medium **Pollution tolerance:** high
In row spacing: 0.9 m (3 ft) **Between row spacing:** 5 m (16 ft)



Fruit Bearing

Choke cherry

Prunus virginiana

Shrub or small tree commonly used for farmstead and field windbreaks. It produces white flowers in the spring and edible dark purple fruit that matures between September and October. Its cherries are great for making jams, jellies, or wine, but not very palatable for raw eating. Found in open areas of the boreal region.

Zone: 2a	Height: 7 m (23 ft)	Spread: 5 m (16 ft)
Moisture: dry, normal	Light: full sun	Fall colour: reddish-purple
Growth rate: fast	Life span: short	Maintenance: low
Suckering: low	Pollution tolerance: medium	
Berries: edible, astringent, red-purple		Toxicity: toxic to horses, cattle, etc.)
Other names: bitter-berry, common chokecherry, Virginia bird berry		



Blueberry

Vaccinium myrtilloides

Low growing branched shrub. August maturing berry that is wonderfully flavourful and contains more antioxidants by volume than the highbush varieties. They'll give your baked goods a wonderful pop of flavour. One of the only varieties that survive in plant hardiness zones 1A to 2B.

Require very specific soil conditions. They need well drained soil with a pH between 4.5 and 5.0

Zone: 1a	Height: 0.5 m (1.5 ft)	Spread: 0.5 m (1.5 ft)
Moisture: dry, normal	Light: partial shade, full sun	Berries: blue
Firmness: medium	Flavor: tart	Harvest: late summer
Flowers: white	Growth rate: medium	Life span: short
Maintenance: low	Suckering: none	Pollution tolerance: low
Fall colour: yellow, orange, and red		Other names: Canadian blueberry, sourtop blueberry, velvetleaf blueberry, velvetleaf huckleberry



Low Bush Cranberry

Viburnum edule

Short, deciduous shrub native to North America. Its white flowers bear sour but edible fruit that ripens to a brilliant red in fall. Lowbush Cranberry's small size makes it suitable for urban use; buyers will also find it useful if trying to reclaim land back to its original species or when landscaping with native species in damp conditions.

Zone: 2a	Height: 0.9 m (3 ft)	Spread: 1.2 m (4 ft)
Moisture: normal	Light: partial shade, full sun	Fall colour: red
Growth rate: fast	Life span: short	Maintenance: low
Suckering: none	Pollution tolerance: high	
Other names: mooseberry, moosomin, pembina, pimbina, squashberry		



American Plum

Prunus americana

Short and stout fruit trees native to North America. This hardy ornamental is excellent for both city dwellings as well as rural areas. During the spring, the white and pink blossoms are long lasting. The tasty fruit is suitable for fresh eating, baking, and preserves. Commonly used as rootstock and as pollinators for other plum varieties. Near universal pollinator for plum varieties.

Zone: 2b **Height:** 5 m (15 ft) **Spread:** 4 m (12 ft)
Moisture: normal, wet **Light:** partial shade, full sun **Fall Colour:** yellow and gold
Flowers: white **Bark:** grey and scaly with age **Growth rate:** fast **Life span:** medium **Maintenance:** low **Suckering:** high **Pollution tolerance:** high

Other names: black plum, Canada plum, horse plum, wild plum



Saskatoon - Lee 8

Amelanchier alnifolia

Fantastic flavour, a cross between Northline and Thiessen Saskatoon. It has very consistent fruiting and a good yield of tasty berries. The berries are large in size with averages of 1.6 cm (1/2") and will ripen in the middle of July. Shrub remains compact and tidy and is great for homeowners with compact yards and for planting in food forests. Begins to produce fruit from three to five years of age. Developed by Lloyd Lee of Barrhead, AB. (Information Provided by Prairie Hardy Nursery)

Zone: 2 **Height:** 2 m (6-7 ft) **Spread:** 2 m (6-7 ft)
Moisture: normal, well drained **Light:** full sun **Fall colour:** orange/red



Saskatoon - Northline

Amelanchier alnifolia var. *northline*

A native shrub that's famous for its great-tasting fruit. The berries are terrific for fresh eating and cooking. The Saskatoon bush itself can be quite large and produces an abundance of fruit. Saskatoons are hardy and can tolerate partial shade and a variety of growing conditions. Northline Saskatoon is popular because it seldom gets over 8 feet in height, which makes it ideal for U-Pick orchards and over-row harvester equipment. The uniform ripening of the berries in full clusters and the desirable sweet taste also make this variety a favorite.

Zone: 1a **Height:** 3 m (10 ft) **Spread:** 2.4 m (8 ft)
Moisture: normal **Light:** partial shade, full sun **Fall colour:** orange/red
Growth rate: fast **Life span:** short **Suckering:** medium
Pollution tolerance: low

Other names: alder-leaf shadbush, dwarf shadbush, pacific serviceberry, pigeon berry, smokey saskatoon, smokey serviceberry, western juneberry, western serviceberry



Saskatoon - Smoky

Amelanchier alnifolia var. *smoky*

Smoky Saskatoons are one of the most productive and widely used Saskatoons and have large sweet berries with good yields. One of the oldest and first good yielding cultivars, a majority of the commercial saskatoon orchards were based on this cultivar until Northline and other cultivars were introduced. Smoky has slightly smaller fruit than Northline and a milder taste

Zone: 1a	Height: 4 m (14 ft)	Spread: 2.4 m (8 ft)
Moisture: normal	Light: partial shade, full sun	Fall colour: orange/red
Growth rate: fast	Life span: short	Suckering: medium
Pollution tolerance: low		

Other names: alder-leaf shadbush, dwarf shadbush, pacific serviceberry, pigeon berry, smokey saskatoon, smokey serviceberry, western juneberry, western serviceberry



Red Elderberry

Sambucus racemosa

An attractive, medium-sized deciduous shrub. It produces clusters of white flowers in the spring and bright red berry-like drupes, which provide beautiful contrast against its coarse, textured green foliage.

Toxic to humans - cooking may reduce toxicity

Zone: 2a	Height: 4 m (13 ft)	Spread: 3 m (10 ft)
Moisture: normal	Light: partial shade, full sun	Growth rate: medium
Life span: medium	Suckering: medium	Maintenance: low
Pollution tolerance: low		



Siberian Crab Apple

Malus baccata

Beautiful, cold hardy, ornamental tree. Its stunning white blossoms burst in the spring to produce deep red fruit. If you are looking for a great landscape or shade tree, Siberian Crab Apple is a beautiful addition to any yard.

Zone: 2a	Height: 7 m (23 ft)	Spread: 7 m (23 ft)
Moisture: normal	Light: full sun	Growth rate: medium
Life span: long	Suckering: none	Maintenance: low
Pollution tolerance: high		

