# Small Trees for the Home Landscape

## EB2036 • CHARLES A. BRUN



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Cover photos, clockwise from upper left: Bigtooth maple, Vine maple, Bloodgood Japanese maple, Variegated boxelder, Chanticleer flowering pear, and Pink flowering dogwood.

## Appropriately Sized Trees for Smaller Yards

Landscape designers and homeowners selecting plants for a small, urban lot should choose trees that do not overwhelm the site. Full-size forest trees are the wrong scale for the newer neighborhood homes as they can

dwarf or hide the home, as well as contribute to maintenance problems for the home's siding, roof, gutter, and walks. Views from within the home will be blocked if excessively large vegetation is grown nearby. During winter windstorms large trees can become a liability when they have been planted too close to the home. For these reasons it is important

This publication only addresses small trees that are smaller than 20 feet in width at maturity.

to select smaller trees that are appropriate for use in narrow yards, parking strips, and beneath power lines (Fig.1).Trees that are commonly planted in greenbelts, parks, and school yards are often too tall and/or wide for smaller urban lots. Efforts at reducing their size through topping yield poorly shaped trees that will never regain their original form.



Figure 1. The Northwest nursery industry has a wide selection of smaller trees that could be used for these small footprint yards.

#### What is a small tree?

Landscape architects and horticulturists often define a small tree as one that does not grow taller than 25 to 35 feet. There are no strict rules however, on what constitutes a small tree. Many factors contribute to the size that a tree will attain once it has been in the ground for a number of years. If the tree is grown on well drained, loamy soil, with supplemental watering during its first two summers of establishment it should grow well. The commercial nursery industry in the Pacific Northwest has developed a whole host of smaller stature cultivars of the traditional larger landscape trees. There are many examples, known as cultivated varieties, or "cultivars" of beech, cherries, crabapple, dogwood, falsecypress, hawthorn, linden, maples, oak, pears, plums, pines, sweetgums, and tulip trees that will serve well in confined planting spaces.

This publication only discusses trees that don't generally exceed 20 feet in width at maturity. Data for this publication has been collected from wholesale nurseries, garden centers, and landscape designers that either sell or understand the attributes of smaller trees. All of the trees listed in this publication can be found at reputable Northwest nurseries. With the advent of on-line inventory and web pages it is now possible to source the more uncommon tree species.

#### Urban trees are important

A healthy urban area hosts a wide diversity of different trees both deciduous as well as coniferous. In parks, school grounds, and public right of ways vegetation is important for a number of reasons, including energy conservation, reducing carbon dioxide, reducing storm water runoff, and aesthetics.

#### Energy conservation

As the percentage of land taken up by structures and paving increases in dense urban areas, so too does the ambient temperature. This "urban heat island effect" can be reduced by the presence of trees in several ways. The canopy of a grove of trees shades the ground and structures while the natural release of water vapor from trees can help cool the surrounding air. By blocking the wind, tree foliage reduces the infiltration of air into homes.

#### Reducing carbon dioxide levels

During the day trees take up carbon dioxide and give off oxygen in the natural process known as photosynthesis. During the active life of the tree the carbon dioxide is sequestered in the woody and foliar (leafy) biomass. Thus, by planting trees, homeowners can help fight global warming.

#### Reducing storm water runoff

All parts of a tree play their part in absorbing rainfall and filtering pollutants, thus improving the quality of water runoff in an urban area. New subdivisions often have bio-swales where trees, shrubs, and grass vegetation help soak up peak water flows during storms, thus reducing overland flow into area streams.

#### Aesthetics

Urban trees come in a wide array of sizes, color, textures, and forms. Collectively they help soften the visual impact of homes and streets. A home's value can increase from 3 to 10% by having a nicely designed yard with a host of different types of trees, shrubs, and herbaceous perennials.

#### Smaller urban lot sizes

In most major cities in the Northwest, county planning personnel have seen the need to set new standards for urban lot sizes. With a steady influx of newcomers into a community, it quickly becomes apparent that the quarter acre (10,000 sq. feet) lot sizes of the 1960s and 1970s would no longer be appropriate. The cost of providing the basic services that come with dense urban living (roads, sewers, schools, police and fire protection) encourages the design of smaller lots in order to cluster homes to protect forests, farms and other open spaces.

The average size urban lot in planned communities in the Northwest is now approximately 5,000 square feet (Fig. 2). Though the footprint of the lot may be small, residents in new subdivisions enjoy the availability of pedestrian- and bicycle-friendly roads and sidewalks, regional parks, underground utilities, and a complete array of both private and public services. A smaller lot is, of course, more affordable—especially in areas that are near major employment opportunities or those which offer scenic, cultural, or recreational amenities.



Figure 2. This single-story home has been built on a 5,000-square-foot lot which limits the space for large trees.

#### Lot architecture

Small urban lots are typically rectangular with the side facing the street being narrower than the depth of the lot. It is not uncommon to find a lot being 50 feet wide and 100 feet deep. By design, the driveway to the home will abut the street and, for a double-car garage, may be 16 feet wide. New subdivisions are required to have sidewalks and curbs bordering the street. After all the concrete has been poured for the driveway, a sidewalk, and perhaps a walkway up to the front entrance, the remaining front yard is relatively small. If the goals are to have a view of the home from the street and not have a tree extend into the neighbor's property, a narrow-stature tree should be considered.

#### **Boulevard planting strip**

The unpaved area between the sidewalk and the street is referred to as the boulevard planting strip (or a 'parkway' or a 'verge'). This is an ideal location to plant trees smaller than 20 feet in width at maturity. However, if the boulevard strip is wider, a larger tree can be selected. Larger trees help shade pedestrians walking on the sidewalk, as well as automobiles parked along the street (Fig. 3). The species listed in Tables 1 and 2 would be suitable where the planting strip is 4 feet wide. Homeowners are advised to check with their local municipality for any planting restrictions and a list of trees for their boulevard planting strip.



Figure 3. The contractor for this new subdivision has selected an 'Autumn Blaze' hybrid maple (*Acer freemanii*, cv. 'Jeffersred') for this boulevard planting strip. At maturity, this tree will be 50 feet tall and up to 40 feet wide.

## **Planting Design Principles**

#### Scale and proportion

The scale of a garden tree refers to its natural shape, height, and width. It is important to consider scale when considering plant selection. A large tree planted next to a single-story home will eventually dwarf both the structure and the yard. Conversely, a small tree leaves the available space exposed. A shorter tree may look better with a single-story home (Fig. 4). A medium height (40-foot mature height) or a taller tree (75-foot mature height) can compliment a two-story home. The tall columnar shape of weeping Alaska cedar (Chamaecyparis nootkatensis 'Pendula') could be used between taller homes (Fig. 5). However, individual tastes should play a dominant role in one's tree selection criteria. If space is available, there are a great number of trees that could be selected, including much larger ones than described in this publication.



Figure 4. The smaller height of this Japanese maple (*Acer* palmatum, cv. 'Bloodgood') frames a single-story home well.

Even with small trees, avoid the temptation to plant the tree too close to the house, as a crowded tree will simply not be able to develop its true shape. Tree branches that infringe upon the house also make painting or cleaning the siding considerably more difficult. In extreme cases, a home's foundation can be cracked by tree roots.

#### **Deciduous trees**

The majority of trees planted in the urban environment have traditionally been deciduous (lose their leaves during the winter). Deciduous trees are especially attractive during the darker days of winter when light levels are naturally lower. Their branch structure,



Figure 5. The greater height of this weeping Alaska cedar (*Chamaecyparis nootkatensis* 'Pendula') complements the two-story home behind it.

serving as the bones of the garden, can still be beautiful (Fig. 6).

#### **Coniferous trees**

A small urban or suburban lot offers an ideal opportunity to enjoy the world of small conifers (conebearing trees) which come in a multitude of shapes, sizes, colors, and textures. Newcomers to the Pacific Northwest quickly come to recognize the wide swatches of coniferous forest, primarily on the western slopes of the Cascade Mountain range. Large stands of Douglas fir



Figure 6. The elegant shape of this stately 'Ever Red' Japanese maple (*Acer palmatum*) will grace any garden, even during the dormant season.

