

2ND EDITION



TREASURE VALLEY TREE SELECTION GUIDE

PUBLISHED JANUARY 2024

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INTRODUCTION

The Treasure Valley (TV) Tree Selection Guide answers the most commonly asked questions about appropriate tree selection in a number of different landscape locations throughout the Treasure Valley including public rights-of ways, private yards, natural open space areas, and commercial properties.

The importance of planting the right tree in the right location is at the heart of best community forestry practices. The TV Tree Selection Guide (<http://www.tvcanopy.net/tree-selection-guide/>) highlights many species known by planners, landscape architects, the nursery industry, and urban foresters that do well in a variety of areas. The guide can assist you in making an appropriate tree selection for your specific need and space. ***This resource is meant as a guide only and is not an exhaustive list of approved trees for any municipality or land use in the Treasure Valley. Please refer to your local forestry department and municipal ordinance. Your local nursery is another good source of information.***

Second Edition Update:

This guide originates from the 1995 Boise Parks & Recreation Department's Tree Selection Guide which was primarily used for tree selection in right-of-way plantings. In 2018, a collaborative team, led by Treasure Valley Canopy Network and partners, and composed of: over 20 public, private, and non-profit stakeholders updated the content of the 1995 Boise Parks & Recreation Department's guide to create the first regional Treasure Valley Tree Selection Guide 1st Edition. By bringing together stakeholders and managers from all throughout the Treasure Valley, this 2018 Treasure Valley Tree Selection Guide represented one valuable resource to support all cities, residents, planners, designers and installers across the region.

In 2023, Treasure Valley Canopy Network and partners assembled a team to produce the Treasure Valley Tree Selection Guide 2nd Edition, which represents a broadened list of tree species selections to include new cultivars and trees that have proven performance over time for the Treasure Valley region. There are a variety of trees that can be planted for increased biodiversity and resilience in the face of the changing climate in our region. Improvements in this second edition include designations to highlight individual trees that provide unique value as: pollinator friendly, wildlife friendly (to include, for example, trees recommended by Golden Eagle Audubon Society as bird friendly), and added notes about Firewise landscaping in the Wildland Urban Interface (WUI) areas of the Treasure Valley. The guide includes additional symbology to alert readers to trees that are threatened by potential pests or may become invasive in the future. While many of the recommended trees listed in this guide are generally available at local nurseries, some of the trees listed may need to be special ordered.

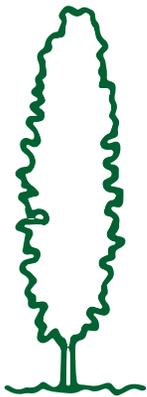
HOW TO USE THE GUIDE

The TV Tree Selection Guide is divided into sections determined by the width, height and spacing requirements that trees will need at maturity. Broadleaf trees, that normally shed their leaves annually, are arranged into classes: I, II, and III for easy reference. Conifers, most evergreen, are listed in alphabetical order.

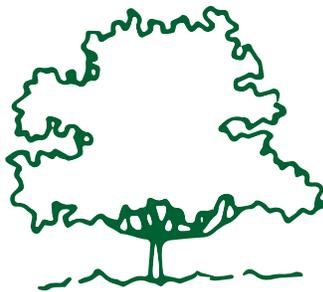
- Class I** Small trees which do not generally reach over 25-30' in height and width. Spacing, 20-30' between trees. Good for under power lines or smaller planting areas.
- Class II** Usually considered medium sized trees mostly planted for their shade and excellent use in the landscape and parkway plantings. Reaching 30-40+' height and width. Spacing, 30-40' between trees.
- Class III** Many are long lived and attain large height and trunk diameter. Make sure you have ample room to accommodate it at maturity. May reach 70'+ in height and width. Spacing, 40-60' between trees.
- Conifers** Provide year round greenery, screening and serve as excellent wildlife shelters. Generally they do not require much pruning and need large growing areas away from buildings, sidewalks and driveways. Spacing varies with species.

TREE FORMS

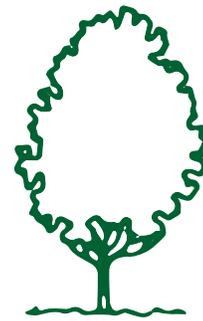
Columnar, Irregular, Oval, Pyramidal, Rounded, Vase and Weeping are shown beside the form designation. A search on-line will show the forms mentioned.



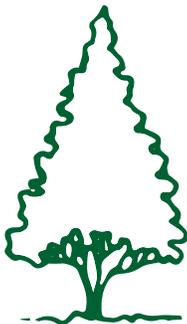
COLUMNAR



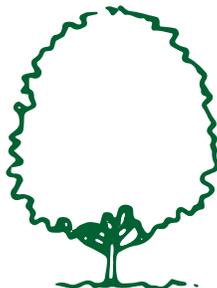
IRREGULAR



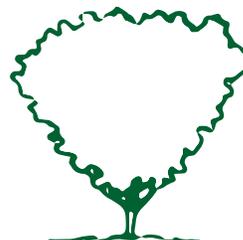
OVAL



PYRAMIDAL



ROUNDED



VASE



WEeping

SYMBOLS

At the bottom of each illustrated tree page are boxes with symbols denoting additional information about that particular tree. These symbols are explained as:



Solar Friendly

A solar friendly tree is one that has been planted at a specific location within your landscape to maximize the sun's rays year-round. These trees provide shade during the summer and a large percentage of sunlight penetration during the winter; resulting in a more solar energy efficient home.

Large broadleaf trees on the south and west sides of your house will shade the roof and walls in summer. In winter they will allow the warming sunlight to pass through.



Wildlife Friendly

Produces fruit, nuts, shelter, or nesting sites for animals and birds. Several of these trees have been included in local partner organizations' preferred tree lists for increasing planting to benefit, for example: wildlife and bird habitat (Golden Eagle Audubon Society) and pollinator habitat (City of Boise).



Beneficial Beauty

Attracts and supports native pollinators.



Street Tree

OK to plant in the rights-of-way (parkway) along streets (a permit may be required). Many regulatory agencies only accept Class II shade trees in 8' wide parkways and landscape islands within the rights-of-way. Check with your local agencies for Street Tree Planting requirements and regulations.



Utility Friendly

OK to plant under utility lines.



Windbreaks

Helps screen and deflect winds away from homes and buildings.



Fire Wise

Plants* chosen for their fire tolerance and resistance in order to decrease property vulnerability to wildfire. Use with defensible space principles and a maintenance plan to reduce risk.



Lower Water Demand

Drought Tolerance

No tree can survive in permanently dry soil. Some are more tolerant of periodic dry soil conditions than others. For our purposes, three levels of tolerance are defined, each falling along a range from lower water demand to higher water demand. Each of these levels is assigned a symbol; these levels and their respective symbols fall along a scale which may be shown as follows:

Remember: Lower water demand does **not** mean a tree can survive in permanently dry soil. All trees prefer a somewhat moist soil for optimum health and maximum growth. To protect your investment, be sure to water tree regularly in hot, dry periods and dry periods during the winter.



Moderate Water Demand



High Water Demand



Note of Caution

Provides a special note of concern because of problems with pests, invasiveness, or is overly planted.

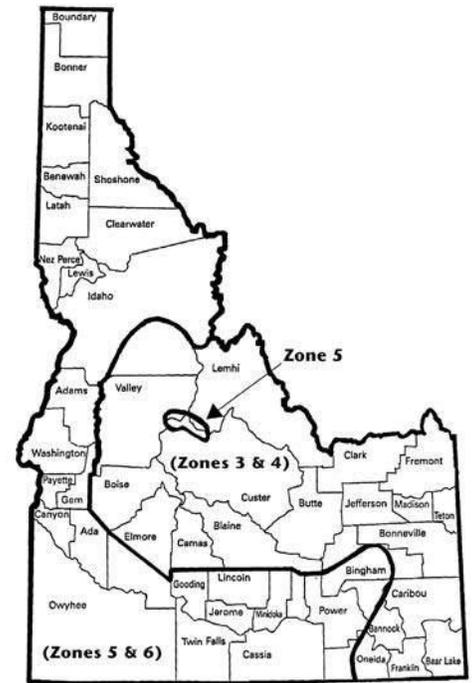
*Conifers are particularly susceptible to wildfire due to, in part, their evergreen needles, sap, and often low-lying branches and growth form. Please consider fire safety when making landscape choices if you live in the Wildland Urban Interface (WUI). Visit AdaFireAdapted.org or IdahoFirewise.org to learn more.

USDA ZONES

The United States Department of Agriculture (USDA) established ten hardiness zones (temperature ranges) throughout the United States based on 10 differences in the average annual minimum temperature. Trees are propagated and grown to match these zones. Referring to these zones can help you decide which type of tree to plant for optimal growing success. The four hardiness zones in Idaho are listed below with the average annual minimum temperature for each:

Zone 3: -40 to -30 F **Zone 4:** -39 to -20 F
Zone 5: -20 to -10 F **Zone 6:** -10 to 0 F

These zones are in parenthesis under the “Growing Conditions” section of each page. The Boise area is zone 5/6. Contact your local extension office for the correct zone in your area.



TREE REMOVAL/PLANTING PERMIT

Refer to your local city ordinance to determine if a removal permit is required for the removal of any public or private tree. Some cities require a permit to remove and/or plant a tree in the public right-of-way, an area from the road edge to the private property line. These areas can vary in width and are often planted with trees, grass, or low ground cover.

PLAN BEFORE YOU PLANT

The importance of matching the tree and its growth requirements to the planting site cannot be over emphasized. The best planting plan will not save a tree that is poorly suited to the planting site. The tree must be able to tolerate factors such as unfavorable soil conditions, inadequate or excessive water levels, space and shade limitations. **Selecting a tree that meets the site conditions is the single most important factor in achieving its success.** When space allows, consider planting larger stature trees over smaller stature trees, in the long run large trees provide exponentially higher environmental benefits. When planting more than one tree be conscious of the different planting space requirements for each species (this is found next to "size" on each illustrated page throughout the guide). A good general reference for Plant the Right Tree in the Right Place is included in Figure 1.0 below from Arbor Day Foundation.

In Idaho you must call Digline at 811 or 208-342-1585 before digging.

To select the planting site and the tree that best fits your needs, carefully consider:

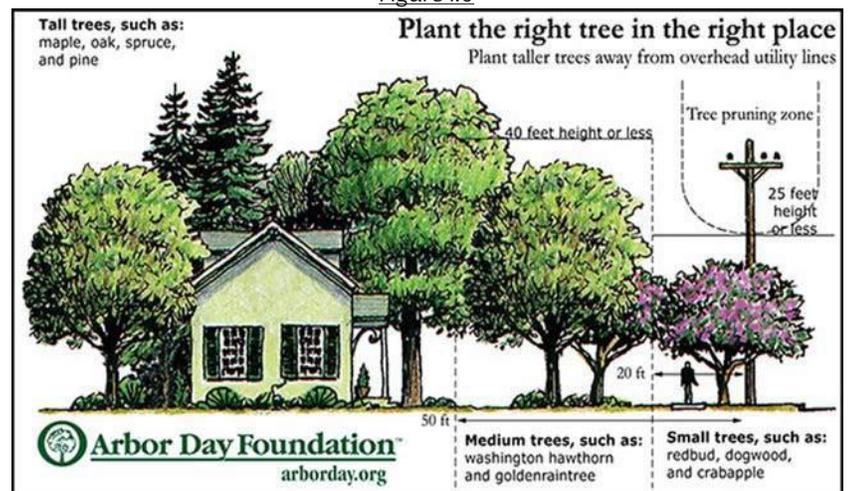
Landscaping purpose - To provide shade, color, a screen from the wind, or to enhance wildlife habitat.

Planting site - Are overhead or underground utilities present? Make sure you give your tree adequate room to grow. Try to envision it 10-50 years into the future. How close is the tree to structures and other trees near the planting area?

Soils - In urban areas can be highly variable. Too much or too little drainage often causes trees to decline and die. Check with your county extension office on ways to test your site's soil condition.

Maintenance - All trees need regular watering, routine pruning and periodic inspection for pests and disease. Planning now can save time and money later.

Figure 1.0



TREE PLANTING INSTRUCTIONS

The three most common types of planting stock found at local nurseries are in containers, bare root, or balled and burlapped (B&B). Planting procedures will vary depending on the type of stock selected, and each has advantages and disadvantages. Carefully follow the steps below to plant a sturdy and healthy tree.

