



## TREES AND SHRUBS FOR INTERIOR ALASKA LANDSCAPES by Patricia S. Holloway

The backbone of any landscape, whether in a home garden or a public landscape, is its trees and shrubs. The choices available to homeowners and businesses in interior, Alaska are small, due in part to the necessity for extreme hardiness, and also to the unavailability of plants. Often, ornamentals that are hardy enough to withstand our short growing season and extreme winter temperatures, are not found in "lower 48" nursery catalogs. Few Alaska nurseries propagate their own plants, so many hardy trees and shrubs are hard to find. Below is a list of reliable trees and shrubs that are normally available in local commercial sources or through catalogs. Many other trees and shrubs are worth testing but may be hard to find or may have had limited testing in Alaska. Refer to *Georgeson Botanical Note No 2* for a complete list of landscape plant materials.

### TREES

**Apples (*Malus* sp.)** -many, many cultivars of apples have been grown in Interior, Alaska, and the most reliable cultivars are a Canadian group whose name begins with Nor- : 'Norland', 'Norcue', 'Norson' etc. These apple trees are hardy but are rarely planted as ornamentals because of the damage caused by moose. These trees require serious protection from moose such as a fence in order to maintain any size. They are best grown in orchards where they can be surrounded by an electrified fence.

**Amur chokecherry (*Prunus maackii*)**- a mid-sized tree similar to European birdcherry. Clusters of white flowers bloom in late May or early June. Purple fruits ripen in late August. Fruit is not as abundant as the birdcherry. The most important ornamental feature of this plant is its copper-colored bark. It really stands out, especially in winter.

**Black spruce (*Picea mariana*)**- native tree to 30 feet, not the most ornamental tree but useful on cold, north-facing slopes. Cones are small rosettes of scales and may persist for years on the tree.

**Chokecherry (*Prunus virginiana*)** Small shrubby tree excellent for small yards. Clusters of white flowers bloom in late May or early June, very fragrant. Reddish edible fruit ripens in August. Two cultivars with purple foliage, 'Canada Red' and 'Shubert' are excellent small landscape trees; foliage is a great contrast to the ubiquitous green. They are sometimes difficult to match with surrounding colors, though. Plants tend to sucker, especially when young and may be difficult to keep as single stem.

**Crabapples (*Malus* sp. and *Malus baccata*, *Malus columbiana*)**- beautiful small trees with very large white flowers in June and green to reddish fruit in August. Size and color of fruit varies significantly in seedlings. The species, *Malus baccata*, is the hardiest crabapple. 'Wien' is a large-fruited selection made by Northern Lights Nursery in Fairbanks. It is not as hardy as *baccata*. Many other cultivars are available, and their success depends on site. They all require a warm site with full sun. 'Dolgo', 'Trailman' and 'Columbia' crabapples all have succeeded at certain locations in interior, Alaska, but they are susceptible to winter injury. The trees are small with stiff branches that are susceptible to breakage from snow loads. Moose love to eat them.

**European Bird Cherry (*Prunus padus*)**- the premier "exotic" ornamental for interior Alaska gardens. A fairly large, rounded tree, nearly as wide as tall when fully mature. Plants flower in late May or June, very fragrant. The purple fruit is ripe in August and attracts birds, especially robins. The plant has stiff branches and is susceptible to breakage from snow loads. Large older branches may die back requiring serious pruning. Older plants tend to sucker from the base making annual pruning a necessity. The fruit makes great jelly and wine.

**Larch or Tamarack (*Larix laricina* and *Larix sibirica*)** The native larch (*L. laricina*) is a medium-sized tree to 60 feet in height. It is a deciduous conifer with bluegreen foliage. It grows in muskegs throughout interior Alaska and is often difficult to establish on drier sites. It is difficult to find local trees with good form and color. Far more ornamental is the Siberian larch (*L. sibirica*) which is a very large tree to more than 100 feet in height. Growth is more robust with longer straighter branches and trunk. Both species have needles that turn a brilliant gold in autumn. Both species also are susceptible to defoliation by the larch sawfly.