(Pseudotsuga menziesii), western red cedar (Thuja plicata), and western hemlock (Tsuga heterophylla) extend from southern Oregon well into British Columbia. On the east side of the Cascades, Ponderosa pine (Pinus ponderosa), lodgepole pine (Pinus contorta var. latifolia), Douglas fir, and western hemlock extend well into Idaho. All of these forest conifer species are valuable for the building industries. However, their fast growth rates and large eventual height and widths all but preclude their use in the urban portions of Northwest communities. The only forest conifer from this group suitable for the urban landscape is mountain hemlock (Tsuga mertensiana) which typically grows very slowly in lowland gardens and retains a columnar form (Fig. 7). But avoid planting this species in central Washington where the summers are too hot for it.

The Northwest's Christmas tree industry relies heavily on the true fir species, predominantly Noble fir (*Abies procera*), Grand fir (*Abies grandis*), and Nordmann fir (*Abies nordmanniana*). All of these species grow too large for the urban setting. However, one true fir cultivar, 'Blue Cloak' white fir (*Abies concolor*) would work well, as it does not grow larger than 10 feet tall and 4 feet wide (after 10 years) and has a beautiful powder blue color (Fig. 8).

Conifers provide both structure and interest during the winter, long after deciduous trees lose their leaves. Rather than viewing conifers as only contributing different shades of green, landscapers can now choose gold foliage types which help brighten up the shorter, darker days of the year. 'Standishii yew' (*Taxus baccata*) is a beautiful, columnar conifer that does not grow wider than 5 feet, and yet still retains its columnar tree form with an eventual height of 20 to 25 feet (Fig. 9).

#### Screening

Trees planted close together can serve as living screens on small urban lots. A row of trees can provide privacy



Figure 7. A stand of mountain hemlocks (*Tsuga mertensiana*) provide a sense of nature in this urban setting.

from the neighbors by screening patios and pools, and can hide the view of fences, driveways and walls. Dense conifers can be used to block prevailing wind or dust from gravel roads.

Vegetation of any nature can help reduce noise levels from adjacent roads. And, when trees are planted in hedgerows, they naturally direct foot traffic.

In the Northwest, the most common small trees used for screening include conifers such as:

- False cypress (*Chamaecyparis spp.*)
- Japanese cedar (*Cryptomeria japonica*)
- Leyland cypress (Cupressocyparis leylandii)
- Rocky Mountain juniper (Juniperus scopulorum)
- Yew (*Taxus baccata*)
- Arborvitae (*Thuja occidentalis*, Fig. 10)

Deciduous trees can also be used for seasonal screens, providing shade during the summer but allowing for more open views during the winter. Consider trees from the genus *Acer* ('Crimson Sentry' Norway maple), *Carpinus* ('Frans Fontaine' hornbeam), *Crataegus* 



Figure 8. With its striking color and compact size, 'Blue Cloak' white fir (*Abies concolor*) makes a good focal point in a small yard.

(Washington hawthorn), *Fagus* ('Purple Fountain' columnar beech), *Ginkgo* ('Princeton Sentry'), or *Liriodendron* ('Clydesform' tulip tree).

#### Spring bloom

While most homeowners consider larger trees for their ability to provide shade, there are smaller trees that are best known for their colorful and showy spring bloom. A burst of spring bloom has long been considered a welcome addition after the darker and wetter days of winter. On narrow lots (60 feet or less) one single flowering tree can serve as the key accent plant to set off the front yard (Fig. 11). In selecting such a specimen tree, consider its canopy form, season of bloom, duration of bloom, and susceptibility to foliar diseases. Good examples to consider include pink flowering dogwood (*Cornus florida* 'Rubra'), Oriental dogwood (*Cornus kousa*), crabapple (*Malus* sp.), or one of the flowering cherry cultivars (*Prunus serrulata*).



Figure 9. 'Standishii' yew (Taxus baccata) retains its golden glow all year long.



Figure 10. When grown close together, 'Emerald Green' arborvitae (*Thuja occidentalis*) works as a hedge to screen off a road and a fence.



Figure 11. The pink bloom of flowering dogwood (*Cornus florida*) is a notable attraction for the month of April in the Northwest.

#### Fall foliage

When designing for a small lot, consider fall color just as you would select spring and summer blooming perennials. While the Northwest native landscape is known more for its conifers (fir, cedar, hemlock, pine) there are a number of smaller stature deciduous garden trees that develop shades of red, yellow, and orange in the landscape. As fall progresses, trees stop producing the chlorophyll molecule responsible for giving leaves their characteristic green color. As levels of chlorophyll fall off, the yellow and orange carotenoid pigments in leaves are unmasked. Examples of small trees with especially brilliant yellow fall foliage include:

- Bigtooth maple (*Acer grandidentatum*)
- Coral Bark Japanese maple (*Acer palmatum cv.* 'Sango Kaku')
- American hornbeam (*Carpinus caroliniana*)
- Golden desert ash (*Fraxinus excelsior* cv. 'Aureafolia')
- Princeton Sentry ginkgo (Ginkgo biloba cv. 'Princeton Sentry')
- Western mountain ash (Sorbus scopulina)

In addition, some species develop the pigment anthocyanin which is responsible for red colors. This pigment is developed in the leaves from an accumulation of sugars and tannins. In the fall, with the onset of cooler nights and warm sunny days, sugars are trapped in the leaves resulting in anthocyanin being manufactured and thus the red coloration. Small lot deciduous trees noted for their excellent red fall foliage include:

- Vine maple (*Acer circinatum*)
- Oriental dogwood (Cornus kousa)
- Washington hawthorn (*Crataegus phaenopyrum*)
- Sourwood (Oxydendrum arboretum)
- Black tupelo (*Nyssa sylvatica*)

In terms of consistently good red fall color, sourwood (Fig. 12) is one of the best.



Figure 12. The intense scarlet red foliage of sourwood (*Oxydendrum arboretum*) will serve as a bright focal point in any yard.

#### Native trees

There are a number of trees native to the Northwest that could be considered for a smaller urban lot. Advantages to planting native species in your yard may include:

- Reducing the need for supplemental watering
- Attracting birds and pollinators
- Having better survival under adverse conditions
- May be less expensive to purchase
- Helping create a true Northwest aesthetic

Once established, a native tree often requires little follow-up care if it has been planted in the right location. Examples of native trees suitable for small lots include:

• Rocky Mountain maple (*Acer glabrum*)

- Vine maple (*Acer circinatum*, Fig. 13)
- Weeping Alaska cedar (*Chamaecyparis* nootkatensis)
- Rocky Mountain juniper (Juniperus scopulorum)
- Mountain hemlock (Tsuga mertensiana)
- Trembling or quaking aspen (*Populus tremuloides*); better suited for western Washington
- Chokecherry (*Prunus virginiana*)
- Western mountain ash (Sorbus scopulina)



Figure 13. The bright, crisp foliage of emerging vine maple (*Acer circinatum*) is a prized addition to the native garden.

#### Attracting songbirds

Most gardeners enjoy attracting songbirds to their landscape with the proper selection of trees and shrubs. Birds will enjoy the fleshy fruits of dogwoods (*Cornus* sp. in Fig.14), serviceberry (*Amelanchier grandiflora*), European mountain ash (*Sorbus aucuparia*), hawthorns (*Crataegus* sp.), and crabapples (*Malus* sp.).

However, note that in central Washington, fruit bearing trees such as crabapple (*Malus* sp.), flowering pear (*Pyrus calleryana*), and hawthorn (*Crataegus* sp.) are all attractive to apple maggot which can lead to conflicts with nearby commercial orchards. Homeowners will need to control apple maggot in their yards on these

fruit bearing ornamentals, or select an ornamental that does not bear fruit. In areas where fireblight is a problem, Western mountain ash (*Sorbus scopulina*) is considered a better choice over European mountain ash.



Figure 14. The large fruit (known as 'drupes') of the Oriental dogwood (Cornus kousa) are especially attractive to songbirds.