1. Dig a hole 2-3 times as wide as the root ball and the **same depth** as the tree was planted in the nursery. Make sure the sides of the hole are rough and uneven. This helps the roots establish in the native soil. Continue with the steps below for the type of stock you are planting.

TYPE	PLANTING PROCEDURES
<p>Container Stock</p> 	<p>Gently remove container and inspect the root ball for circling roots. If only a few are found, gently separate and spread them outward. Eliminate masses of circling roots by cutting 2-4 vertical slices on the root ball sides to a depth of one-half inch and cut a shallow "X" on the bottom of the root ball. Cutting circling roots in this way allows growth of new roots into the surrounding native soil. Place the root ball in the planting hole, making sure that the top is level with or slightly higher than the surrounding ground.</p>
<p>Balled & Burlapped (B & B)</p> 	<p>Carefully set the tree into the planting hole so the top of the root ball is level with or slightly higher than the surrounding ground. If the tree is in a wire basket, completely remove it, if possible, or remove the upper one-half after the tree is in its final planting position. Take care not to damage the roots or disturb the integrity of the root ball. Adjust the position using pressure on the root ball; don't move it by twisting the trunk. Straighten the tree and stabilize it by adding soil around the bottom portion of the root ball. Cut and remove all twine, and cut the burlap half way down the root ball.</p>
<p>Bare Root</p> 	<p>Be sure to keep the roots moist at all times! Prune away any damaged or broken roots. Place the tree in the hole at the same depth that it grew in the nursery. Do not allow roots to curl up or around in the hole. Add soil until the tree can stand by itself. Hold it straight while the hole is being filled. Gently push soil under and between roots with your hands to remove large air pockets. If the tree settles in the hole, gently pull it back to the proper depth.</p>

2. Stand back and inspect the tree from several sides to make sure it's straight. If not, move the tree in the hole until it stands straight. Backfill with soil around the roots until the hole is half full. Water sparingly to settle the soil and remove air pockets. Lightly tamp the soil in with the shovel handle to compress the soil around the root ball, taking care not to damage the roots. Continue adding soil until the hole is filled.
3. With the remaining soil, build a basin around the edge of the filled hole. Fill the basin with water several times and allow it to soak into the root ball between each filling. Add soil where excessive settling has occurred.
4. Fill the basin with 2-3" of wood chips. Do not place chips directly against the trunk, as this may promote trunk rot.
5. It is not always necessary to stake the tree. Stake if you live in a windy area, if the root ball is fractured or the trunk is not stable. Remember to remove stakes after one year.

MAINTAINING HEALTHY TREES

Once a tree is planted there are several things that must be done to help ensure its survival. Most of the threats to the health and life of young trees can be avoided or reduced with a few simple precautions. Please read the following post-planting care tips.

WATERING

Watering the tree regularly during the first couple of years is critical to its establishment. Do not water your tree daily, instead water the tree 2-3 times per week with approximately 10 gallons of water per caliper inch. For example, if your tree is in turf, place a sprinkler under the tree or hand-water it out to the drip-line of the tree for a longer time period than your lawn sprinklers. Several slow-release watering methods are valuable, including drip irrigation that covers the whole area within the drip-line, a milk jug with small holes, or watering bag. Begin watering in the Spring when soils start drying out and continue through late Fall. After establishment, provide irrigation during drought and when above normal temperatures.

MULCHING

Mulching is a must! Mulch with wood chips to help retain soil moisture and reduce weeds. It also protects the tree from lawn mowers and weed whippers. Mulch with 2"-3" of material at a diameter that is equal to the dripline of the canopy for the newly planted tree. Keep mulch a few inches away from the tree trunk to avoid trunk rot. As mulch decomposes, it enriches the soil and provides organic matter and beneficial microorganisms.

FERTILIZING

Fertilizers are natural or synthetically produced elements applied to the soil or foliage of plants to supply nutrients necessary for normal or accelerated growth. **Newly planted trees should not be fertilized until their roots are fully established in the new planting location. This typically occurs after 1-3 years for a 2" caliper tree.**

With the exception of nitrogen, fertilizing with other nutrients is usually not required unless a known deficiency exists. As long as your trees have normal leaf size and color and appear to be growing well, the nutrients in the soil are probably adequate.

If a deficiency is suspected, a soil analysis should be done to determine what nutrient or mineral is deficient. Testing can usually be performed by an agricultural soils laboratory or by your local county extension service. After testing, a report is prepared for you identifying what nutrients need to be applied to correct any deficiencies. Only those nutrients which are known to be deficient should be applied since over application of certain elements over time can be harmful to your trees.

Over fertilization can contribute to ground water contamination or pollution of adjacent bodies of water. If nitrogen is to be applied, slow release formulas are recommended as they will limit the chances of root 'burning', which can be caused by some of the quick release, high concentrate, nitrogen fertilizers. Natural organic forms of nitrogen are your best choices for fertilizing.

PRUNING

Pruning is the most common tree maintenance task. Pruning to improve structure or enhance vigor is associated with mature or aging trees. When planting young trees, prune to remove the dead, broken or crossing branches. Cut the branches to just outside the branch collar. Avoid flush cuts or stubs. Do not apply wound dressings to the cut area after pruning. It is not necessary and may impede the tree's natural healing process. Contact your local city Forestry Department for a list of recommended Licensed Tree Services.

PESTS

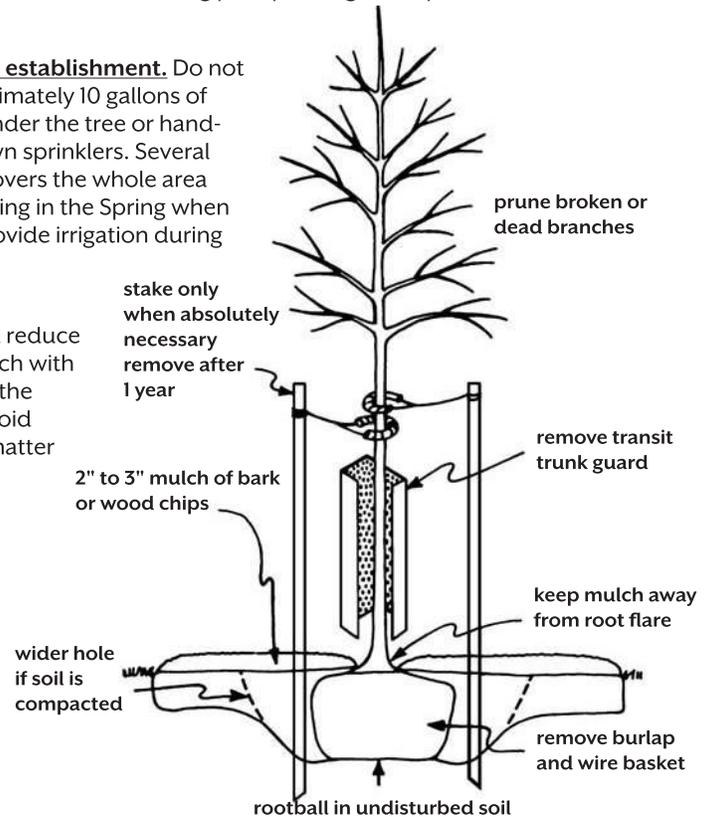
Some of the more common forms of pests include insects, mites, bacteria, fungi and viruses. There are many organisms in the landscape that are considered pests because of the amount of damage they cause the host plant or because they may be present in such large numbers that they become undesirable. However, some of these organisms do not harm plants but are truly beneficial to the host plant and are a valuable component of the ecosystem.

Many pest problems occur as a result of improper watering, poor plant stock, or an inferior planting site. Trees that are poorly adapted to a particular site are usually the ones most affected by pests. Choosing the appropriate tree and planting it in an environment capable of sustaining good growth will significantly reduce many pest problems.

The guide's chosen species are adapted well to our local environment. Although there may be certain pests associated with these trees, with proper attention to correct planting procedures, growing conditions and maintenance, you will promote the tree's best health against pests.

WEEDS AND THE USE OF HERBICIDES

Keep the area around your tree free of weeds and competing plants. Use wood chip mulch to suppress the weeds or remove them by hand. Avoid the use of herbicides near the tree as certain formulations may seriously injure or kill the tree. If you decide to use herbicides, avoid getting any on the leaves, branches, trunk or near the root area of desirable plants. Beware of fertilizers containing weed killers. These types of 'weed and feed' fertilizers should not be used over areas where tree roots are growing, as they can seriously injure or even kill trees. Remember that tree roots extend well beyond the perimeter of the outermost branches. Seek the advice of a certified pesticide applicator for further recommendations.



CLASS I TREES

Small trees which do not generally reach over 25-30' in height and width. Spacing, 20-30' between trees. Good for under power lines or smaller planting areas.



Magnolia, Saucer

Cherry, Japanese Flowering

Prunus serrulata varieties



Family	Rosaceae	Fall Color	Purple/red
Form	Vase and round	Seed	Some fruit
Size	15-20 ft. High 20 ft. Wide	Flower	Pink and white blooms.

Characteristics

An ornamental flowering cherry tree native to Japan and known more for its cultivars. The actual species is seldom sold. The cultivars produce showy flowers in spring and good leaf color in autumn.

Growing Conditions (Hardy in Zones 5-6)

Water: Tolerates low to moderate amounts

Light: Full sun

Soil: Tolerates most soil types

Growth Rate

Moderate, short life span generally 20-30 years

Disease and Insect Pests

Leaf spot and leaf curl, aphids, borers, and scale

Commonly Available Varieties

See local nurseries for varieties



Chokecherry, Canada Red

Prunus virginiana



J. Frank Schmidt & Son Co. photo

Family	Rosaceae	Fall Color	Purple/red
Form	Small suckering tree	Seed	Small red berries
Size	20-25 ft. High 20 ft. Wide	Flower	White bloom on 3- 6" long racemes

Characteristics

Grown as either a suckering single stem or clump small ornamental tree. Foliage emerges green, changing to reddish purple by mid summer.

Growing Conditions (Hardy in Zones 2-10)

Water: Tolerates low to moderate amounts

Light: Full sun

Soil: Tolerates most soil types

Growth Rate

Fast, 1-2 ft per year

Disease and Insect Pests

Shot hole leaf fungus

Commonly Available Varieties

See local nurseries for varieties



Crabapple, Red Flowering

Malus spp.



J. Frank Schmidt & Son Co. photo

Family	Rosaceae	Fall Color	Yellow/brown
Form	Varies with variety	Seed	Small apple
Size	15-25 ft. High 15-25 ft. Wide	Flower	Light pink to rosy red

Characteristics

Selection of the variety of this popular small tree is usually based on flower color (light pink to rosy-pink to deeper shades of red) and fruit color (red or orange) and persistence (clinging or falling in winter). Apples can be a favorite of birds.

Growing Conditions (Hardy in Zones 3-6)

Water: Quite drought tolerant in maturity

Light: Full sun

Soil: Well-drained, acidic soil is best; quite adaptable

Growth Rate

Medium/fast, depending on variety; short lived, at most 50 years

Disease and Insect Pests

Fireblight can be a serious disease as can cedar-apple rust and apple scab. Borers, scale and aphids are among the common insect pests.

Commonly Available Varieties

'Prairifire' - pink/red flowers with red persisting fruit

'Royalty' - crimson to purple flowers with dark red fruit

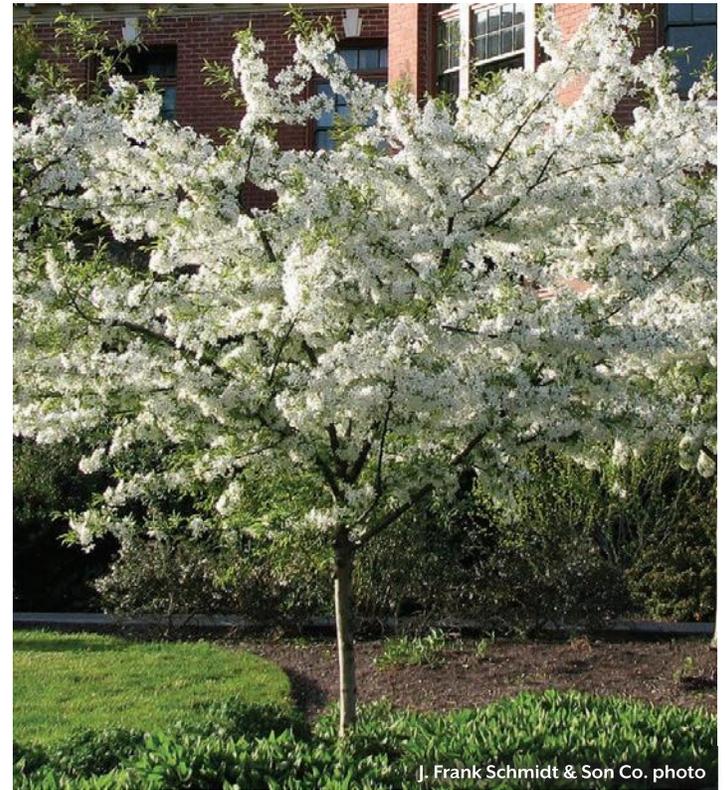
'Perfect Purple' - deep pink to rose red flowers with purple to red fruit

Royal Raindrops® - pictured above



Crabapple, White Flowering

Malus spp.