**Lodgepole pine (*Pinus contorta* var *latifolia*)**- one of the few non-native conifers that grows well in interior, Alaska. Seed source is very important to the success of this plant, so buy from a local nursery rather than a mail order source. Plants in the Fairbanks





area that grow well came from seed sources in Yukon Territory. The tree has an open branching pattern, especially when planted in shaded areas. The needles are susceptible to sunscald in early spring (needles turn red and die). Since all plants are from wild-collected seed, their winter survival varies from plant to plant. Young seedlings need to be protected from hares that strip off the needles and girdle the tree when hare populations are high.

**Paper birch** (*Betula papyrifera*)- large, native tree to 80 feet in height, the standard for ornamental landscaping in interior, Alaska. Many regions in the lower 48 are truly envious of our beautiful birch trees. As trees mature, small lower branches fall off resulting in annual cleanup. The tree attracts aphids, and in high aphid years can be very messy. Black mold on the honeydew from aphids can coat everything beneath birch trees (rocks, structures, vehicles, etc. ). Other insect pests cause leaf roll or leaf curl, but rarely cause permanent damage. Plants are susceptible to a variety of fungi that rot and weaken the trunks with little outward signs of weakness. Tree roots are shallow and very heavy feeders. Many plants cannot survive beneath a birch tree because they cannot compete for nutrients. Small-diameter trees may be snapped off by moose or bent double by snow.

**Quaking aspen** (*Populus tremuloides*) - this native occurs in many people's yards whether they like it or not. The suckering habit of quaking aspen make it a premier tree for woodland landscapes and for rapid growth of screens, but it can be a real headache if located near vegetable gardens or lawns. Roots are attracted to areas of high fertility such as lawns, and suckers will be a perennial problem. Mown suckers are sharp and can be a hazard to bare feet! Aspen is a tall, willowy tree to 80 feet in height that is susceptible to bending from snow load and breakage from moose when young. Female trees are especially messy when seed catkins are released, and fluff settles on the surrounding area.

**Scotch Pine** (*Pinus sylvestris*)- a compact tree with twisted, bluish-green needles borne in clusters of two, and 2-3 inches long. It appears similar to lodgepole pine except growth is much more compact, and needles are smaller. Seed source is very important to the success of this plant, so buy from a local nursery rather than a mail order source. The needles are susceptible to sunscald in early spring. Since all plants are from wild-collected seed, their winter survival varies from plant to plant.

**Siberian elm** (*Ulmus pumila*) - an underutilized small tree (to 40 feet) of great ornamental potential. It has the nice urn shape of the stately American elm, but is disease free. It has an interesting alternating branching pattern and very rough, grooved, gray bark which give it landscape interest in both winter and summer. The flowers appear in May before the leaves. Leaves appear so late in spring, many think the tree has died. Branch dieback in some years might be severe. The seeds mature in late June, and can be quite prolific and messy. Seedlings will germinate beneath the trees.

**Swiss stone pine** (*Pinus cembra* and *Pinus cembra sibirica*)- a very slow-growing, pyramidal tree, but worth the effort. The plants are fairly small, reaching a height of 15 feet in 25 years. Young plants are susceptible to needle burn, but no other problems are known. The needles are borne in clusters of five, and are densely packed along the stem. The form *sibirica* is more compact than the species.

**Ussurian pear** (*Pyrus ussuriensis*) - a small compact tree to 15 feet tall. It has large white flowers in June, and tiny rock-hard, nearly inedible pears in late summer. Flower buds have a faint tinge of pink before opening. More than one plant is needed to get fruit. The glossy, green leaves are quite attractive, and turn a scarlet or burgundy red in fall. Long spines can be a menace or a barrier.

**White spruce** (*Picea glauca*)- the most abundant conifer in interior, Alaska reaches 115 feet in height on good sites. An excellent ornamental tree, seedlings vary in needle color from yellow-green to blue-green. Excellent for screens or specimen trees. Many wild stands are now being decimated by bark boring insects. Spruce trees attract squirrels that may nest in nearby buildings.