## **Environmental Considerations** for Small Trees

#### Shaded sites

In the Northwest there are smaller trees that will thrive in partial or dappled shade, or if they are exposed to morning sun and afternoon shade. **Dappled shade** is produced by trees and creates a moving pattern of sunlight and shade. This shade allows for the widest range of gardening options for growing both shadeand sun-loving plants. On the north side of buildings, fences, or walls however, a gardener will be faced with full shade. This term refers to length of the shadow created by the structure blocking the sun's rays. During the longer days of summer, the length of this shadow will be reduced, thus allowing possible leaf scorching on plants that do best in full shade, especially in central and eastern Washington. Examples of small trees that can withstand shade include:

- Vine maple (*Acer circinatum*)
- Japanese maple (*Acer palmatum*)
- Serviceberry (Amelanchier grandiflora)
- Weeping Alaska cedar (*Chamaecyparis* nootkatensis)
- Flowering dogwood (Cornus florida)
- Sourwood (*Oxydendron arboretum*)
- Yew (Taxus baccata)
- Mountain hemlock (*Tsuga mertensiana*)

A good small tree for full shade is Golden Fullmoon maple (*Acer shirasawanum* cv. 'Aureum', Fig. 15). This maple variant will experience leaf scorch if planted in a spot brighter than dappled shade.

#### Wet sites

The Pacific Northwest is known for long stretches of winter rain. In addition, there are many areas with poorly drained soils. The combined effect of winter rain and poor drainage can greatly impact the success or failure of any new landscape. If a tree's roots are completely inundated during the winter for a period of days, the tree will suffer and either grow poorly or not at all. During home construction it is advisable to grade the site so that water drains away from the foundation, but also away from future planting sites if possible. On level sites, soil may have to be brought in for raised planting beds that will help ensure drier root systems.

However, even if a tree is considered tolerant of wet soil, it will often grow better if the planting site is drier. On very wet sites a landscape contractor can install buried underground drain tile which should help divert water away from the tree's roots. Tile drainage is best considered and installed prior to putting in landscape plants.



Figure 15. Golden fullmoon maple (*Acer shirasawanum* cv. 'Aureum') will thrive in dense shade.

A number of small lot tree species have inherent tolerance of wet soils. There are cultivars of the following species that could be considered:

- Vine maple (*Acer circinatum*)
- Red maple (*Acer rubrum*)
- Norway maple (Acer platanoides) (Fig. 16)
- Alaska cedar (*Chamaecyparis nootkatensis*)
- Sweetgum (*Liquidambar styraciflua*)
- Black gum (*Nyssa sylvatica*)
- White spruce (*Picea glauca*)
- Flowering pear (*Pyrus calleryana*)
- Western red cedar (*Thuja plicata*)

#### Dry sites

Summers in the Northwest are typically very dry. On the west side of the Cascades, spring rains conclude



Figure 16. Columnar Norway maple (*Acer platanoides* 'Columnar') is both narrow and wet-soil-tolerant.

by the end of June and conditions remain dry until mid-September. On the east side of the Cascades, it is not uncommon to receive less than 10 inches of precipitation the entire year. To establish and successfully grow smaller urban trees, it is important that they receive either natural rainfall or supplemental irrigation during their first two years in the ground.

On sites where water is limited, trees should be selected based on their ability to withstand drought. The following factors should be considered:

- Native trees are best adapted to local conditions and should do well without water, once they are established.
- Trees with smaller leaves are better at cooling themselves. Trees with larger leaves simply lose more water through transpiration.
- Trees with deep, upright crowns perform better than those with wide-spreading canopies.
- Species with thick leaves are better at maintaining good water retention under dry conditions. Purple Fountain beech is an example (Fig. 17).
- Conifers often do better than deciduous trees in surviving drought, as their needles or scales have thick waxy cuticles.



Figure 17. Purple Fountain beech (Fagus sylvatica) is considered a drought-tolerant species because it bears thick waxy leaves.

#### Hot areas

In the warmer regions of the Northwest, high summer temperatures can harm the seasonal growth of both deciduous and coniferous trees. In central Washington, hot, dry, exposed sites lead to leaf scorching and reduced growth. The following species have been found to be the most susceptible to heat damage:

- Vine maple (*Acer circinatum*)
- Fullmoon maple (*Acer japonicum*)
- Japanese maple (*Acer palmatum*)
- Katsura tree (*Cercidiphyllum japonicum*)
- Hinoki falsecypress (Chamaecyparis sp.)
- Flowering dogwood (Cornus florida)
- Flowering cherries (*Prunus* sp.)
- Zelkova (Zelkova serrata)

#### **Foliar diseases**

In areas west of the Cascades, frequent periods of rain occur in the spring during leaf emergence, contributing to mold, fungus, and other diseases on the new foliage. For instance, all garden trees in the genus *Prunus* (flowering cherries, plums) are susceptible to foliar fungal disorders which can result in leaf deformity and weakened trees. An early symptom is the presence of small, red spots that enlarge and become purple with a white center. These spots will drop out of the leaf, leaving a 'shot hole' (Fig. 18). Numerous shot holes give a tattered appearance to leaves.



Figure 18. The leaf spot fungus (*Blumeriella jaapii*) is responsible for the shot-hole appearance on the leaves of this flowering plum.

Older cultivars of flowering crabapples were noted for susceptibility to apple scab. The newer cultivars such as 'Prairiefire,' 'Royal Raindrops,' and 'Sugar Tyme' all are considered scab resistant. Before purchasing a crabapple for your yard, check to ensure that it is one that resists the scourge of apple scab.

#### Insect problems

The trees described in this publication generally have few insect problems as long as they are planted in the right *place*. For instance, wood-boring beetles are going to be a problem on trees grown in hot areas where the trees are under water stress. Weeping birch (Betula pendula) grows well in areas west of the Cascades but can suffer from bronze birch borer (Agrilus anxius) in the eastern part of the state if planted on a windy, dry site. The chances of borer injury can be reduced if a thick layer of mulch is applied around the base of the trunk. Be sure to keep the mulch at least six inches away from the trunk of the tree. In areas west of the Cascades, a perennial ground cover could be substituted for the layer of mulch. Birch does best on the north or east side of a home where the soils potentially have more moisture and are cooler.

Hawthorns (*Crataegus spp.*) and crabapples (*Malus sp.*) are prone to attack by apple maggot (*Rhagoletis pomonella*) and codling moth (*Cydia pomonella*). In western Washington, both of these insects cause little damage. In eastern Washington, local pest management boards advise against planting these tree species. In addition, flowering pear is now a host for codling moth and thus should not be planted near commercial orchards.

#### Winter hardiness

Plant hardiness zones help define optimum growing climates for particular groups of plants. By knowing the hardiness zone of the planting area, one can properly select the plants that are best suited to growing there.

The United States Department of Agriculture (USDA) drew up a map of the United States in the mid 1990s that included eleven different hardiness zones which were defined by the average annual minimum temperatures. A 10°F difference defines each zone. Each of the garden trees listed in this publication contains a reference to the USDA Hardiness Zone(s) for which the particular species is rated.

In Washington and Oregon, climates span five hardiness zones:

- Zone 4: -30°F to -20°F
- Zone 5: -20°F to -10°F
- Zone 6: –10°F to 0°F
- Zone 7: 0°F to 10°F
- Zone 8: 10°F to 20°F

Along the Interstate 5 corridor from Vancouver north to the border at Blaine, the hardiness zones range from 8 in the south to 7 in the north. On the east side of the Cascades, the coldest area is zone 4 in the very northeast corner of the state. All of the trees listed in this publication are winter hardy in areas west of the Cascade Mountains.

## Soil pH

Soils in south-central Washington typically have a pH of 7.5 to 8.5, creating a basic, or alkaline, condition. Small tree species that have *not* been found to do well under these conditions include:

- Flowering dogwood (Cornus florida)
- Tulip tree (*Liriodendron tulipifera*)
- Saucer magnolia (Magnolia soulangiana)

## **Tree Size Considerations**

## **Power lines**

Trees growing large enough to interfere with overhead power lines are a constant source of concern for public utility districts who must monitor those trees and trim them when necessary. Power failures occur when tree branches or whole trees fall across or contact electric lines. During stormy weather, area-wide power failures can disrupt both businesses and homes with either minor or major consequences.