J. Frank Schmidt & Son Co. photo

Family	Rosaceae	Fall Color	Yellow/brown
Form	Varies with variety	Seed	Small apple
Size	15-25 ft. High 15-25 ft. Wide	Flower	White fragrant spring bloom

Characteristics

Flower color is white. Fruit color among the varieties are red, orange or gold and winter persistence of fruit on the tree also differs, some remaining until spring. Apples are edible to birds.

Growing Conditions (Hardy in Zones 3-6)

Water: Quite drought tolerant in maturity

Light: Full sun

Soil: Well-drained, acidic soil is best; quite adaptable

Growth Rate

Medium/fast, depending on variety; short lived, at most 50 years

Disease and Insect Pests

Fireblight can be a serious disease as can cedar-apple rust and apple scab. Borers, scale and aphids are among the common insect pests.

Commonly Available Varieties

'Spring Snow' - carries almost no fruit

'Snowdrift' - pink buds, small orange colored persistent fruit

Golden Raindrops® - profuse bloomer, golden yellow fruit



Cockspur Hawthorn

Crataegus crus-galli



J. Frank Schmidt & Son Co. photo

Family	Rosaceae	Fall Color	Orangish/red
Form	Round	Seed	Red fruit
Size	20-25 ft. High 25 ft. Wide	Flower	Creamy white, un-pleasantly scented

Characteristics

A spreading glossy green foliage tree with abundant white flowers producing clusters of deep red persistent fruit. Tree has exfoliating bark.

Growing Conditions (Hardy in Zones 4-6)

Water: Drought tolerant in maturity

Light: Full sun

Soil: Prefers moist well-drained; tolerant of alkalinity

Growth Rate

Slow to medium growth, 1 ft per year

Disease and Insect Pests

Cedar rust, fireblight and leaf spot are diseases that can be bothersome. Scale and mites are most likely insect pests.

Commonly Available Varieties

'Crusader Thornless' - most common thornless variety



Dogwood, Cornelian

Cornus mas



J. Frank Schmidt & Son Co. photo

Family	Cornaceae	Fall Color	Yellow
Form	Multi-stemmed oval shaped	Seed	½" red ripening in late summer
Size	20-25 ft. High 15 - 20 ft. Wide	Flower	Small yellow clusters appearing before leaves

Characteristics

A small, 20 to 25 foot high tree that thrives in well-drained urban conditions. Commonly called Cornelian Cherry. Can be used as a hedge.

Growing Conditions (Hardy in Zones 4-8)

Water: Moderate water requirement

Light: Full to partial sun

Soil: Prefers moist well-drained; tolerant of alkalinity

Growth Rate

Slow

Disease and Insect Pests

Relatively free of pests

Commonly Available Varieties

See local nurseries for varieties



Dwf. White Flowering Pear

Pyrus calleryana 'Jaczam'



Family	Rosaceae	Fall Color	Yellow
Form	Narrow columnar	Seed	Small 1/2" green pome
Size	15 ft. High 10 ft. Wide	Flower	White

Characteristics

Tight branched narrow upright growth makes a perfect ornamental tree for limited space landscapes. Hardest of all the flowering pears.

Growing Conditions (Hardy in Zones 5-8)

Water: Low to Moderate

Light: Full sun

Soil: Adaptable to most soil types

Growth Rate

Fast, 1-2 ft per year

Disease and Insect Pests

Minimum; some fireblight susceptibility

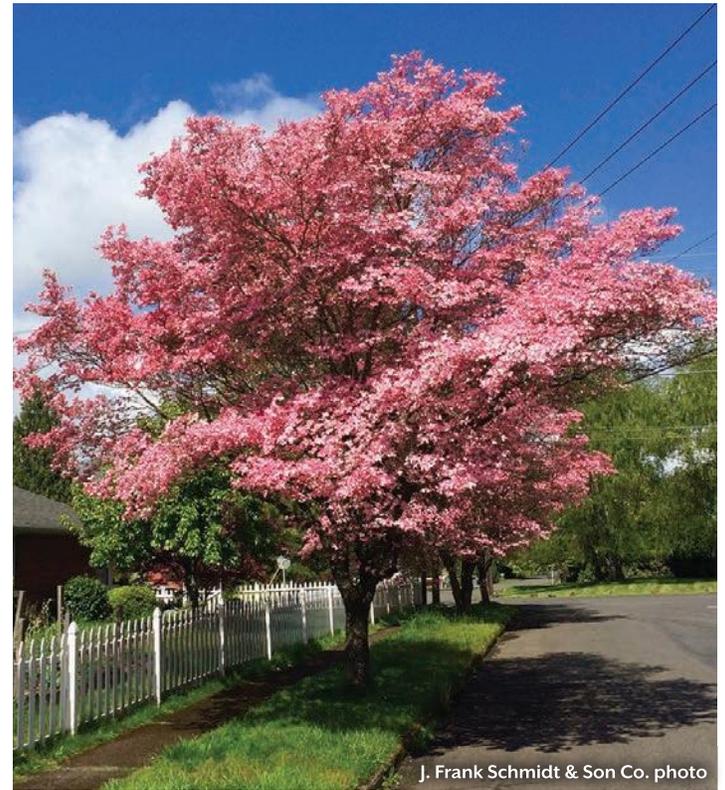
Commonly Available Varieties

Jack®



Dogwood, Flowering

Cornus florida



Family	Cornaceae	Fall Color	Red
Form	Irregular, unique	Seed	Red, stone fruit
Size	15-20 ft. High 15-20 ft. Wide	Flower	3" Red, pink or white in spring

Characteristics

Dark Green leaves consistently turning red in autumn. Attractive in all seasons. Excellent specimen tree and is considered to be one of the most attractive native flowering trees in the United States. Flowers in spring before leaves appear. Flower color varies with the variety selected. Appeals to birds and wildlife.

Growing Conditions (Hardy in Zones 5-6)

Water: Moderate to High

Light: Partial shade

Soil: Cool, well-drained, light soil with some organic matter

Growth Rate

Slow/medium; short to moderate life span

Disease and Insect Pests

Borers and leaf spot are common, especially on stressed trees. Maintaining proper watering and soil conditions helps to keep this species healthy.

Commonly Available Varieties

'Cloud 9' (white flowering)

'Cherokee Chief' (red/pink flowering)

'Milky Way Select' (*Cornus kousa*) creamy white



Golden Chain Tree

Laburnum x watereri



J. Frank Schmidt & Son Co. photo

Family	Fabaceae	Fall Color	Yellow
Form	Round	Seed	Bean-like Pod
Size	15-30 ft. High 15-30 ft. Wide	Flower	Showy yellow clusters

Characteristics

For compact spaces where shade is desired, Golden Chain-Tree will put on a stunning spring show of long fragrant bright yellow flower clusters. Tough and adaptable this tree is well suited for the Treasure Valley. Keep in mind however, the seeds are poisonous to humans, goats and horses.

Growing Conditions (Hardy in Zones 5-8)

Water: Moderate

Light: Full sun

Soil: Adaptable

Growth Rate

Moderate to Fast Up to 1.5' a year

Disease and Insect Pests

Canker, leaf spot, aphids, and mealybugs

Commonly Available Varieties

'Pendulum'

'Vossi'



Goldenrain Tree

Koelreuteria paniculata



J. Frank Schmidt & Son Co. photo

Family	Sapindaceae	Fall Color	Yellow
Form	Round	Seed	Papery "lantern"
Size	30-40 ft. High 30-40 ft. Wide	Flower	Yellow clusters in July

Characteristics

A superb flowering tree for many situations. Unrivaled for late summer yellow flowers. Leaves are 8 to 15 inches long and bear 8 to 15 irregularly lobed medium green leaflets. In spring, the leaves emerge a purplish-red color. Seed capsules begin to appear in August looking very much like Japanese paper lanterns; they persist on the tree throughout winter.

Growing Conditions (Hardy in Zones 5-6)

Water: Heat and drought tolerant in maturity

Light: Full sun

Soil: Adaptable; tolerant of heavy alkaline soils

Growth Rate

Fast, nearly 2 ft per growing season on a good site

Disease and Insect Pests

Mostly free of major pests

Commonly Available Varieties

'September' - flowers late, may not be as hardy of a species



Japanese Tree Lilac

Syringa reticulata



J. Frank Schmidt & Son Co. photo

Family	Oleaceae	Fall Color	Yellow
Form	Upright	Seed	Insignificant
Size	20 ft. High 15 ft. Wide	Flower	Showy white clusters

Characteristics

An excellent choice for a seedless late flowering tree the Tree Lilac absolutely steals the show when blooming! Like its more well known relative the Common Lilac this small tree is lovely and tough as nails. Unfussy as to soil type and water it is an excellent addition to our urban forest.

Growing Conditions (Hardy in Zones 4-7)

Water: Moderate to drought tolerant

Light: Full sun

Soil: Adaptable

Growth Rate

Moderate 12"-18" a year

Disease and Insect Pests

No serious disease or insect issues.

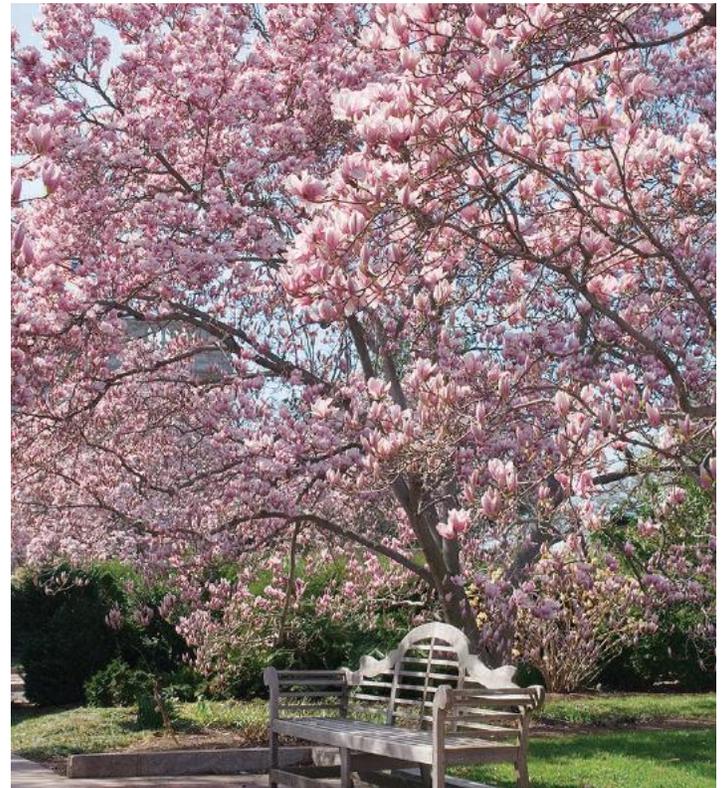
Commonly Available Varieties

'Ivory Silk'



Magnolia, Saucer

Magnolia x soulangiana



Family	Magnoliaceae	Fall Color	Yellow/brown
Form	Pyramidal/Round	Seed	Cone-like cluster
Size	20-30 ft. High 20-30 ft. Wide	Flower	Pink/white to 7" across

Characteristics

Very desirable as a specimen tree for pre-leaf display of large pink/white flowers. Often outer ring of petals in pink/purple white interior petals are pure white. Medium green leaves are 4-6" long. Buds are soft and woolly. Late spring frost will sometimes kill the new flower buds.

Growing Conditions (Hardy in Zones 5-6)

Water: High

Light: Full sun/partial shade

Soil: Needs good loam with high organic matter content.

Growth Rate

Medium, 1-2 ft per year on a good site; moderate life-span of about 100 years

Disease and Insect Pests

Several leaf spots and cankers; magnolia scale, tulip tree scale, and others. Sapsuckers often drill holes into the trunk, doing little harm.