## SHRUBS AND SHRUBBY TREES

**Amur maple** (*Acer ginnala*) a small shrub to 10 feet with gently arching branches. This plant needs a protected location, and winter kill of branches should be expected. It recovers in most years from shoots at the crown. The most ornamental feature of this shrub is its flaming scarlet/yellow fall color that is visible at great distances. The flowers are not showy, but the shrub is normally covered with the typical winged maple seeds that kids love to fly as helicopters.

**Red and Black currant** (*Ribes triste* and *nigrum*) not normally thought of as an ornamental, but useful for individuals seeking an "edible landscape". The native red and black currants transplants well from the wild. Several cultivars are available that have very large fruit (best is 'Boskoop Giant' for black and 'Holland Long Bunch' for red). The branches of 'Boskoop Giant' are very floppy, and they root where they touch the ground. Continual pruning is necessary to keep the plant from forming a thicket. Another cultivar, 'Swedish Black' is hardy and has smaller fruit. The growth habit is upright, requiring less pruning. Many people cannot tolerate the smell of black currant bushes.

**Cinquefoil or tundra rose** (*Potentilla fruticosa*)- a small native shrub to 2 1/2 feet in height well adapted to interior landscapes. Plants with good form can often be dug from wild stands but cultivars such as 'Gold Drop' and 'Friederichsenii' are more compact and flower more abundantly than the wild plants. These shrubs have bright yellow flowers that bloom from mid June until frost. They are best planted in masses for greatest impact. Many cultivars are available with white, orange and even pink flowers, but they are not as hardy as the yellow cultivars.





**Dwarf birch and shrub or resin birch** (*Betula nana* and *B. glandulosa*) Dwarf birch (*B. nana*) is a low, spreading shrub to 3 feet in height. Few commercial sources are available, but it readily transplants from the wild. It has small rounded, toothed leaves and gland-covered branches. The resin birch (*B. glandulosa*) is a similar shrubby plant but much larger, reaching 10 feet on good sites. The flowers and fruit are not very ornamental, but the glossy green leaves appear very early in spring, and fall color can range from yellow to a brilliant scarlet/yellow. Moose will prune the branches in winter. Both species hybridize readily.

**False spiraea** (*Sorbaria sorbifolia*)-a long-standing shrub in ornamental landscapes in the Interior. The plant grows to 4 1/2 feet and produces plumes of creamy white flowers. The finely-dissected compound leaves are quite ornamental. This plant is very easy to grow, but can take over an entire yard because it suckers readily. It can form great thickets in no time. This plant is great for very large areas where it can spread easily. It can also be confined to smaller areas by mowing.

**Green alder** (*Alnus incana*) and **Mountain alder** (*Alnus crispa*)- both alder species are large shrubs that can be pruned heavily into multi-stemmed trees. They make good screens and hold soils on steep banks and waste areas. When pruned they can be quite attractive. Plants grow to about 15 feet and are thickly covered with large, toothed light green leaves. Flowering is very early, often before the leaves appear. Late in the season, small cones appear that attract lots of birds. The plants sucker prolifically and can form large thickets. They can be a mess to deal with when suckers emerge in lawns and gardens.

**Highbush cranberry** (*Viburnum edule*) few commercial sources of this native shrub are available, but plants are easily dug and transplanted from the wild. Although the plants are usually 3-4 feet tall in cultivated situations, they can often reach 12 feet on good sites. The plants are open and leggy in shady spots, but get more compact and leafy in full sun. Clusters of white flowers appear in June, and red, edible fruit mature in late August. Fruit is attractive to birds.

**Honeysuckle** - two main types of honeysuckles are grown in Interior, Alaska: **Sweetberry honeysuckle** (*Lonicera caerulea*) and Tatarian honeysuckle (*Lonicera tatarica*). The Tatarian honeysuckle is a long-time favorite of Fairbanks gardeners. It is an upright shrub to 5 feet in height with fragrant pink to white flowers in June and red or yellow fruits in August. It suffers branch dieback only in the most severe winters. It makes a great hedge or specimen plant. Several named cultivars have been grown in protected locations but are not as hardy as the species. They include 'Arnold Red' and 'Zabellii', both with dark red flowers. The sweetberry honeysuckle has bluegreen foliage, small trumpet-shaped yellow flowers and blue fruit in August. This species has reddish stems with interesting spines beneath the buds. the cultivar 'Edulis' has sweeter-tasting fruit than the species and makes a great jam. It also makes a great hedge or barrier.