The mature height of a garden tree needs to be known before it is planted beneath or within 15 feet of an overhead power line. For planting near power lines, select trees that do not exceed 25 feet in height at maturity (Fig. 19). Even though utility companies trim trees in the public right of way, they still estimate that 90% of tree-related power outages are caused by trees growing outside of the right-of-way, for example, trees growing in the front yard rather than in the boulevard



Figure 19. The short stature of these 'Crimson Sentry' Norway maples (*Acer platanoides*) will prevent them from growing up into the overhead power lines.

parking strip. By selecting a narrow stature tree, a homeowner can avoid potential conflicts with limbs interfering with power lines.

Scientific name	Common name	Height	Width
Acer circinatum	Vine maple	15'	20′
Acer grandidentatum	Bigtooth maple	25′	15′
Acer griesum	Paperbark maple	25′	20′
Acer negundo	Variegated boxelder	25′	20′
Acer palmatum	'Bloodgood' Japanese maple	20′	20′
Acer palmatum	'Coral Bark' Japanese maple	18′	14′
Acer platanoides	'Crimson Sentry' Norway maple	25′	15′
Amelanchier grandiflora	'Autumn Brilliance' serviceberry	20′	15′
Betula pendula	Young's weeping birch	15′	20′
Cercidiphyllum japonicum	'Morioka Weeping' katsura tree	25′	20′
Cornus kousa chinensis	Chinese Kousa dogwood	20′	20′
Crataegus laevigata	'Crimson Cloud' hawthorn	25′	18′
Crataegus phaenopyrum	Washington hawthorn	25′	20′
Fraxinus excelsior	'Aureafolia' Golden Desert ash	20′	18′
Malus 'Sutyzam'	'Sugar Tyme' crabapple	18′	15′
Prunus cerasifera	'Thundercloud' plum	20'	20'

Deciduous trees (less than 25	feet tall at maturity)
suitable for planting beneath	power lines.

Coniferous trees (less than 25 feet tall at maturity)
uitable for planting beneath power lines.

Scientific name	Common name	Height	Width
Chamaecyparis obtusa	Slender Hioki Falsecypress	20′	10′
Cryptomeria japonica	Sekkan Sugi Japanese cedar	25′	10′
Cupressus glabra	'Blue Ice' Arizona cypress	10′	4′
Juniperus scopulorum	Moonglow juniper	15′	10′
Juniperus scopulorum	Skyrocket juniper	25′	3′
Picea glauca	Dwarf Alberta spruce	12′	6′
Pinus aristata	Bristlecone pine	20'	10′

•

#### Lower limb height

With its smaller stature, an urban tree may have lower limbs closer to the ground. To minimize the danger of tree limbs blocking visibility of street signs, driveways, and sidewalks, new trees should be planted at least 35 feet from an intersection. As the tree matures, its lower limbs should be removed by pruning to a height of 6½ to 7 feet above the ground. But note, this pruning will destroy the characteristic shape of certain trees, including all of the conifers listed in this booklet. Therefore, plant trees whose natural mature shape will work with having their lower limbs removed.

#### **Distance from structures**

The trees listed in this publication can be planted as close as 10 to 15 feet from a house, as they don't have an extensive width at maturity. They will look their best, however, when they are planted on a diagonal line out from the corners of the house (Fig. 20). By incorporating progressively smaller plants closer to the main entrance, one can frame the house and focus attention to the entryway.



Figure 20. On this 50-foot-wide urban lot, the 'Kwanzan' flowering cherry (*Prunus serrulata*) has been properly planted on the diagonal out from the house where it does not block the view of the front entrance.

Avoid simply planting two trees of the same species next to one another. Also avoid planting a tree in a location where it divides a view into two equal parts or where it obscures the view of the house from the street.

## Boulevard planting strips

As new building codes generally require sidewalks in new subdivisions, small trees are often planted in the boulevard planting strip (the space between the street curb and sidewalk). In general, tree codes include the following:

- Plant trees 3½ feet back from the curb (with a 5-foot-wide planting strip)
- Plant trees 5 feet away from underground

utility lines

- Space trees 10 to 15 feet away from power poles
- Maintain a 7- to10-foot distance between trees and driveways
- Keep trees 30 feet from light and power poles
- Plant trees 35 feet away from intersections (Fig. 21)



Figure 21. In this boulevard planting, a columnar 'Chanticleer' flowering pear (*Pyrus calleryana*) has been planted about 35 feet from the intersection.

The standards listed above are for King County, Washington. Codes and standards will vary by county, municipality, or even by homeowners association. Some local codes will prohibit certain trees to avoid problems such as dropping fruit or invasive root systems. Be sure to check with local authorities for planting restrictions in your area.

#### For more information:

- National Arbor Day Foundation http://www.arborday.org/trees/righttreeandplace/
- International Society of Arboriculture, Pacific Northwest Chapter: Tree Care and Urban Forestry Web Sites http://www.pnwisa.org/publiclinks.html
- Olympia http://www.ci.olympia.wa.us/cityservices/ urbanforests/
- Pierce County http://www.co.pierce.wa.us/xml/services/home/ property/pals/pdf/rectreespechndout.pdf
- Seattle http://www.seattle.gov/transportation/treeplanting.htm http://www.seattle.gov/transportation/smalltrees.htm
- Spokane http://www.spokanecity.org/services/documents/ smc/?Section=17C.200.050
- Tacoma http://www.cityoftacoma.org/Page.aspx?hid=9760
   Vancouver
- http://www.ci.vancouver.wa.us/parks-recreation/ parks\_trails/urban\_forestry/tree\_permits.htm

## Illustrated List of Urban Trees Less Than 20 feet in Width at Maturity

#### 1) Acer circinatum—Vine maple

A Northwest native which grows vine-like in shaded locations along streams. In full sun it performs well as a small tree. Thinning excess stems also helps keep a more tree-like shape. Green foliage gives way to intense shades of golden to red depending upon the amount of sun (more color in the open). Wildlife enjoys the seeds produced in the fall.

Prefers moist, humus-rich soils in western Washington.

Height: 15' Width: 10'–20'

Zones 4-8

#### 2) Acer grandidentatum—Bigtooth maple

A close relative of the sugar maple, bigtooth maple (also known as canyon maple) is a slow-growing tree noted for its upright growth and beautiful yellow to orange-red fall color. Native to the inter-mountain western regions of the United

States.

Widely adapted to all soil types, drought tolerant, and pest-free.

Height: 25' Width: 15' Zones 4–8





#### 3) Acer griesum—Paperbark maple

This maple relative forms a small garden tree with an oval to rounded shape, and bearing small green trifoliate leaves in the summer followed by brown to red leaves in the fall.

Its principal attribute is the year-round presence of a peeling copper-to-cinnamon-colored exfoliating bark.

Height: 25' Width: 15'–20' Zones 4–8









#### 4) Acer negundo cv. 'Variegatum'—Variegated boxelder

With its stunning display of green and white foliage, this maple variant shines in the landscape during the summer. Sterile seed pod chains add additional interest. An improvement over its parent, this cultivar grows well without limb breakage or insect attraction.

May scorch on hot, dry sites; avoid scorching by selecting a site with partial sun.

Height: 25' Width: 20' Zones 5–8





#### 5) Acer palmatum cv. 'Bloodgood'—Bloodgood Japanese maple

As the most widely known cultivar of upright Japanese maples, this cultivar holds its deep reddish purple leaf color all through the season. Performs best in areas west of the Cascades.

Protect from strong winds and afternoon sun in central Washington. Does best on humus-rich sites.

Height: 20' Width: 20' Zones 5–8





#### 6) Acer palmatum dissectum cv. 'Ever Red'—Ever Red Japanese maple

With its spreading, pendulous limbs bearing deeply dissected maroon leaves, this Japanese maple forms a stately garden tree for all-season enjoyment. New spring leaf foliage resembles silver

hairs. Features a very stately winter tree shape.