Commonly Available Varieties

'Galaxy'

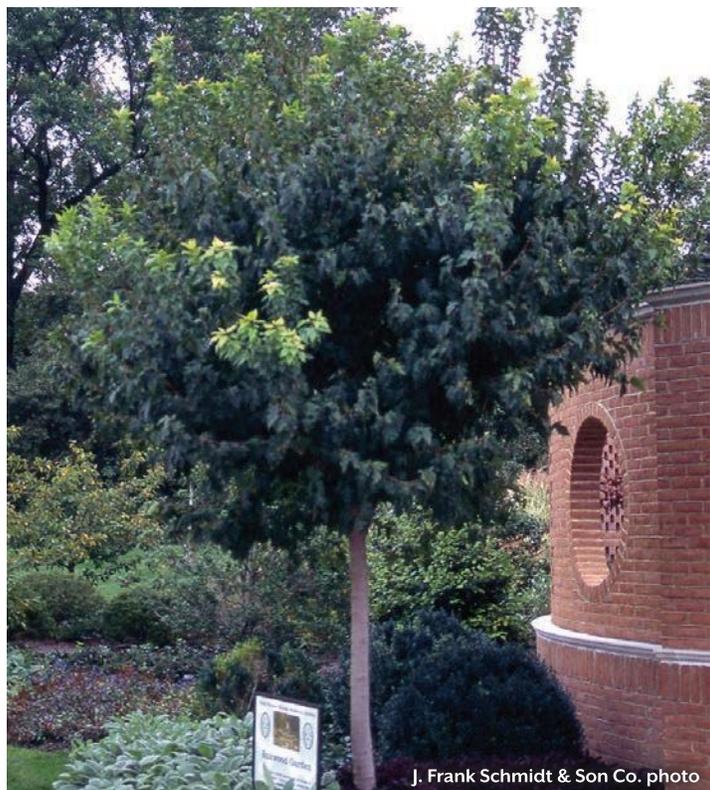
'Royal Star' (*Magnolia stellata*)

'Rustrica Rubra'



Maple, Amur

Acer ginnala



J. Frank Schmidt & Son Co. photo

Family	Aceraceae	Fall Color	Brilliant red
Form	Round	Seed	Winged samara
Size	15-20 ft. High 15-20 ft. Wide	Flower	Fragrant yellowish white

Characteristics

A small tree or shrub, usually multi-stemmed. One of the first trees to leaf in spring. Dark green summer leaves give way to orange/red in autumn. Winged seeds persist through winter.

Growing Conditions (Hardy in Zones 3-8)

Water: Tolerates moist conditions, somewhat drought tolerant in maturity

Light: Full sun/partial shade

Soil: Tolerates most soil types, adaptable to alkaline

Growth Rate

Medium to fast, 1-2 ft per year

Disease and Insect Pests

Verticillium wilt, otherwise free from most pests

Commonly Available Varieties

'Flame'

Red November™



Maple, Bigtooth

Acer grandidentatum



Bigtooth Maple © Audrey Zharkikh, CC BY-NC-SA 2.0

Family	Aceraceae	Fall Color	Yellow to reddish orange
Form	Oval	Seed	Reddish winged samara
Size	10-30 ft. High 10-15 ft. Wide	Flower	Inconspicuous yellow/green in early spring

Characteristics

A small tree with spreading crown similar to Sugar Maple but smaller.

Growing Conditions (Hardy in Zones 5-10)

Water: Low to Moderate

Light: Full sun

Soil: Moist, well drained, tolerates clay

Growth Rate

Slow to moderate, 1 ft per year

Disease and Insect Pests

Relatively free of pests

Commonly Available Varieties

Rocky Mountain Glow®

See local nurseries for varieties



Maple, Tatarian

Acer tataricum

CLASS I



Family	Sapindaceae	Fall Color	Yellow/red
Form	Upright round multi-stemmed	Seed	Red colored winged samaras
Size	15 - 20 ft. High 15 - 20 ft. Wide	Flower	Pale greenish white

Characteristics

Grows as a small upright spreading multi-stemmed tree. Spring blooms are followed by brightly colored samaras that persist until fall.

Growing Conditions (Hardy in Zones 3-8)

Water: Requires moderate amount of regular water

Light: Tolerates full to partial sun

Soil: Will tolerate clay soils and some drought

Growth Rate

Once established between 8-12 inches per year

Disease and Insect Pests

Aphids, scale and mites have been noted; verticillium wilt may appear

Commonly Available Varieties

Hot Wings® - bright scarlet red samaras and orange red fall color



Mountain Ash

Sorbus acuparia



Family	Rosaceae	Fall Color	Brilliant Rust
Form	Narrow Oval	Seed	Red berry / occurs in clusters
Size	35 ft. High 15-20 ft. Wide	Flower	Showy white clusters

Characteristics

A naturally columnar tree, the Mountain Ash is an excellent choice for a smaller yard where flower and fall color are desired. Clusters of white flowers in the spring followed by stunning red fruit in the fall. This tree does well in the valley but is probably underused currently. Fall color is a deep bronze and local songbirds will feast on the seeds through the season.

Growing Conditions (Hardy in Zones 2-8)

Water: Moderate

Light: Full sun

Soil: Adaptable

Growth Rate

Moderate less than 12" per year

Disease and Insect Pests

Fireblight if too wet, aphids and scale. Borers are a problem if the tree is unhealthy.

Commonly Available Varieties

Cardinal Royal®



Plum, Purple Leaf Flowering

Prunus cerasifera



J. Frank Schmidt & Son Co. photo

Family	Rosaceae	Fall Color	Nothing significant
Form	Small shrubby, single stem	Seed	Large red edible fruit
Size	15-30 ft. High 15-20 ft. Wide	Flower	Fragrant light pink single flower

Characteristics

Popular purple leaf varieties bloom in early spring before leafing out with fragrant light pink flowers. Tree shape varies from rounded to upright vase shape depending on variety.

Growing Conditions (Hardy in Zones 5-6)

Water: Requires moderate amount of regular water

Light: Tolerates full sun

Soil: Prefers well drained, tolerates higher pH

Growth Rate

Fast

Disease and Insect Pests

Aphids, scale, borers, canker and leaf spot

Commonly Available Varieties

'Krauter Vesuvius' - oval rounded crown shape

'Newport' - hardiest, rounded crown shape

'Thundercloud' - vase shape



Redbud, Eastern

Cercis canadensis



J. Frank Schmidt & Son Co. photo

Family	Rosaceae	Fall Color	Yellow
Form	Round	Seed	Bean like pod
Size	20-30 ft. High 20-25 ft. Wide	Flower	Attractive pink clusters in April

Characteristics

A beautiful small tree native to North America. Trunk is usually branched very close to the ground. Heart shaped leaves open with reddish/purple color then turn dark green. Very nice floral displaying April/May lasts 2/3 weeks.

Growing Conditions (Hardy in Zones 5-6)

Water: Quite drought tolerant in maturity

Light: Full sun/partial shade

Soil: Does well in many soil types

Growth Rate

Medium growth rate, 1 ft per year

Disease and Insect Pests

Cankers, verticillium wilt, scale and leaf hoppers

Commonly Available Varieties

'Forest Pansy'

Lavender Twist®

'Ruby Falls'



Serviceberry

Amelanchier x grandiflora

CLASS I



Family	Rosaceae	Fall Color	Yellow/orange/red
Form	Multi-stemmed small tree	Seed	Edible 1/4" red to purplish black
Size	15-25 ft. High 15-25 ft. Wide	Flower	White blooms on 3-4" racemes

Characteristics

Grows as either a strong single stem tree or a large multi-stemmed shrub. White blossoms in late spring producing small red berries turning purplish in fall. Deep green foliage turning orange to deep red in fall.

Growing Conditions (Hardy in Zones 4-9)

Water: Tolerates moderate levels of moisture

Light: Full sun

Soil: Tolerates most soil types

Growth Rate

Fast, 1 -2 ft per year

Disease and Insect Pests

Rusts, powdery mildew, fire blight, borers, leaf miners and scale

Commonly Available Varieties

Autumn Brilliance® - great fall color

Spring Flurry®



CLASS II TREES

Usually considered medium sized trees mostly planted for their shade and excellent use in the landscape and parkway plantings. Reaching 30-40+' height and width. Spacing, 30-40' between trees.



Tulip Tree

Deguz Designs photo

Ash, Green

Fraxinus pennsylvanica



J. Frank Schmidt & Son Co. photo

Family	Oleaceae	Fall Color	Yellow
Form	Oval	Seed	Winged
Size	50-60 ft. High 30-40 ft. Wide	Flower	Inconspicuous in April

Characteristics

Tough mid-size tree that tolerates adverse conditions. However, with the emergence of the Emerald Ash Borer some municipalities have stopped using it. Check with your local city or county municipality for possible restrictions. The City of Boise does not use this tree on the public rights-of-way.

Growing Conditions (Hardy in Zones 3-6)

Water: Quite drought tolerant in maturity

Light: Full sun

Soil: Tolerates most soil types

Growth Rate

Fast, 2-3 ft per year

Disease and Insect Pests

Canker, viruses, leaf spot, flower gall (mites), borers, scale, aphids

Commonly Available Varieties

'Cimmaron'

'Patmore'

'Summit'



Ash, White

Fraxinus americana



J. Frank Schmidt & Son Co. photo

Family	Oleaceae	Fall Color	Purple/gold
Form	Oval	Seed	Winged
Size	50-60 ft. High 35-45 ft. Wide	Flower	Inconspicuous

Characteristics

Stunning fall color makes this a favorite of homeowners. However, with the emergence of the Emerald Ash Borer some municipalities have stopped using it. Check with your local city or county municipality for possible restrictions. The City of Boise and City of Nampa do not allow use of this tree in the public rights-of-way.

Growing Conditions (Hardy in Zones 4-6)

Water: Moderate

Light: Full sun

Soil: Adaptable

Growth Rate

Medium/fast, 1-2 ft per year

Disease and Insect Pests

Canker, viruses, leaf spot, flower gall (mites), borers, scale, aphids

Commonly Available Varieties

Autumn Purple®



Beech, European

Fagus sylvatica



J. Frank Schmidt & Son Co. photo

Family	Fagaceae	Fall Color	Golden yellow
Form	Oval/Round	Seed	1" triangular nut
Size	50-70 ft. High 35-50 ft. Wide	Flower	Clusters of yellow globes

Characteristics

Dark green to purple leaves in spring turning a rich yellow/brown in autumn. Large tree with dense shade. Smooth gray bark has unusual beauty. Many varieties!

Growing Conditions (Hardy in Zones 5-6)

Water: Moderate

Light: Full sun/partial shade

Soil: Well-drained, acid soil; somewhat adaptable

Growth Rate

Slow/medium, 1 ft or less per year; long lived species

Disease and Insect Pests

Woolly aphid, otherwise mostly free of major pests

Commonly Available Varieties

'Asplenifolia'

'Riversii'

'Roseomarginata'



Birch, River

Betula nigra



J. Frank Schmidt & Son Co. photo

Family	Betulaceae	Fall Color	Yellow
Form	Rounded	Seed	Small nutlet
Size	40-60 ft. High 40-60 ft. Wide	Flower	Thin, drooping catkins

Characteristics

Beautiful, flaking bark of orange, white, pink and cinnamon make this a very attractive tree. Available in both clump and single stem form it has many uses in the Treasure Valley. However, it can struggle in heavier soils. May not be the best choice in Canyon County or southern Ada county due to alkalinity.

Growing Conditions (Hardy in Zones 4-6)

Water: Moderate to High

Light: Full sun

Soil: Acidic, does not tolerate heavy clay well

Growth Rate

Medium/fast, 1-2 ft per year

Disease and Insect Pests

Borers, aphids, chlorosis (in heavy soil)

Commonly Available Varieties

Dura-Heat®

Heritage®



Black Gum

Nyssa sylvatica

CLASS II



Family	Nyssaceae	Fall Color	Crimson to yellow
Form	Pyramidal	Seed	Blue-black berries
Size	40-50 ft. High 20-30 ft. Wide	Flower	Insignificant

Characteristics

A delightful mid-sized tree prized for its spectacular fall color; Black Gum could be an excellent addition to the usual shade trees used in the Treasure Valley. It can be sensitive to alkalinity however, so use with caution in Canyon County as well as southern and western Ada County.