**Juniper** (*Juniperus horizontalis* and *Juniperus communis*) both species are native to Alaska, but many cultivars are also available. Many low-growing junipers do well in Alaska gardens. They need ample snow cover in the Interior to prevent needle browning. *Juniperus horizontalis* is a low-growing species that has a lot of variation in form. Some cultivars are creepers that rarely get more than 6 inches tall such as the Blue Rug juniper ('Wiltonii'). Other cultivars are also low, spreading plants but the branches are more upright such as 'Bar Harbor' and 'Yukon Belle'. These plants may reach 12-18 inches in height. The native *Juniperus communis* (common juniper) also has value in ornamental landscapes. It forms upright, sprawling bushes that reach 3 feet in height and may reach 10 feet in diameter. Both species are slow to grow, but the common juniper is the slowest. Common juniper is also difficult to propagate, so it is not often sold in commercial nurseries unless it is harvested from wild stands. Both shrubs are evergreen and provide welcome color when snow melts in spring.

**Labrador tea** (*Ledum palustre*) a small native shrub that grows well in woodland and shady gardens. Creamy white flowers appear in June, and seed pods are brown. The plant tends to get leggy as it gets older since leaves are retained only on the younger wood. Yearly pruning will promote bushier, more compact plants. This species requires moist, acid soils.

**Lilacs** (*Syringa villosa* and other hybrids) the hardiest lilac is the **villosa lilac** also called rough or late lilac. This plant may be seen all over the Fairbanks area and can attain an impressive size. One multi-stemmed bush in downtown Fairbanks was taller than a two-story house! This bush can form dense screens or can be pruned to just a few stems to form a tree-like growth habit. Fragrant flowers are normally lavender, but some may be white. Smaller hardy lilacs are hybrids of Villosa lilac and other species. The most successful are the Preston hybrids including 'James MacFarlane' and 'Royalty'. The plants are smaller and the pink to reddish blooms are not as fragrant as villosa, but they are a fine group for hedges, specimen plantings and windbreaks. Two other groups of lilacs are sold in the Interior; Korean lilacs (*Syringa oblata* i.e. 'Assessissippi', 'Pocahontas' and Common lilac (*Syringa vulgaris*). These groups are not as hardy and susceptible to severe winter injury in many locations. If in doubt, start with villosa!

**Mountain ash** (*Sorbus aucuparia*, European mountain ash) and (*S. scopulina*, Greene's mountain ash) Mountain ash is the premier street tree of Anchorage. The European Mountain Ash is used so much, it should be adopted as the official city tree! This species is marginally hardy in Interior, Alaska and is best grown as a multi-stemmed shrub. Severe dieback is common, but the plant normally recovers by sending up an abundance of shoots from the crown. Green's mountain ash is native to Alaska and is hardier than the European shrub. It is more difficult to find in the nurseries, however. Both plants have finely-dissected compound leaves and large clusters of creamy white flowers in June. The orange to red fruit appears in August and is a favorite of winter birds.

**Mugho pine** (*Pinus mugo mughus*, *Pinus mugo* and *Pinus mugo pumilo*) Mugho pine or mugo pine is a very popular evergreen shrub. The species *P. mugo*, called Swiss mountain pine, grows to 36 feet in the Lower 48, but is kept short by snowfall in Interior Alaska. Because of this, it is difficult to distinguish this species from the form *mughus*, which is slower growing and