The red color will hold well during the summer months if given some shade.

Height: 18' Width: 18' Zones 5–8





### 7) Acer palmatum cv. 'Sango Kaku'—Coral Bark Japanese maple

One of the most widely grown Japanese maples in areas west of the Cascades. Can be pruned into different shapes. Spring leaves emerge yellowgreen, but then turn a beautiful orange-red by early summer. During the winter, the reddish bark seems to glow, becoming a wonderful salmon color.

Protect from hot, dry winds.

Height: 18' Width: 14' Zones 7–8





#### 8) Acer palmatum cv. 'Ueno Yama'—Ueno Yama Japanese maple

The spectacular orange of this vigorous, upright garden maple makes a show early in spring, as it is one of the first to leaf out. With a broad, rounded shape, it bears layered, sweeping limbs.

Summer leaves turn green, followed by a brilliant yellow in the fall.

Protect from the sun in central Washington.

Height: 15'–18' Width: 10'–12' Zones 6–8





## 9) Acer platanoides cv. 'Crimson Sentry'—Crimson Sentry Norway maple

Regarded as a miniature form of its much larger parent 'Crimson King,' this variant forms a compact, pyramidal tree with a dense array of dark purple leaves.

Free from pests, this tree performs very well in boulevard planting strips or wherever space is limited.

Height: 25' Width: 15' Zones 4–8





#### 10) Acer platanoides cv. 'Columnar'—Columnar Norway maple

When a tall maple is needed for a tight space, this cultivar is often employed. With its dark green, upright, ascending branches, this tree quickly grows to a prodigious height, while remaining free from pests.

Brilliant yellow-orange fall growth.

Height: 35' Width: 15' Zones 4–8





#### 11) Acer rubrum cv. 'Scarsen'—Scarlet Sentinel red maple

With its very fast growth and ability to withstand heavy soils and wetter sites, this red maple cultivar is widely utilized as a lawn or park tree.

Red maples are some of the first deciduous species to color up and provide an excellent display in September and October. Fall leaves turn yellow and orange.

Height: 40' Width: 20' Zones 4–8





#### 12) Acer shirasawanum cv. 'Aureum'—Golden Fullmoon maple

For shady areas consider this species with its beautiful yellowgreen summer foliage and attractive fall foliage display. If grown on humus-rich ground, and protected from cold winter winds, Fullmoon maple becomes an elegant alternative to Japanese maples.

Don't plant in full sun, as the leaves will scorch.

Height: 16'–20' Width: 20' Zones 6–8





#### 13) Amelanchier grandiflora cv. 'Autumn Brilliance'—Autumn Brilliance serviceberry

As a small, spring-flowering tree, this serviceberry provides a profusion of white flowers, striking red fall foliage, and blue-colored berries in the fall to attract birds.

Remove root suckers to retain tree shape.

Height: 20' Width: 20' Zones 5–8





#### 14) Betula pendula cv. 'Pendula'—Young's weeping birch

As a weeping tree, this species grows as a fountain of cascading limbs bearing crisp, green leaves which turn yellow in the fall. This tree can be trained into different shapes if staked or pruned.

Keep the area beneath the tree well supplied with mulch or compost to keep the root system cool to avoid birch borer damage.

Height: 15' Width: 20' Zones 2–8





#### 15) Carpinus betulus cv. 'Frans Fontaine'—Frans Fontaine hornbeam

This hornbeam variant holds its narrow columnar structure as the tree matures. Often used as a single-specimen boulevard tree. If planted 3'-6' apart, trees will grow together and can be trained into a screen or hedge. Disease-resistant and highly adaptable to all sites.

Summer foliage is a crisp green, while fall foliage is golden.

Height: 35' Width: 15' Zones 5–8





#### 16) Carpinus caroliniana—American hornbeam

While this species is considered a native of the East Coast, it will perform well in the Northwest. It grows slowly in a rounded, upright shape, bearing smooth branches and thick muscle-like fluting of larger branches, thus giving rise to its alternative 'ironwood' name.

Bright yellow to orange-red fall foliage.

Height: 25' Width: 20' Zones 3–8





## 17) Cedrus deodara cv. 'Gold Cone'-Gold Cone deodar cedar

Forming a narrow pyramid of color, 'Gold Cone' bears glowing yellow-green foliage on pendulous branches. A relatively fast grower, this cultivar will not take up large amounts of lawn space.

Tolerant of a wide range of soil types.

Height: 30'–40' Width: under 20' Zones 7–8





#### 18) Cercidiphyllum japonicum cv. 'Morioka Weeping'—Morioka weeping katsura tree

Erect when juvenile, this weeping deciduous tree begins to send arching branches downward as it matures. Bears bluish-green heart-shaped leaves. In the fall leaves range in color from yellow to apricot and take on the scent of cinnamon.

Grows best in rich, moist sites with well-drained soils. Susceptible to sunscald in central Washington.

Height: 25' Width: 20' Zones 5–8





#### 19) Chamaecyparis nootkatensis cv. 'Pendula'-Weeping Alaska cedar

A native of coastal Alaska and the Pacific Northwest, this graceful conifer features drooping branchlets which hang from spreading, upcurving limbs. The foliage is soft and gray-green colored.

Performs best with abundant moisture and protection from drying winds.

Height: 45' Width: 20' Zones 5–8





## 20) Chamaecyparis nootkatensis cv. 'Strict Weeping'—Strict Weeping Alaska cedar

A narrow, pendulous cypress, bearing foliage which hangs vertically against the central trunk. This variant will serve as a stark accent for the smaller yard. Appropriate for two-story homes.

Prefers deep, well-drained loamy soil and wet winters.

Height: 20' Width: 10' Zones 4–8





#### 21) Chamaecyparis obtusa cv. 'Crippsii'—Crippsii Hinoki Falsecypress

Long considered to be one of the best gold-colored, slow-growing Hinoki Falsecypresses, this variety is a narrow, conical conifer with drooping tips. With its front-like foliage, it remains loose and airy.

Best suited to areas with mild winters. Foliage may burn under intense sun conditions.

Height: 30' Width: 13' Zones 4–8





#### 22) Chamaecyparis obtusa cv. 'Gracilis'—Slender Hinoki Falsecypress

With its open-branched, narrow pyramidal form and, later, gracefully arching branchlets, this widely grown Hinoki Falsecypress makes an excellent accent plant. The green foliage consists of spray-like scales, twisted and cupped.

Grows best on moist, acidic soils.

Height: 25' Width: 15' Zones 4–8





## 23) Chamaecyparis pisifera cv. 'Boulevard'—Boulevard Falsecypress

Though often sold as a pruned shrub at garden centers, this cypress will soon grow to become a narrow pyramidal tree, bearing soft awl-shaped needles with a silvery, blue-green color.

Performs best in the wetter regions of the Northwest, in acidic soils.

Height: 15'–25' Width: 10' Zones 4–8





#### 24) Clerodendrum trichotomum-Harlequin glorybower

As a small, rounded garden tree, glorybower is known for its green hairy leaves, which when crushed give off a peanut butter smell. During the summer months a profusion of white, fragrant tubular flowers are formed which later give rise to small (¼") bright blue fruit.

Does best on rich organic sites in full sun. Training can help improve the tree structure which is often uneven.

Height: 20' Width: 18' Zones 7–8





#### 25) Cornus florida cv. 'Rubra'—Pink flowering dogwood

A low-branching, spreading tree filled with pink, 3- to 4-inch diameter flowers that appear before the leaves emerge in the spring, this popular garden tree has a very strong following of Northwest gardeners. Glossy red berries in the fall attract song birds.

Generally free from leaf disorders if grown on exposed sites with plenty of air circulation. For a more compact form, select a sunny site for this tree. Grows best in soils that are acidic, moist, and well-drained.

Height: 30' Width: 13' Zones 4–8





#### 26) Cornus kousa—Oriental dogwood

An excellent small garden tree, especially for areas west of the Cascades, as this dogwood avoids the leaf disorders that can plague other species. White floral bracts appear in May (after C. florida), which give rise in late summer to pink or red  $\frac{34}{7}$  to  $\frac{17}{7}$  fruit, which birds love to feast

upon.