Growing Conditions (Hardy in Zones 4-7)

Water: Moderate to drought tolerant

Light: Full sun

Soil: Prefers moist, well-drained, acidic soil; does not tolerate alkaline soils or pollution

Growth Rate

Slow

Disease and Insect Pests

Mostly free of disease and pests

Commonly Available Varieties

'Afterburner'

'Red Rage'

Elm, Hybrid Cultivars

Ulmus



Family	Ulmaceae	Fall Color	Yellow
Form	Vase to Oval	Seed	Flat and round
Size	40-50 ft. High 30-40 ft. Wide	Flower	Insignificant

Characteristics

New varieties of Elms have entered the market that have a higher disease tolerance to Dutch Elm Disease and Elm Leaf Beetle. These newer varieties have brought back the Elm to the landscape with their arching forms, glossy leaves, and bright yellow fall color.

Growing Conditions (Hardy in Zones 4-7)

Water: Moderate

Light: Full sun

Soil: Tolerant of most soils

Growth Rate

Fast, up to 2+ ft per year

Disease and Insect Pests

Find varieties that have a high resistance to Dutch Elm Disease and Elm Leaf Beetle. Elms can have issues with borers, leaf miners, and scale.

Commonly Available Varieties

Emerald Sunshine[®], **Accolade**[™], **'New Horizon'**, **Colonial Spirit**[®], **'Princeton'** (pictured above)

Hybrid Elms: **'Frontier'**, **Triumph**[™]



Filbert, Turkish

Corylus colurna



Family	Betulaceae	Fall Color	Yellow/purple
Form	Pyramidal	Seed	Half-inch nut
Size	40-50 ft. High 20-30 ft. Wide	Flower	Two-inch brown catkins in spring

Characteristics

An excellent tree that does very well in hot, dry summers and cold winters. Thick, dark green leaves with toothed margins that are seldom attacked by disease or insect. Drooping brown catkins and edible nuts are very appealing. Flaking brown/orange bark is attractive as well. Somewhat formal appearance in the landscape. Not in wide production.

Growing Conditions (Hardy in Zones 5-6)

Water: Quite drought tolerant in maturity

Light: Full sun

Soil: Well drained, loamy; tolerates alkalinity

Growth Rate

Medium, 1 ft or more per year

Disease and Insect Pests

Mostly pest and disease free

Commonly Available Varieties

Species



Ginkgo

Ginkgo biloba



J. Frank Schmidt & Son Co. photo

Family	Ginkgoaceae	Fall Color	Yellow
Form	Pyramidal/oval	Seed	Tan, fleshy fruit
Size	40-60 ft. High 30-50 ft. Wide	Flower	Inconspicuous

Characteristics

Extremely tolerant of adverse conditions, this is an excellent choice for city streetscapes. However, due to its relatively slow growth rate, it can be difficult to find in large numbers. Male clones are the best choice as the fruit of the female is quite messy and has an unpleasant smell.

Growing Conditions (Hardy in Zones 4-6)

Water: Moderate

Light: Full sun

Soil: Well drained, very adaptable

Growth Rate

Slow

Disease and Insect Pests

Mostly free of disease and pests

Commonly Available Varieties

'Autumn Gold'

'Magyar'

Princeton Sentry®



Hackberry, Common

Celtis occidentalis

CLASS II



J. Frank Schmidt & Son Co. photo

Family	Ulmaceae	Fall Color	Yellow
Form	Vase-shaped	Seed	Berry-like
Size	40-60 ft. High 40-60 ft. Wide	Flower	Inconspicuous

Characteristics

A very tough, sturdy tree. Hackberry is a great choice for windy, exposed sites where it is difficult to get trees established.

Growing Conditions (Hardy in Zones 4-6)

Water: Drought tolerant once established

Light: Full sun

Soil: Tolerates most conditions

Growth Rate

Medium/fast, 1-2 ft per year

Disease and Insect Pests

Witches broom, hackberry nipple-gall, scale

Commonly Available Varieties

See local nurseries for varieties

Honeylocust, Thornless

Gleditsia triacanthos var. inermis



J. Frank Schmidt & Son Co. photo

Family	Fabaceae	Fall Color	Yellow
Form	Irregular/rounded	Seed	Bean-like pod
Size	30-60 ft. High 40-50 ft. Wide	Flower	Inconspicuous

Characteristics

A sturdy, dependable shade tree that tolerates most environmental conditions in the Treasure Valley. The small leaflet produces dappled shade so turf does well under it. Most varieties in production today are both seedless and thornless.

Growing Conditions (Hardy in Zones 4-6)

Water: Somewhat drought tolerant in maturity

Light: Full sun

Soil: Adaptable, tolerates most soil conditions

Growth Rate

Fast, 2 ft or more per year

Disease and Insect Pests

Canker, aphids, borers, spider mites, leaf hoppers, others

Commonly Available Varieties

Imperial®

Shademaster®

Skyline®

Sun Burst®



Hophornbeam

Ostrya virginiana



J. Frank Schmidt & Son Co. photo

Family	Betulaceae	Fall Color	Yellow to orange
Form	Pyramidal, Round	Seed	Hop-like fruit
Size	25-40 ft. High 15-40 ft. Wide	Flower	Inconspicuous

Characteristics

An excellent choice for difficult locations, the Hophornbeam will tolerate drought and alkaline soils. Pretty, serrated leaves are similar to Hornbeam. This tree could be a very nice alternative to an Ash.

Growing Conditions (Hardy in Zones 3-9)

Water: Requires moderate amount of regular water

Light: Full sun/Partial sun

Soil: Prefers moist well-drained; tolerant of alkalinity and dry sites

Growth Rate

Slow, less than 1 ft per year

Disease and Insect Pests

Mostly free of major pests

Commonly Available Varieties

'Autumn Treasure'



Hornbeam, European

Carpinus betulus



© Bailey Nurseries Inc. photo

Family	Betulaceae	Fall Color	Yellow
Form	Pyramidal	Seed	Small nut
Size	40-50 ft. High 30-40 ft. Wide	Flower	Catkin

Characteristics

A very nice choice for smaller yards; it is also excellent for streetscapes. It's formal appearance lends itself to screening applications. Nice medium green leaf in the summer turns to handsome, long lasting yellow fall color.

Growing Conditions (Hardy in Zones 5-6)

Water: Requires moderate amount of regular water

Light: Full sun

Soil: Tolerates most soil types

Growth Rate

Slow, less than 1 ft per year

Disease and Insect Pests

Mostly free of major pests

Commonly Available Varieties

'Fastigiata'

'Frans Fontaine'



Linden, American

Tilia americana



Family	Tiliaceae	Fall Color	Yellow
Form	Pyramidal/oval	Seed	Nut-like, small
Size	40-60 ft. High 30-40 ft. Wide	Flower	Small, yellow, very fragrant

Characteristics

Very formal in habit this has been a popular street tree for municipalities. With its delightful flower scent in early summer it is a favorite of homeowners as well.

Growing Conditions (Hardy in Zones 3-6)

Water: Moderate

Light: Full sun

Soil: Prefers well drained; tolerates alkalinity

Growth Rate

Moderate, 1 ft or more per year

Disease and Insect Pests

Aphids, verticillium wilt, leaf miners, scale, mites

Commonly Available Varieties

'Boulevard'

'Redmond'



Linden, Littleleaf

Tilia cordata



Family	Tiliaceae	Fall Color	Yellow
Form	Pyramidal/oval	Seed	Nut-like, small
Size	40-60 ft. High 30-40 ft. Wide	Flower	Small, yellow, very fragrant

Characteristics

With its heart-shaped leaves and formal habit this Linden is another favorite for streetscapes and also a good choice for homeowners.

Growing Conditions (Hardy in Zones 4-6)

Water: Drought tolerant in maturity

Light: Full sun

Soil: Prefers well drained; tolerates alkalinity

Growth Rate

Medium, 1 ft or more per year

Disease and Insect Pests

Aphids, verticillium wilt, leaf miners, scale, mites

Commonly Available Varieties

Corinthian®

Greenspire®



Linden, Silver

Tilia tomentosa



J. Frank Schmidt & Son Co. photo

Family	Tiliaceae	Fall Color	Yellow
Form	Pyramidal/oval	Seed	Nut-like, small
Size	40-60 ft. High 30-40 ft. Wide	Flower	Small, yellow, very fragrant

Characteristics

In addition to the wonderful scent in spring, this Linden adds a silver underside on its leaves which makes it stand out in a breeze. Same formal habit as other Linden, however this one is not in heavy production so can be difficult to get in quantity.

Growing Conditions (Hardy in Zones 5-6)

Water: Moderate

Light: Full sun

Soil: Prefers well drained; tolerates alkalinity

Growth Rate

Medium, 1 ft or more per year

Disease and Insect Pests

Aphids, verticillium wilt, leaf miners, scale, mites

Commonly Available Varieties

'Sterling'



Maple, Freeman

Acer x freemanii



J. Frank Schmidt & Son Co. photo

Family	Aceraceae	Fall Color	Red to orange
Form	Oval	Seed	Winged
Size	45-55 ft. High 35-45 ft. Wide	Flower	Red, inconspicuous

Characteristics

Prized by homeowners for its brilliant red fall color and charming silver bark, Freeman Maple is a very popular tree in the Treasure Valley. However, its fast growth rate can lead to structural problems and it does not like alkaline soil in conjunction with heavy clay. Some municipalities do not use it, check with your city or county for any restrictions. The City of Boise and City of Nampa do not allow use of this tree in the public rights-of-way.

Growing Conditions (Hardy in Zones 4-6)

Water: Drought tolerant in maturity

Light: Full sun

Soil: Well drained; tolerates some alkalinity

Growth Rate

Fast, up to 2 ft per year

Disease and Insect Pests

Borers, trunk scald, verticillium wilt, chlorosis in alkaline soil

Commonly Available Varieties

Autumn Blaze®

Celebration®

Sienna Glen®



Maple, Miyabe's

Acer miyabei

CLASS II



Miyabe's Maple © Morton Arboretum, CC BY-NC-SA 2.0

Family	Aceraceae/ Sapindaceae	Fall Color	Yellow
Form	Oval, Upright	Seed	Winged Samara
Size	50 - 55 ft. High 35 - 40 ft. Wide	Flower	Insignificant

Characteristics

A lesser known Maple, Miyabe's Maple is a good medium size shade tree. With its large classic classically maple shaped leaf it works well in a standard suburban yard in the Treasure Valley. It tolerates our soil and heat well and does not suffer the chlorosis problems some maples have here.

Growing Conditions (Hardy in Zones 4-8)

Water: Moderate

Light: Full sun

Soil: Adaptable but prefers well drained and moist.

Growth Rate

Moderate

Disease and Insect Pests

No specific disease or insect problems found yet

Commonly Available Varieties

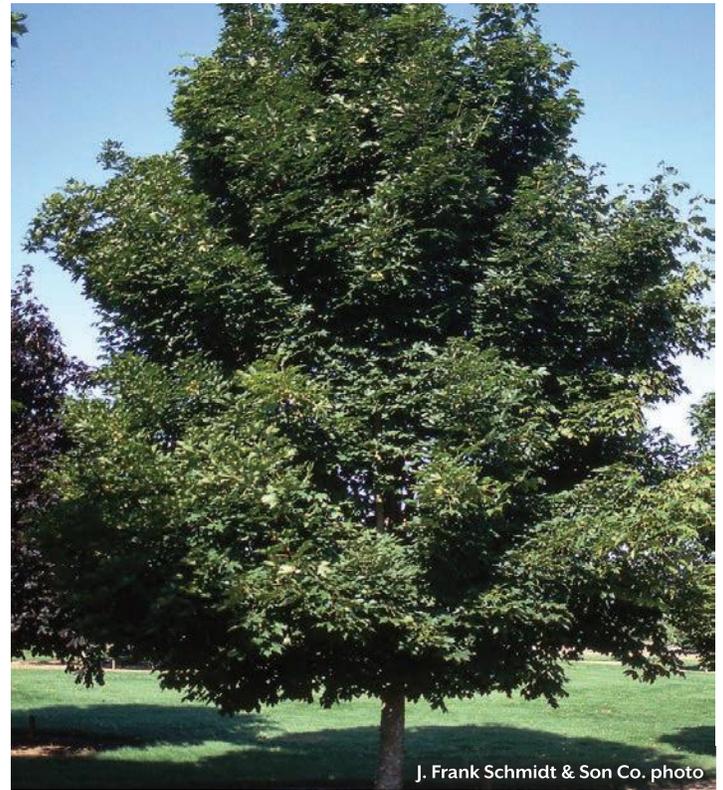
Rugged Ridge®

State Street®



Maple, Norway

Acer platanoides



J. Frank Schmidt & Son Co. photo

Family	Aceraceae	Fall Color	Yellow
Form	Rounded	Seed	Winged
Size	40-50 ft. High 30-40 ft. Wide	Flower	Yellow, insignificant

Characteristics

A useful mid sized tree, Norway Maple provides dense shade with it's large green leaf. It is susceptible to leaf scorch in late summer and the trunks can scald on the south side when placed in a hot location. Some municipalities do not use it, check with your city or county for any restrictions. The City of Boise does not use this tree on the public rights-of-way.