- only about 5 feet tall. The form *pumilo* is a dwarf, compact, slowly spreading shrub, best used in rock gardens. Mugo pine is susceptible to winter injury from sunscald, especially any branch that sticks up above the snow. They are best maintained as a low, sprawling evergreen in locations where snow is ample.
- Ninebark** (*Physocarpus monogynus*)- a medium-sized shrub to 5 feet tall with stiff outward spreading branches and light brown peeling bark. The flowers are small white clusters that bloom from late May through August. Fruit are clusters of brown capsules that persist in winter. The plant is very hardy and a good ornamental for home and commercial landscapes.
- Peking cotoneaster** (*Cotoneaster acutifolia*) a nice, medium-sized shrub with glossy green leaves that turn deep red to scarlet in fall. Flowers are tiny and fruit is a blue-black berry. The thin, arching branches tolerate severe snow loads. Occasionally, branches will be winter killed, but damage is usually slight.
- Pin cherry** (*Prunus pennsylvanica*) a nice-sized tree in the lower 48, this plant produces a small shrub to about 8 feet tall with gracefully arching branches. The branches are covered with cascades of white flowers in spring and brilliant light red fruit in August. Some plants produce edible fruit that is great for jelly and wine. The plant is not very attractive in winter.
- Redosier dogwood** (*Suida* [*Cornus*] *stolonifera*) a native bush to 6 feet tall (taller in shady areas), white flower clusters appear in June followed by white berries. The young stems are bright red and have great winter interest. This plant suckers very slowly, forming large rounded thickets. It is an excellent shrub for large areas and can be pruned into a hedge.
- Roses** (*Rosa* sp.) Hardy roses are not common in Interior, Alaska, but there are a few roses that can add a lot to ornamental landscapes. The hardiest is, of course our **wild rose**, *Rosa acicularis*. It works well in meadows and woodland gardens but spreads rapidly and blooms only once in June. It can be disfigured late in the season by orange-colored rust diseases. The **Turkestan or rugosa rose** (*Rosa rugosa*, sometimes called Sitka rose) is very hardy, but canes die back in some years. Rugosa roses have large single pink to white flowers that are very fragrant. They begin blooming in late June and continue until frost. The very large hips are quite ornamental. The cultivars 'Therese Bugnet' and 'Hansa' are old-time favorite rugosa types. Another old timer is **Altai Scotch Rose** (*Rosa spinosissima* 'Altaica') which has double white flowers. The foliage is finer than the rugosa roses, and the plants are taller. Rugosas usually are 3 feet tall, whereas Altai Scotch can reach 5 feet or more. Three other **hybrid roses** that have proven hardy are 'Lac la Nonne', 'Lac ma Jeau' and 'Killwinning'. All have white flowers and are continuous bloomers. Rugosas spread slowly by suckers, but the other roses mentioned above do not.
- Saskatoon** (*Amelanchier alnifolia*)-an upright shrub to 12 feet tall. The native plants are highly variable and produce gray-green foliage, large clusters of white flowers in June, and small blue/black fruit in August. Several cultivars bred in Canada, most notably 'Smoky' and 'Regent', have very large, tasty fruit and a better growth form than the native plant. This plant is very much underutilized in ornamental landscapes. The foliage is sometimes skeletonized by sawfly larvae.
- Siberian Pea shrub** (*Caragana arborescens*) tall shrub to 15 feet with finely dissected compound leaves, bright yellow flowers and long brown "pea" pods that explode open when seeds are ripe. This plant is an old reliable shrub for specimen plantings and hedges. Not much bothers this shrub except for moose. It rarely show signs of winter injury, but will bend or break with heavy snow loads. It is excellent as a screen or windbreak.
- Silverberry** (*Elaeagnus commutata*) a small native shrub to 12 feet that is noted mostly for its silvery foliage. The branches on older trees are rather sparse and open, so it is best planted with other shrubs. Tiny trumpet-shaped blooms appear in June and emit one of the strongest fragrances of any plant (some people find it objectionable). The plant is covered with silvery fruit all winter. This plant spreads by suckers, especially in soils that are continually disturbed. If you dig up some suckers, the root prunings left in the ground will all sprout.
- Vanhoutte spiraea** (*Spiraea x vanhouttei*)- an old time shrub that may be seen around many homes in the older parts of Fairbanks. It has beautiful arching branches that, in June, are covered with flat clusters of white flowers. The seed pods are persistent and brown, but not very showy. It may be sheared into a hedge, but then the graceful arching cascades of white flowers is lost.