Green leaves predominate during the summer, with intense purplish-red to scarlet foliage in the fall that will brighten up any landscape.

Height: 20' Width: 20' Zones 5–8





#### 27) Cornus mas—Corneliancherry dogwood

Forming a multi-stem, ovoid garden tree, this dogwood cultivar bears a profusion of bright yellow flowers in late winter and early spring, followed by a vast number of 1" cherry-red olive-like fruit in midsummer. Birds find the fruit very delectable and often strip the tree in only a few days.

The lower limbs can be trimmed to improve the shape.

Height: 20'–25' Width: 15' Zones 4–7





#### 28) Cotinus coggygria—Smoketree

Forming an open, spreading, and somewhat irregular, shrubbery tree, smoketree produces a cloud of airy pink flowers on current-season growth.

In the fall foliage is variable, turning yellow, orange, amber, or even red-purple. This tree is considered pest-free and grows quickly in a range of sites and soil types.

Height: 20' Width: 20' Zones 4–8





## 29) Crataegus laevigata cv. 'Crimson Cloud'—Crimson Cloud hawthorn

An improved English hawthorn selected for its nice, rounded form, large bright red blossoms with white centers, and freedom from the common leaf spot disorder that plagues the older cultivars in areas west of the Cascades.

Height: 20' Width: 20' Zones 4–8





#### 30) Crataegus lavallei—Lavalle hawthorn

This species bears shiny, deep green leaves on an oval to spreading canopy. In the spring, showy white flowers develop, which later give rise to orange to brick-red ½" to ¾" berries in the fall. Branches will bear some thorns, but not excessively. As it does not grow all that tall, it is suitable for use beneath power lines.

Grows on a wide array of sites and is considered pest-free.

Height: 25' Width: 20' Zones 4–8





#### 31) Crataegus phaenopyrum—Washington hawthorn

A broadly oval to rounded, dense, thorny tree, this hawthorn bears bright white flower clusters in the spring, green leaves in the summer, scarlet-red leaves in the fall, and a profusion of red berries. Wildlife greatly enjoy the cover provided by this fruiting tree, which can be mass-planted for a hedgerow.

Widely adapted to all sites and soil types, with no diseases.

Height: 25' Width: 20' Zones 4–8





## 32) Cryptomeria japonica cv. 'Elegans'—Plume cedar

A most unusual columnar conifer that features soft green, feathery foliage during the summer which turns a rich reddish brown in the winter. This tree can become a stately addition to any gardener seeking winter color to offset deciduous trees.

Does best in well-drained, acidic soils and full sun. Once established, this conifer should be pest-free and droughttolerant. To ensure a good shape, grow it on a site sheltered from strong winds.

Height: 30' Width: 10' Zones 6–9





## 33) Cryptomeria japonica cv. 'Sekkan Sugi'-Golden Japanese Cedar

A slow-growing conifer featuring a narrow columnar shape and spiraling, bright yellow foliage in the spring, giving rise to greener shades as the days shorten in the fall.

For best results, site this species where it will be sheltered from drying winds, spring frost, and extreme sunlight which can all scorch the foliage. Pest-free, and adaptable to all soil types.

Height: 15'–20' Width: 5' Zones 5–8





#### 34) Cunninghamia lanceolata cv. 'Glauca'—Blue China fir

A native of China, this unique fir is grown for its sharp, bright whitish-blue new foliage borne on slightly pendulous branches. Over time this tree will produce globose cones that appear as ornaments on a Christmas tree.

Best suited to moist, acidic, welldrained sites protected from cold drying winter winds. Better for areas west of the Cascades. No reported pest problems.

Height: 30'–40' Width: 10'–20' Zones 7–8





#### 35) Cupressocyparis leylandii—Leyland cypress

A fast-growing (more than 3 feet per year) conifer that is often used for screening or clipped hedges, it is best left to grow naturally on its own, forming a column or narrow pyramid. Its height makes it more suitable next to taller homes. Soft green or gold-tipped foliage (depending upon the cultivar).

Grows best on moist, fertile, acidic sites. Considered to be pest-free.

Height: 60' Width: 15' Zones 5–8





#### 36) Cupressus glabra cv. 'Blue Ice'-Blue Ice Arizona cypress

A fast growing, columnar conifer noted for its intense silver-blue scale-like needles and mahogany-colored bark, this cypress is a real eye-catcher during the darker months of the year. First found in New Zealand, this plant is aromatic.

Considered pest-free; widely adaptable to many sites and soils.

Height: 25'–30' Width: 8'–12' Zones 5–8





#### 37) Cupressus glabra cv. 'Sulphuera'—Sulphuera Arizona cypress

Though relatively uncommon, this cypress should be utilized where a compact, columnar, dense evergreen is needed. With its creamy-yellow winter color, and brighter yellow flakey,

crisscrossed summer foliage, this cypress shares many of the same attributes as its 'Blue Ice' cousin.

Very tolerant of hot, dry conditions.

Height: 10'–15' Width: 5' Zones 5–8





#### 38) Cupressus sempervirens—Italian cypress

This Mediterranean cypress tree is an ideal specimen for tight planting sites where a larger tree would simply be too wide. It can also accent tall buildings. This variant has dull, dark green foliage that is borne on sharply ascending branches, along with 1"

cones. Heavy snow can lead to limb spreading and damage.

Pest-free and widely adaptable to all sites.

Height: 60' Width: 5'–10' Zones 7–8





#### 39) Fagus sylvatica cv. 'Dawyck Purple'—Purple columnar beech

A narrow, columnar tree with green summer foliage turning deeppurple in the fall. This beech variant is considered a slow-growing tree that can be used as free-standing specimen or grouped for a hedge.

No reported pest problems. Can be grown in partial shade.

Height: 40' Width: 12' Zones 4–8





#### 40) Fagus sylvatica cv. 'Purple Fountain'—Purple Fountain beech

Forming a true garden statue with its distinctive narrow upright form and drooping, cascading branches, this beech cultivar retains its excellent purple foliage color all season long. Considered a slow growing beech cultivar.

Once established, this cultivar is drought tolerant. Adaptable to a wide array of soil types. Free from any major pest problems. Best planted in full sun.

Height: 25' Width: 12' Zones 5–8





#### 41) Fraxinus excelsior cv. 'Aureafolia'—Golden Desert ash

A small, compact, rounded-head European ash variant with yellow foliage in the spring which turns greener in the summer, but then returns with a beautiful

yellow-gold glow in the fall. The twigs themselves are even yellow!

Considered pest-free and widely tolerant of a wide array of soil types.

Height: 30' Width: 20' Zones 5–9





## 42) Ginkgo biloba cv. 'Princeton Sentry'—Princeton Sentry ginkgo

Ginkgoes are known for their distinctive two-lobed, fan-shaped, leathery leaves with diverging (almost parallel) veins. This ginkgo cultivar forms a stark columnar shape with stiffly upright branches. With its crisp, clean foliage, lack of fruit, and fantastic yellow fall foliage, this cultivar is widely utilized throughout the west for narrow boulevard plantings.

Considered pest free. Widely adapted to all soil types.

Height: 40' Width: 15'–20' Zones 4–9





#### 43) Halesia tetraptera—Carolina silverbell

This East Coast native is best known for its profusion of snow-white, bell-shaped flowers borne on pendulous stalks in late April. During the summer 2''-4'' green leaves form on this oval-headed, often multi-stemmed tree. In the fall, 1½-inch-long, oblong fruit form, adding interest. As this species is partially shade tolerant, it is a good

candidate for small yards with tall vegetation or structures nearby.

Sun to part-shade; has shallow roots.

Height: 30'
Width: 20'
Zones 4–8





#### 44) Juniperus scopulorum cv. 'Moonglow'-Moonglow juniper

In very tight spaces, Rocky Mountain junipers work very well as they form fast-growing, tall spires with very little lateral growth and a dense, compact branching habit. With its intense silvery-

blue foliage, this variant eventually forms a broad pyramidal shape making it suitable as a landscape accent, or clumped together for screens, hedges, and group plantings.