Growing Conditions (Hardy in Zones 4-6)

Water: Moderate

Light: Full sun

Soil: Tolerates most soil

Growth Rate

Medium, 1 ft or more per year

Disease and Insect Pests

Verticillium wilt, borers, leaf scorch, sun scald and frost cracks on trunks

Commonly Available Varieties

'Columnar'

'Crimson King' (red leaf)

Emerald Queen™



Maple, Red

Acer rubrum



Family	Aceraceae	Fall Color	Orange to red
Form	Rounded	Seed	Winged
Size	35-40 ft. High 35-40 ft. Wide	Flower	Red, inconspicuous

Characteristics

Bright green through the summer turning orange and/or red in the fall. Since it is not as large as other maples it works well in smaller home lots. It will show chlorosis in alkaline conditions. Some municipalities do not use it, check with your city or county for any restrictions. Not recommended for Canyon County or southern Ada County. The City of Boise does not use this tree on the public rights-of-way.

Growing Conditions (Hardy in Zones 4-6)

Water: Moderate

Light: Full sun

Soil: Well drained; does not tolerate alkaline soils

Growth Rate

Medium, 1 ft or more per year

Disease and Insect Pests

Verticillium wilt, borers, leaf hoppers, chlorosis in alkaline soils

Commonly Available Varieties

October Glory®

Red Sunset®

Redpointe®



Maple, Sugar

Acer saccharum



Family	Aceraceae	Fall Color	Yellow/orange
Form	Rounded	Seed	Winged
Size	50-70 ft. High 30-60 ft. Wide	Flower	Inconspicuous

Characteristics

Beautiful fall color makes this a prized shade tree. However, it seems to need a deep, slightly acidic soil. It is not recommended for the shallower alkaline soils of south and west Ada County and Canyon County. Probably not a good choice in new construction areas either.

Growing Conditions (Hardy in Zones 3-6)

Water: Moderate

Light: Full sun

Soil: Deep; slightly acidic soil

Growth Rate

Slow, possibly 1 ft a year

Disease and Insect Pests

Verticillium wilt, leaf scorch, borers

Commonly Available Varieties

Green Mountain®

Legacy®



Maple, Truncatum

Acer truncatum



J. Frank Schmidt & Son Co. photo

Family	Aceraceae	Fall Color	Yellow-orange to red
Form	Oval	Seed	Winged
Size	30-35 ft. High 25 ft. Wide	Flower	Red, insignificant

Characteristics

Upright oval trees with outstanding fall color. Very adaptable to acidic, alkaline, and dry soils. Drought and heat tolerant. Nice branching and uniform canopy.

Growing Conditions (Hardy in Zones 4-8)

Water: Moderate

Light: Full sun

Soil: Tolerates most soil

Growth Rate

Medium, 1 ft or more a year

Disease and Insect Pests

Leaf Scorch, verticillium wilt

Commonly Available Varieties

Crimson Sunset® (red leaf)

Norwegian Sunset®

Pacific Sunset®



Pear, Flowering

Pyrus calleryana



J. Frank Schmidt & Son Co. photo

Family	Rosaceae	Fall Color	Red/orange/purple
Form	Upright pyramidal	Seed	Small 1/2" pome
Size	35-45 ft. High 20-30 ft. Wide	Flower	White

Characteristics

A mid-sized flowering tree that is perfect in a yard or mass planting along city streets. With its spring flower and fall color it is one of the more popular trees in the Treasure Valley. Can suffer chlorosis when too wet in heavy soils.

Growing Conditions (Hardy in Zones 5-6)

Water: Low to Moderate

Light: Full sun

Soil: Well drained

Growth Rate

Fast, 1-2 ft per year

Disease and Insect Pests

Fairly disease free, can suffer fire blight

Commonly Available Varieties

Aristocrat®

'Capital'

Chanticleer®

'Redspire'



Sweetgum, American

Liquidambar styraciflua



Family	Hamamelidaceae	Fall Color	Yellow/red/purple
Form	Pyramidal	Seed	Beaked capsule
Size	50-60 ft. High 40-50 ft. Wide	Flower	Inconspicuous

Characteristics

With its formal habit and brilliant fall color, Sweetgum is becoming more popular in the Treasure Valley. With its sensitivity to alkaline soil, this may not be the best choice for the more southern and western parts of the valley.

Growing Conditions (Hardy in Zones 5-6)

Water: Moderate to High

Light: Full sun

Soil: Well drained; prefers more acidic

Growth Rate

Fast, up to 2 ft per year

Disease and Insect Pests

Leaf spots, caterpillars, scale; chlorosis in overly alkaline soil

Commonly Available Varieties

'Moraine'

'Slender Silhouette'

'Worplesdon'



Tulip Tree

Liriodendron tulipifera



Family	Magnoliaceae	Fall Color	Yellow
Form	Oval	Seed	Cone like
Size	55-65 ft. High 25-35 ft. Wide	Flower	Tulip-like/ yellow-green

Characteristics

A stunningly elegant specimen, the Tulip Tree can grow to be quite an imposing specimen. Significantly taller than wide this tree lends itself to tighter locations becoming so common in our smaller yards today.

Growing Conditions (Hardy in Zones 5-6)

Water: Moderate to High

Light: Full sun

Soil: Well drained; prefers slightly acidic

Growth Rate

Fast, up to 2 ft a year

Disease and Insect Pests

Aphids, leaf spot; not tolerant of dry soil

Commonly Available Varieties

'Arnold'

Emerald City®



Yellowwood, American

Cladrastis kentukea



J. Frank Schmidt & Son Co. photo

Family	Fabaceae	Fall Color	Yellow
Form	Rounded	Seed	Bean-like pod
Size	30-50 ft. High 30-50 ft. Wide	Flower	White clusters, fragrant

Characteristics

A nice medium sized shade tree with showy spring flower. It prefers a well drained soil but tolerates alkalinity. Not in heavy production but should be considered as something new for the typical Treasure Valley yard.

Growing Conditions (Hardy in Zones 5-6)

Water: Moderate to High

Light: Full sun

Soil: Well drained; tolerates alkaline soil

Growth Rate

Medium, 1 ft per year

Disease and Insect Pests

Mostly free of major pests

Commonly Available Varieties

'Perkin's Pink'

Zelkova, Japanese

Zelkova serrata



J. Frank Schmidt & Son Co. photo

Family	Ulmaceae	Fall Color	Yellow & orange
Form	Vase	Seed	Nut-like drupe
Size	40-60 ft. High 25-40 ft. Wide	Flower	Inconspicuous

Characteristics

A nice medium sized shade tree closely related to the elm but is resistant to Dutch elm disease (DED).

Growing Conditions (Hardy in Zones 5-8)

Water: Moderate

Light: Full sun

Soil: Well drained, tolerates variety of sites

Growth Rate

Fast, 1-2 ft per year

Disease and Insect Pests

Mostly free of major pests

Commonly Available Varieties



CLASS III TREES

Many are long lived and attain large height and trunk diameter. Make sure you have ample room to accommodate it at maturity. May reach 70'+ in height and width. Spacing, 40-60' between trees.



Heritage® Oak, English Oak hybrid

Deguz Designs photo

Catalpa, Northern

Catalpa speciosa



Family	Bignoniaceae	Fall Color	Yellow/brown
Form	Narrow/irregular	Seed	Bean-like pod
Size	40-50 ft. High 25-35 ft. Wide	Flower	2" white bell shaped in June

Characteristics

Huge medium green, heart shaped leaves and showy spring flowers. Interesting seed capsules stay on the tree throughout much of the winter. Can be considered messy as flower parts, leaves and seeds drop.

Growing Conditions (Hardy in Zones 4-6)

Water: Drought/ heat tolerant in maturity

Light: Full sun

Soil: Adaptable, tolerant of heavy alkaline soils

Growth Rate

Fast, some tests have shown 2' or more per year in good sites. Most fast growing trees are short-lived to (50 years).

Disease and Insect Pests

Some scale and mealybug, verticillium wilt

Commonly Available Varieties

Heartland® 'Hiawatha 2' - upright form



Coffeetree, Kentucky

Gymnocladus dioicus



Family	Fabaceae	Fall Color	Pale yellow
Form	Narrowly oval	Seed	4" bean-like pod
Size	50-75 ft. High 40-50 ft. Wide	Flower	Yellow, spike like clusters

Characteristics

Huge, dark green compound leaves in late spring on thick, stout branches. Flowers are quite fragrant and interesting. Early settlers used the seeds in the pods as a coffee substitute. Imposing and picturesque form in winter. Resistant to drought, heat and wind damage.

Growing Conditions (Hardy in Zones 4-6)

Water: Drought/heat tolerant in maturity

Light: Full sun

Soil: Adaptable, tolerant of heavy alkaline soils

Growth Rate

Slow/medium, about 1' yr. Moderate life span 100-125 years

Disease and Insect Pests

Verticillium wilt

Commonly Available Varieties

Espresso™ - seedless, more vase shaped



Horsechestnut, Common

Aesculus hippocastanum



Deguz Designs photo

Family	Hippocastanaceae	Fall Color	Yellow/brown
Form	Oval	Seed	Walnut-like
Size	40-60 ft. High 40-50 ft. Wide	Flower	10" long ivory tipped red cluster

Characteristics

Quite stunning when flowering in the spring with a strong presence in the landscape year round. Leaves can get scorched in late summer.

Growing Conditions (Hardy in Zones 4-6)

Water: Moderate

Light: Full sun

Soil: Well-drained, tolerates alkalinity

Growth Rate

Moderate, 1 ft per year

Disease and Insect Pests

Leaf scorch, leaf blotch, anthracnose, canker, scale and borers

Commonly Available Varieties

'Baumannii'



Oak, Bur

Quercus macrocarpa



J. Frank Schmidt & Son Co. photo

Family	Fagaceae	Fall Color	Yellow/brown
Form	Round	Seed	1 1/2" Bur covered caps
Size	70-80 ft. High 70-80 ft. Wide	Flower	Inconspicuous

Characteristics

The stately bur oak has a broad, rounded open crown with a stout trunk. The upper half of the leaf has 5 to 7 very shallow lobes and a broad round tip.

Growing Conditions (Hardy in Zones 5-6)

Water: Moderate

Light: Full sun

Soil: Alkaline soil, Dry soil, Moist, well-drained soil

Growth Rate

Moderate, can live over 300 years.

Disease and Insect Pests

Free of major pests, Oak wilt and oak blight can be serious concerns

Commonly Available Varieties

Urban Pinnacle® - form is narrow and pyramidal

Heritage Macdaniel's® - hybrid between Bur and English Oak



Oak, Hybrids

Quercus robur x alba

CLASS III



J. Frank Schmidt & Son Co. photo

Family	Fagaceae	Fall Color	Rusty red
Form	Columnar	Seed	Inconspicuous
Size	35'-45 ft. High 12-15 ft. Width	Flower	Inconspicuous

Characteristics

An excellent choice for narrow spaces. A strong tree that grows moderately fast. Dramatic fall color.

Growing Conditions (Hardy in Zones 3-6)

Water: Moderate

Light: Full sun

Soil: Tolerant of most soils

Growth Rate

Moderately fast

Disease and Insect Pests

Not prone to infestation

Commonly Available Varieties

Crimson Spire™, Skinny Genes®, Street Spire® - all narrow
Regal Prince®

Oak, English

Quercus robur



J. Frank Schmidt & Son Co. photo

Family	Fagaceae	Fall Color	Yellow/brown
Form	Rounded with age	Seed	1" acorn
Size	30-50 ft. High 30-40 ft. Width	Flower	Inconspicuous

Characteristics

One of the best trees to use in high pH soils. Darker green w/thick, leathery leaves.

Growing Conditions (Hardy in Zones 5-6)

Water: Moderate

Light: Full sun

Soil: Adaptable, tolerant of clay & high pH soils

Growth Rate

Moderate

Disease and Insect Pests

Resistant to diseases

Commonly Available Varieties

Heritage® - Bur & English Oak Hybrid



Oak, Red

Quercus rubra



J. Frank Schmidt & Son Co. photo

Family	Fagaceae	Fall Color	Bright red
Form	Round	Seed	Rounded acorn
Size	45-55 ft. High 40-50 ft. Wide	Flower	See Bur Oak

Characteristics

Often brilliant red autumn coloring with deep lobed dark green leaves ending in sharp points. New leaves pinkish in spring. Large tree a favorite of birds/mammals.

Growing Conditions (Hardy in Zones 4-6)

Water: Drought tolerant in maturity

Light: Full sun

Soil: Prefers well-drained, acidic soil, not alkaline

Growth Rate

Medium/fast, can grow 2 ft per year in good sites; medium to long life span

Disease and Insect Pests

Mostly free of major pests. See Bur Oak.

Commonly Available Varieties

Species



Oak, Shumard

Quercus shumardii



Family	Fagaceae	Fall Color	Red orange
Form	Rounded	Seed	1" egg shaped
Size	40-60 ft. High 40-60 ft. Wide	Flower	Inconspicuous

Characteristics

Beautiful leathery green leaves, long and deeply lobed with some bristles on tips. A stately, strong and long lived tree very suitable to yards and urban areas. Birds & small mammals love acorns.

Growing Conditions (Hardy in Zones 5-6)

Water: Drought tolerant in maturity

Light: Full sun

Soil: Adaptable & tolerant of area conditions

Growth Rate

Moderate. Long lived to 400 years

Disease and Insect Pests

Mostly free of major pests

Commonly Available Varieties

Species



Oak, Swamp White

Quercus bicolor

CLASS III



J. Frank Schmidt & Son Co. photo

Family	Fagaceae	Fall Color	Yellow
Form	Round	Seed	Shiny 1" acorn
Size	30-50 ft. High 25-30 ft. Wide	Flower	See Bur Oak

Characteristics

Similar to Bur Oak. Leaves are more leathery and somewhat smaller. Acorn is smaller with no brush fringe. Highly prized by birds/small mammals. Hardy/ tough oak for Idaho.

Growing Conditions (Hardy in Zones 4-6)

Water: Drought/heat tolerant in maturity

Light: Full sun/partial shade

Soil: Adaptable, may have chlorosis in clay soils

Growth Rate

Medium/fast 2 ft per season in good sites; life span 125-150 years.

Disease and Insect Pests

Mostly free of major pests

Commonly Available Varieties

American Dream[®] - anthracnose & mildew resistant

Bonnie & Mike' Beacon[®] - narrow upright, disease resist

Planetree, London

Platanus x acerifolia



J. Frank Schmidt & Son Co. photo

Family	Platanaceae	Fall Color	Yellow/brown
Form	Round	Seed	1" global cluster
Size	50-70 ft. High 35-50 ft. Wide	Flower	Inconspicuous

Characteristics

A towering tree at full growth. Medium green maple like leaves can be 10" across. Leaves remain on tree into December. Bark exfoliates in patches of cream, olive and brown colors beneath.

Growing Conditions (Hardy in Zones 5-6)

Water: Drought tolerant in maturity

Light: Full sun/ partial shade

Soil: Adaptable, tolerant of clay soil & pollution

Growth Rate

Moderate/fast, nearly 2 ft per year; can be long lived to 300 years.

Disease and Insect Pests

Cankerstain, twig anthracnose, borers; may frost crack in winter

Commonly Available Varieties

'Bloodgood' - anthracnose resistant

Exclamation![®] - more compact/less fruit than species



CONIFERS

Provide year round greenery, screening and serve as excellent wildlife shelters. Generally, they should not be pruned and will need large growing areas away from buildings, sidewalks and driveways. Spacing varies with species.



Pine, Limber

Deguz Designs photo

Arborvitae, Eastern

Thuja occidentalis



Deguz Designs photo

Family	Cupressaceae	Fall Color	Green/brown
Form	Pyramidal/broad	Seed	Tiny cones
Size	30-50 ft. High 10-20 ft. Wide	Flower	Inconspicuous

Characteristics

An attractive U.S. native when planted in the right place in the landscape. Medium green scale like leaves. Branches spread out into flat, horizontal sprays of foliage.

Growing Conditions (Hardy in Zones 3-6)

Water: Moderate, drought tolerant in maturity

Light: Full sun

Soil: Tolerant of alkaline soils

Growth Rate

Moderate; long lived

Disease and Insect Pests

Cedar Borer, Spider mites, bagworm, tip blight

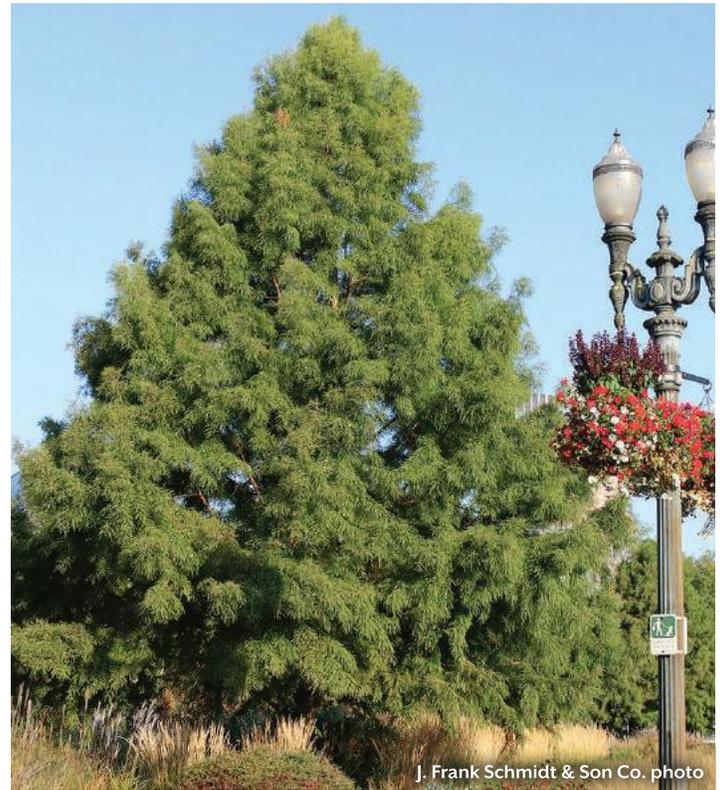
Commonly Available Varieties

Many available, but most qualify as shrubs



Bald Cypress, Common

Taxodium distichum



J. Frank Schmidt & Son Co. photo

Family	Taxodiaceae	Fall Color	Rusty orange
Form	Pyramidal	Seed	1" cone
Size	50-70 ft. High 20-40 ft. Wide	Flower	Inconspicuous

Characteristics

A dignified deciduous conifer native to S.E. United States. Light green needles lay flat along the twigs giving a feathery appearance. Root system supports knobby "knees" protruding up from the ground.

Growing Conditions (Hardy in Zones 4-9)

Water: Moderate, does well in standing water

Light: Full sun

Soil: Tolerant of poorly drained, compacted soils

Growth Rate

Moderate; long lived, 500-700 years

Disease and Insect Pests

Free of major pests

Commonly Available Varieties

Green Whisper®, **Lindsey's Skyward**™ - narrow form
Shawnee Brave™, **'Cascade Falls'** - weeping form
Greenfeather® Pond Cypress form



Cedar, Alaska

Chamaecyparis nootkatensis



J. Frank Schmidt & Son Co. photo

Family	Cupressaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	1/2" brown cone
Size	40-50 ft. High 25-40 ft. Wide	Flower	Inconspicuous

Characteristics

Blue green scale like leaves arranged in flat sprays from drooping branchlets. Needs constant moisture.

Growing Conditions (Hardy in Zones 4-7)

Water: Moderate to High

Light: Full sun

Soil: Needs drainage; likes acidic soils

Growth Rate

Moderate

Disease and Insect Pests

Cedar borer

Commonly Available Varieties

'Pendula' - 25-30 ft. High x 10-12 ft. Wide

'Green Arrow' - 20 ft. High x 2 ft. Wide



Cedar, Blue Atlas

Cedrus atlantica 'Glauca'



J. Frank Schmidt & Son Co. photo

Family	Pinaceae	Fall Color	Green, blue & silver
Form	Pyramidal	Seed	Cones 3"
Size	40-60 ft. High 30-40 ft. Wide	Flower	Inconspicuous

Characteristics

Evergreen conifer native to the Atlas Mountains in North Africa. One of the true cedars. Needles to 1" long in tufted clusters.

Growing Conditions (Hardy in Zones 5-6)

Water: Drought tolerant in maturity

Light: Full sun

Soil: Adaptable to soil conditions

Growth Rate

Moderate

Disease and Insect Pests

No serious pests or disease. Tip blight may occur.

Commonly Available Varieties

Glauca Group

'Glauca Fastigiata' - narrow variety

'Horstmann' - dwarf variety



Cedar, Deodar

Cedrus deodara



Idaho Nursery & Landscape Association photo

Family	Pinaceae	Fall Color	Gray/green evergreen
Form	Pyramidal	Seed	Cones 4"
Size	40-50 ft. High 30-40 ft. Wide	Flower	Inconspicuous

Characteristics

Perhaps the most pendulous of the cedars with branching that gracefully droops at the tips. Intolerant of poorly drained soils. Native to the Himalayas.

Growing Conditions (Hardy in Zones 6-11)

Water: Drought tolerant in maturity

Light: Full sun

Soil: Adaptable; needs soil to drain

Growth Rate

Moderate

Disease and Insect Pests

No serious pests or disease. Tip blight and root rot may occur

Commonly Available Varieties

Species



Douglas Fir

Pseudotsuga menziesii



© Bailey Nurseries Inc. photo

Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	3" cones with papery tongues
Size	50-60 ft. High 20-30 ft. Wide	Flower	Small, red dangling cluster

Characteristics

This #1 timber species is also suited to home/community landscape. An Idaho native with dark green needles.

Growing Conditions (Hardy in Zones 4-6)

Water: Somewhat drought tolerant in maturity

Light: Full sun, partial shade

Soil: Prefers well-drained, acidic soils; not tolerant of alkaline soils

Growth Rate

Moderate; long lived to 200 years

Disease and Insect Pests

Some cankers, aphids, Douglas fir bark beetle, gypsy moth, scale

Commonly Available Varieties

Species



Fir, White

Abies concolor



© Bailey Nurseries Inc. photo

Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	5" cone, upright
Size	35-45 ft. High 15-25 ft. Wide	Flower	Inconspicuous

Characteristics

Native to some eastern areas of Idaho, it is gaining acceptance in home landscapes. Flat needles that are 2" and bluish or silvery green. Similar to the blue Colorado Spruce with a softer effect. Beautiful and hardy for Idaho.

Growing Conditions (Hardy in Zones 4-6)

Water: Drought tolerant in maturity

Light: Full sun, partial shade

Soil: Well-drained soil; does poorly in clay

Growth Rate

Slow/moderate; long lived, 250-300 years

Disease and Insect Pests

Mostly free of major pests

Commonly Available Varieties

'Violacea'



Incense Cedar, California

Calocedrus decurrens



Deguz Designs photo

Family	Cupressaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	1" cones
Size	40-50 ft. High 15-25 ft. Wide	Flower	Inconspicuous

Characteristics

A beautiful tree with flat, dark green sprays of closely overlapped scaly leaves. Fibrous bark a rich cinnamon color. Spicy fragrance of leaves and bark gives this tree its common name. Pencils are made of this wood.

Growing Conditions (Hardy in Zones 5-6)

Water: Moderate

Light: Full sun, partial shade

Soil: Adaptable, prefers well drained soil

Growth Rate

Slow/moderate; long lived to 1,000 years in natural forests

Disease and Insect Pests

Some heart rot fungi, leafy mistletoe

Commonly Available Varieties

Species



Juniper, Upright

Juniperus scopulorum



Family	Cupressaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	Small cones
Size	15-20 ft. High 6-12 ft. Wide	Flower	Inconspicuous

Characteristics

A drought and heat tolerant species. A short trunk supports several main limbs. Bluish green scale like leaves are held close to the twigs. A reliable screen or hedge for drier areas of Idaho.