Drought tolerant. Considered pestfree.

Height: 15' Width: 8'–10' Zones 3–8





#### 45) Juniperus scopulorum cv. 'Skyrocket'—Skyrocket juniper

The narrowest of all junipers, this variant has needle-like, soft, bluish green growth foliage. Best grouped to form a colorful bluish-gray screen.

On richer, moister sites, plants will naturally grow wider than those on shallower, drier sites. Considered pest-free.

Height: 25' Width: 3'–5' Zones 3–8





#### 46) Laburnum watereri-Goldenchain tree

Featuring spectacular color from its 10"–20" long, pendulous clusters of fragrant, bright yellow, pea-shaped flowers, this small upright garden tree is popular, especially in cooler areas.

Protect from full sun. Pest-free and adaptable, with the only caution being that all parts of the plant are poisonous.

Height: 20' Width: 20' Zones 5–8





#### 47) Liquidambar styraciflua cv. 'Clydesform'—Emerald Sentinel sweetgum

Historically, sweet gum has been found to be a large tree. This cultivar is not, and it still features the enjoyable yellow-orange fall foliage of its parent. Growing in a columnar, compact, upright fashion, this

variant produces the commonly recognized 7-lobed, 3''-8'' wide leaves, as well as the  $1\frac{1}{2}''$  spiny fruit capsules.

Prefers sun. Does best in deep, moist, slightly acid soils.

Height: 30' Width: 12'–15' Zones 5–8





#### 48) Liriodendron tulipifera 'Fastigiatum'—Columnar tulip tree

While tulip trees are widely recognized and valued all across the United States, this cultivar is best suited to narrow planting sites as it forms a strictly columnar shape with nearly upright limbs.

Bears distinctive lobed leaves, which go from green to clear yellow in the fall. In June, tulip-like flowers may be found, with their greenish-yellow petals and orange interiors.

Widely adapted to all soil types. Pest-free.

Height: 50' Width: 15' Zones 4–9





#### 49) Magnolia soulangiana cv. 'Rustica Rubra'—Saucer magnolia

As a true herald of spring, this magnolia cultivar bursts forth with large, colorful, rose-red  $5\frac{1}{2}$ " diameter flowers that appear to float above their bare woody stems. Growing slowly, this cultivar forms a multi-stem spreading tree, bearing  $3^{"}-6^{"}$  long, dark green leaves. Fall foliage is a mild yellow color.

Widely adaptable to a multitude of soils and sites, and considered pest-free.

Height: 15'–20' Width: 20' Zones 5–8





#### 50) Malus cv. 'Sutyzam'—Sugar Tyme crabapple

As one of the best new disease-resistant crabapples available, this variant features fragrant 1" wide, white blossoms which cover the widely spreading limbs in April. Summer foliage stays green and

healthy all summer. In the fall, <sup>1</sup>/<sub>2</sub>" fruit form and persist if not readily consumed by larger songbirds. Fall leaf color is yellow to light red.

An excellent choice for high rainfall zones.

Height: 18' Width: 15' Zones 4–8





#### 51) Nyssa sylvatica—Black tupelo

Native to the East Coast, this tree has an oval form supporting glossy green foliage during the summer, followed by bright red to scarlet fall foliage. In addition, small, ½"-long berries form, which turn blueblack and provide fruit for songbirds.

Tupelo grows best on deep, organic-rich sites with low soil pH. This is a pest-free tree that will serve well in the fall as a wonderful accent specimen.

Height: 30' Width: 20' Zones 3–8





#### 52) Oxydendron arboretum—Sourwood

A unique garden tree noted for its large (4"–10") cream-colored, fragrant flower clusters, which form on droopy branches resembling Lily of the Valley flowers. Flower clusters remain for many weeks, often until the glossy green leaves turn shades of

scarlet and red in the fall. This slow-growing species, a native of the southeast, forms a nice pyramidal to rounded shape.

It is best suited to moist, acidic sites and may be grown in partial shade if needed. It has no reported pest problems.

Height: 20' Width: 15' Zones 5–9





#### 53) Picea glauca cv. 'Conica'—Dwarf Alberta spruce

Probably he best known dwarf conifer with its characteristic broad-conical shape, this spruce has light green, ½"-long needles that radiate out in a dense pattern around the stem. When grouped together this species makes a nice hedge.

If grown on a site where it is sheltered from hot or cold winds and strong sunlight, it should do very well. If exposed to excessive hot winds spider mites can be a problem.

Height: 12' Width: 6' Zones 2–8





#### 54) Picea glauca cv. 'Pendula'—Weeping white spruce

This spruce cultivar makes a bold statement in the garden with its narrow, conical habit and blue-green foliage on short pendulous branches that appear to be layered on top of one another. Best suited to open spaces or set beside 2-story homes.

It is considered deer-resistant and widely adapted to a host of soil types, though it does best on moist, rich sites.

Height: 40' Width: 8'–10' Zones 2–8





### 55) Picea pungens cv. 'Baby Blue Eyes'—Baby Blue Eyes Colorado spruce

Blue spruce is a commonly utilized garden conifer planted throughout the temperate zone for its striking blue growth. This cultivar is also valued for its smaller stature, which makes it more suitable for urban yards.

For best color, plant in full sun. This variant is pest-free and tolerant of many soil types.

Height: 30'–40' Width: 15'–20' Zones 2–8





#### 56) *Pinus aristata*—Bristlecone pine

While normally considered an intermountain forest conifer, this pine can be utilized as a slow growing, narrow specimen for the conifer enthusiast. Known for the waxy white exudates on its needles (five needles per bundle).

This variant is widely adapted to nearly all soil types and will survive and prosper on dry, rocky sites where other ornamental conifers would do poorly.

Height: 10'–20' Width: 8'–10' Zones 4–8





## 57) Pinus strobus cv. 'Fastigiata'—Fastigiata white pine

This eastern white pine cultivar is noted for its fast growth and narrow, upright, columnar habit. Bearing bluish-green plumes of needles (in bundles of five), this pine can be planted on its own or clumped together to form screens or hedges.

Widely adaptable to all soil types, and free from pests.

Height: 40' Width: 10'–12' Zones 3–8





#### 58) Populus tremuloides—Quaking aspen

A slender, graceful tree with smooth, greenish-white bark, aspen trees are planted throughout the Northwest and are prized for their distinctive green summer leaves that quiver in the slightest breeze. Fall foliage is a very distinctive golden-yellow hue. A fast growing tree, but can be short lived.

Ensure that this tree receives good air circulation.

Height: 40' Width: 20' Zones 1–8





#### 59) Prunus cerasifera cv. 'Thundercloud'—Thundercloud flowering plum

With its ruby red foliage, profusion of white to light pink, fragrant springtime flowers, and a fast growth rate, this popular garden selection will brighten up any landscape. In the Northwest this tree will not produce fruit as it will in other parts of the United States.

To keep the leaf color all summer long, this tree will need full sun. To ensure best results west of the Cascades, only plant this tree in areas of good air circulation to avoid fungal disease problems.

Height: 20' Width: 20' Zones 5–8





## 60) Prunus serrulata cv. 'Mt. Fuji'-Mt. Fuji flowering cherry

Northwestern gardeners take great delight in May when their nonfruiting cherries burst into bloom. This variant features pink buds which give rise to white, semi-double 2" diameter floral bouquets (three per cluster) held on spreading, horizontal limbs. Summer foliage consists of 5" long green leaves, which turn a beautiful yellow in the fall before they drop. No fruit is produced.

To ensure that this species looks nice all year, plant it in a sunny, exposed site with plenty of air circulation.

Height: 12'–15' Width: 20' Zones 5–8





#### 61) Prunus serrulata cv. 'Royal Burgundy'-Royal Burgundy flowering cherry

All through areas west of the Cascades flowering cherries are highly valued for their spring flower show. This variant is a smaller derivative of the popular 'Kanzan' cultivar, growing in a more upright vase form. Features purple leaves, and magenta flowers, plus coppery-red, glossy, peeling bark and bronze-purple fall foliage.

As with all flowering cherries, this cultivar can suffer leaf disorders when planted in a windless area.

Height: 20' Width: 15' Zones 5–8





#### 62) Prunus cv. 'Snofozam'—Snow Fountains weeping cherry

This beautiful spring blooming, weeping tree is known for its profusion of white, lightly scented bloom covering branches that dip nearly all the way down to the ground. The Northwest nursery industry sells this cultivar as a high-grafted (6') tree, thus giving rise to the distinctive umbrella, or fountain form. Following the

green summer foliage, the leaves turn a very pleasing yellow to scarlet red in the fall.

In order to avoid the leaf spot disease that can affect this tree in areas west of the Cascades, ensure it is planted on sites with good air circulation.

Height: 12' Width: 12'–15' Zones 5–8





#### 63) Prunus virginiana 'Canada Red'—Canada Red chokecherry

This uncommon small garden tree is noted for its fragrant, 5-lobed, white flower clusters which, in the summer, give rise to dark purpleblack, pea-sized berries that ripen in August. While these fruit can be used in cooking (*don't eat them fresh!*), it's really the local songbirds who find this tree so desirable.

With an oval-rounded crown, this tree has light green foliage in early spring, but by the end of June nearly all of the foliage will be dark purple.

Height: 20' Width: 20' Zones 2–8





#### 64) Pyrus calleryana cv. 'Chanticleer'-Chanticleer flowering pear

A very popular urban tree that has showy, white flowers (½" diameter) which appear before and during leaf emergence and an upright, narrow columnar form. Summer foliage is shiny and dark green, giving way to spectacular shades of reddish-orange and purple in fall.

A fast growing, pest-resistant tree.

Height: 40' Width: 15' Zones 5–8





## 65) Salix integra cv. 'Hakura Nishiki'—Dapple willow

When grafted high onto a tall rootstock, dapple willow forms a green-and-white variegated garden tree, sending out branches in all directions that eventually form an elegant drooping shape. During the winter, stems display a nice coral and red coloration.

Performs best on moist soils or those heavily enriched with organic matter.

Height: 15' Width: 15' Zones 4–8





#### 66) Sequoiadendron giganteum cv. 'Pendulum'—Weeping giant redwood

An exceptionally unusual conifer with stiffly pendulous side branches and a vigorous upright leader. Although it can grow quite tall, it maintains its narrow, slightly corkscrewed shape forever. It may lean if the tree was not planted vertically when first set out.

Free from any pest problems. Does best on well drained, moist sites.

Height: 25'–35' Width: 4'–6' Zones 6–8





### 67) Sorbus aucuparia cv. 'Michred'—Cardinal royal mountain ash

A popular garden tree noted for its white flower clusters in the spring and compound airy leaflets which don't need to be raked in the fall. In September the leaves turn a multitude of colors, including yellow and orange-red. In addition, it bears orange-red berries which are quickly discovered and entirely consumed by songbirds.

Best grown in acidic, moist, and well-drained soils.

Height: 35' Width: 20' Zones 2–8





#### 68) Stewartia psuedocamelia—Japanese stewartia

While most trees bloom in the spring, this stewartia sends out  $2\frac{1}{2}$ " camellia-like flowers with orange centers in mid-summer. In the fall, leaves can turn yellow, red, and even purple.

During the winter months, an older tree develops a fascinating series of colors, including grey, orange, and reddish-brown on its peeling bark.

Best grown on well-drained sites with acidic, moist, humus-rich soil.

Height: 30' Width: 20' Zones 6–9





#### 69) Styrax japonicus—Japanese snowbell

A small deciduous garden tree which produces a vast number of bell-shaped, 1" white flowers during the months of May and June. The drooping flower clusters are easily visible as they hang beneath the upward-posing green foliage. Later in the summer, greenish brown, olive-shaped fruit form. In the fall, leaves may turn yellow to red.

Plant in sun to part shade. Does best in acid soil enriched with organic matter.

Height: 20' Width: 20' Zones 5–8





#### 70) Taxus baccata cv. 'Fastigiata'—Irish yew

Forming a very narrow columnar sentinel, this garden conifer makes a wonderful stand-alone accent with its rigid, upright branches which bear green needles tipped with gold on the new growth. If needed it can be further sheared to fit a tight space.

Tolerant of both sun and shade, this yew is a pest-free, very hardy plant. As with any yew, all parts of the foliage are poisonous.

Height: 20' Width: 4'–8' Zones 5–8





#### 71) Thuja occidentalis cv. 'Emerald Green'-Emerald green arborvitae

A narrow, densely branched pyramidal conifer with rich, emerald green scale-like foliage (pale green below). While often grown en masse as a sheared hedge, individual plants left on their own form

stately pyramidal columns. Can be sheared as desired but avoid topping. Interior foliage

may yellow-brown in the winter.

Prefers full sun and well-drained soils.

Height: 15'–25' Width: 4'–8' Zones 2–8





#### 72) Thuja plicata cv. 'Zebrina'—Zebrina cedar

As a smaller version of the native western red cedar (*Thuja plicata*), this variant forms a narrow pyramidal shape bearing light green foliage striped with golden yellow bands. If planted close together, this cedar could be used for screening hedges. Otherwise consider this gold-colored conifer for accent. The yellow foliage color develops best in full sun.

Best grown on acid pH soils that are naturally moist. Free from major pest problems.

Height: 40' Width: 20' Zones 7–8





#### 73) Tilia cordata cv. 'Corzam'-Corinthian linden

Lindens have long been prized for their use as majestic, very adaptable shade trees. This cultivar is uniquely suited for the smaller lot with its narrowly pyramidal shape. Its crisp, green summer foliage changes to a beautiful yellow hue in the fall. Spring flowers attract native pollinators.

With its tolerance for polluted air, heavy soils, and lack of summer rainfall, this newer cultivar is very popular.

Height: 45' Width: 15' Zones 3–9





#### 74) Tsuga mertensiana-Mountain hemlock

A true Northwest native, normally found in the coastal mountain range, this hemlock species is prized for its columnar shape and its dense needles, which form on nodding branches.

Best suited to areas with cool summer temperatures. Does best on gravelly but organic-rich sites.

Height: 15'–30' Width: 6'–10' Zones 5–8





#### 75) Zelkova serrata cv. 'Musashino'—Musashino columnar zelkova

A tight, columnar shade tree, introduced from Japan, which is now gaining popularity for boulevard plantings or tight spaces. The slender leaves with serrated margins give it a fine-textured appearance. Medium green summer foliage gives rise to warm yellows to rusty orange-red fall foliage. The small leaf size minimizes the need for raking and leaf cleanup in the fall.

Widely adapted and pest-free.

Height: 45' Width: 15' Zones 5–9





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#### Acknowledgements

The following individuals reviewed this document and helped add significant comments towards its usefulness across the Pacific Northwest.

Marianne Filbert is a sales associate at Pollock and Sons Nursery in Battle Ground, Washington.

Toni Fitzgerald is the Master Gardener Program Leader for Washington State University in Spokane County.

Don Hanley is an Extension Forester for Washington State University.

Jennifer Karps is the Botany Specialist with the city of Portland Urban Forestry Division in Portland, Oregon.

Marianne Ophardt is a Horticulture Extension Educator for Washington State University in Benton County.

Herb Orange is a Professor of Horticulture at Clark Community College in Vancouver, Washington.

Elizabeth Petersen writes for the Oregon Association of Nurseries in Wilsonville, Oregon.

Charles Ray is the Urban Forester for the city of Vancouver, Washington.

Nick Redmond is an Urban Forestry Specialist with the city of Vancouver, Washington.

Peggy Rollens is a WSU-trained Master Gardener in Clark County, Washington.

Toby Schamberger is a salesman for J. Frank Schmidt Nursery in Boring, Oregon.

Brighton West is the Program Director for Friends of Trees in Portland, Oregon.

Kathleen Wolf is a Professor in the College of Forest Resources at the University of Washington in Seattle, Washington.

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