Growing Conditions (Hardy in Zones 4-6)

Water: Drought tolerant in maturity

Light: Full sun

Soil: Adaptable to most soil conditions

Growth Rate

Slow

Disease and Insect Pests

Can suffer greatly from Phomopsis tip blight, Cedar-apple rust, scale and mites

Commonly Available Varieties

'Moonglow', 'Skyrocket', 'Wichita Blue'

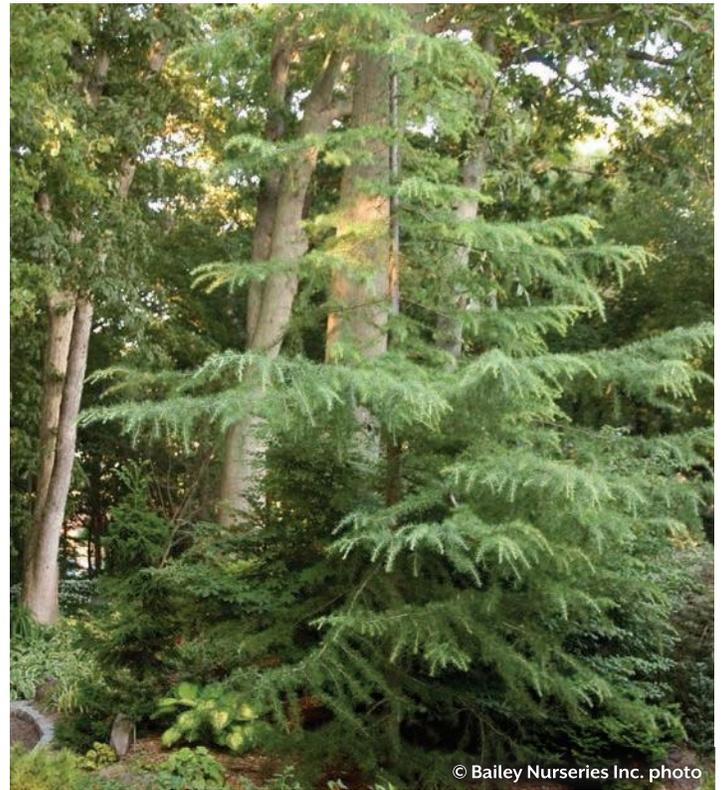
'Spartan' *chinensis*

'Taylor' *virginiana*



Larch, European

Larix decidua



Family	Pinaceae	Fall Color	Bright yellow
Form	Pyramidal	Seed	1" cones
Size	50-70 ft. High 20-25 ft. Wide	Flower	Red or yellow, egg shaped

Characteristics

The larches (or tamaracks) are one of the few needle bearing species that lose their needles in winter. The spectacular display of orange against an evergreen forest is magnificent. Soft tufts of needles perched in a whorl along the stem are unique characteristics.

Growing Conditions (Hardy in Zones 3-6)

Water: Moderate to High

Light: Full sun

Soil: Well drained soil, good in boggy areas

Growth Rate

Moderate/fast; life span 100-150 years

Disease and Insect Pests

Larch case bearer can infest new foliage, larch sawfly, aphids, gypsy moth, cankers can be serious

Commonly Available Varieties

Upright varieties

'Pendula' - weeping branches



Pine, Austrian

Pinus nigra



J. Frank Schmidt & Son Co. photo

Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal, broad	Seed	3" cones
Size	50-60 ft. High 25-35 ft. Wide	Flower	Inconspicuous

Characteristics

Long and stiff dark green needles. A hardy and tolerant pine adapting to many soil conditions. Good screen or windbreak.

Growing Conditions (Hardy in Zones 4-6)

Water: Drought tolerant in maturity

Light: Full sun

Soil: Adaptable; tolerant of clay, alkaline soils

Growth Rate

Moderate

Disease and Insect Pests

Sphaeropsis shoot blight can kill new plant growth

Commonly Available Varieties

'Arnold's Sentinel' - columnar variety

'Oregon Green' - 20 ft. High x 20 ft. Wide



Pine, Bosnian

Pinus heldreichii



Willow Creek Nursery photo

Family	Pinaceae	Fall Color	Evergreen
Form	Conical when young	Seed	2-3" bluish purple cones
Size	50-70 ft. High 20-40 ft. Wide	Flower	Inconspicuous

Characteristics

Native to the Europe's Balkan Peninsula. Glossy green needles 3.5" long in pairs. *Pinus leucodermis* is now synonymous with this species.

Growing Conditions (Hardy in Zones 4-8)

Water: Moderate

Light: Full sun

Soil: Adaptable; tolerant of clay, sand

Growth Rate

Moderate

Disease and Insect Pests

Tip blight, rusts and rots; moths, bagworms, beetles may appear; pine needle scale

Commonly Available Varieties

'Compact Gem' - to 10 ft.



Pine, Eastern White

Pinus strobus



Missouri Botanical Garden photo

Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal, broad	Seed	Showy
Size	50-80 ft. High 20-40 ft. Wide	Flower	Inconspicuous

Characteristics

Native to the N.E. United States and Canada. Bluish green soft needles in bundles of five. Valued for its light-weight, straight wood.

Growing Conditions (Hardy in Zones 3-6)

Water: Moderate

Light: Full sun

Soil: Adaptable; tolerant of wide range of soils

Growth Rate

Rapid

Disease and Insect Pests

Pine blister rust and other blights; bark beetles, canker

Commonly Available Varieties

'Fastigiata' - 30-40 ft.



Pine, Scotch

Pinus sylvestris



Willow Creek Nursery photo

Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	3" cones
Size	40-50 ft. High 25-35 ft. Wide	Flower	Inconspicuous

Characteristics

Attractive gray and orange peeling bark makes for a good addition to the landscape. Blue green needles 2" in bundles of two. Upper bark flakes to a brilliant orange skin.

Growing Conditions (Hardy in Zones 3-6)

Water: Drought tolerant in maturity

Light: Full sun

Soil: Adaptable to many soils; needs good drainage

Growth Rate

Moderate in youth, slower with age

Disease and Insect Pests

Cankers, shoot blight, scale, sawflies, borers, needle miners, bark beetles, caterpillars

Commonly Available Varieties

Species



Pine, Southwestern White

Pinus strobiformis



Southwestern White Pine © Mark Bolin, CC BY-NC-SA 2.0

Family	Pinaceae	Fall Color	Evergreen
Form	Narrowly pyramidal	Seed	5-9" woody cone
Size	50-60 ft. High 20-25 ft. Wide	Flower	Inconspicuous

Characteristics

Also known as Mexican White Pine, its grayish green needles remain throughout winter. Refined pyramidal form, straight leader. Rather shade intolerant.

Growing Conditions (Hardy in Zones 4-7)

Water: Moderate; no standing water

Light: Full sun

Soil: Adaptable

Growth Rate

Slow to 100 years

Disease and Insect Pests

White pine blister rust

Commonly Available Varieties

Species



Pine, Limber

Pinus flexilis



Willow Creek Nursery photo

Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	5" Oblong cone
Size	20-30 ft. High 10-20 ft. Wide	Flower	Inconspicuous

Characteristics

A five needled Idaho native pine that typically resides above 4,000'. A hardy tree withstanding tough winters. The tree and twigs can bend. Bluish green needles make for an attractive tree.

Growing Conditions (Hardy in Zones 3-6)

Water: Moderate

Light: Full sun tolerant of part shade

Soil: Adaptable

Growth Rate

Slow

Disease and Insect Pests

White blister rust; certain rots and blights

Commonly Available Varieties

'Vanderwolf's Pyramid'



Redwood, Dawn

Metasequoia glyptostroboides



J. Frank Schmidt & Son Co. photo

Family	Taxodiaceae	Fall Color	Orange brown
Form	Pyramidal	Seed	1" cones
Size	70-100 ft. High 25-35 ft. Wide	Flower	Inconspicuous

Characteristics

A deciduous needle bearing conifer with a fascinating history. Discovered in 1941 from fossils in Japan and later that year live stands were found in China. Leaf similar to Baldcypress.

Growing Conditions (Hardy in Zones 5-6)

Water: Moderate

Light: Full sun

Soil: Well drained; slightly acidic

Growth Rate

Fast; life span not known yet

Disease and Insect Pests

Some cankers, nothing too serious

Commonly Available Varieties

'Gold Rush'

Jade Prince® 'JFS-PN3Legacy'



Spruce, Colorado

Picea pungens



© Tom Incrocci / Missouri Botanical Garden

Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	Oblong 4" cones
Size	45-55 ft. High 25-35 ft. Wide	Flower	Inconspicuous

Characteristics

A successful home landscape tree. Very formal, rigid appearance. Needles range from dark green to silvery blue depending on variety. Steady growth and tolerant of adverse conditions.

Growing Conditions (Hardy in Zones 3-6)

Water: Moderate

Light: Full sun

Soil: Adaptable to most soil conditions

Growth Rate

Moderate

Disease and Insect Pests

Spruce bud scale, spider mites, aphids, Cytospora canker can kill lower branches

Commonly Available Varieties

'Fastigiata' - columnar form

'Hoopsii' - dense, more blue color than most forms

'Moerheimii' - compact and retains blue color in winter



Spruce, Norway

Picea abies



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	5" oblong cones
Size	40-60 ft. High 25-30 ft. Wide	Flower	Pendulous, rosy red when young

Characteristics

Attractive pendulous branch growth very different from most spruces, lends a graceful air to this species. Very hardy and wind resistant.

Growing Conditions (Hardy in Zones 4-6)

Water: Moderate

Light: Full sun

Soil: Adaptable somewhat but prefers drained acidic soils

Growth Rate

Fast

Disease and Insect Pests

Spruce bud scale is common; aphids, borers, spider mites, Cytospora canker and needle casts

Commonly Available Varieties

'Nidiformis' - dwarf form

'Cupressina' - columnar form



Spruce, Serbian

Picea omorika



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	2" cone
Size	50-60 ft. High 20-25 ft. Wide	Flower	Inconspicuous

Characteristics

Great tree for urban landscapes. Gracefully drooping branches give a softness to the entire tree. Needles are dark green with silvery undersides. Grows more narrowly and suited to smaller areas.

Growing Conditions (Hardy in Zones 4-6)

Water: Drought tolerant in maturity

Light: Full sun/partial shade

Soil: Adaptable and tolerates alkaline soils

Growth Rate

Slow/moderate

Disease and Insect Pests

Cytospora canker, aphids, spruce bud scale, borers, spider mites

Commonly Available Varieties

Species



Spruce, White

Picea glauca



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	2" cone
Size	40-50 ft. High 15-25 ft. Wide	Flower	Inconspicuous

Characteristics

Pale green short needles are crowded on upper sides of twigs. Does very well in most Idaho landscapes. Native to Canada, Alaska and upper mid-western U.S.

Growing Conditions (Hardy in Zones 3-6)

Water: Drought and heat tolerant at maturity

Light: Full sun/partial shade

Soil: Adaptable and tolerates alkaline soils

Growth Rate

Moderate

Disease and Insect Pests

Root rot, cankers, needle miners, sawfly, bagworms

Commonly Available Varieties

'Densata' Black Hills Spruce - denser than species

'Montrose Spire' - columnar form



Sequoia, Giant

Sequoiadendron giganteum



Family	cupressaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	2" cone
Size	60-275 ft. High 25-60 ft. Wide	Flower	Inconspicuous

Characteristics

A gigantic beautiful evergreen, Sequoia should be used in large spaces where it can reach its full potential. The Weeping variety is suitable for smaller spaces and adds a delightful touch of whimsy to a garden.

Growing Conditions (Hardy in Zones 6-8)

Water: Moderate

Light: Full sun

Soil: Prefers moist well-drained soil. Adaptable to most soil conditions. Avoid heavy clays.

Growth Rate

Moderate

Disease and Insect Pests

No serious pests or disease. Honey fungus may occur.

Commonly Available Varieties

'Pendulum'



NOT TO BE PLANTED IN RIGHTS-OF-WAYS

The following species are not to be planted on any public rights-of-way (ROW). Check with your city or county or their specific rights-of-way restrictions before you plant. These trees exhibit characteristics including but not limited to: extreme insect or disease susceptibility, soft or brittle wood and/or limited cold and heat hardiness. Such problems often lead to excessive maintenance costs, hazard to other trees and potential public safety hazards. Class II and Class III are not allowed in ACHD ROW unless planter width is 10' in width or wider. Conifers and shrub plantings over 3' are not allowed in ACHD ROW. Check with your local agencies for ROW planting requirements and regulations.

Birch, Paper	<i>Betula papyrifera</i>	Heat intolerant; prone to Bronze Birch Borer attack.
Birch, Weeping	<i>Betula pendula</i>	Heat intolerant; prone to Bronze Birch Borer attack.
Cottonwood	<i>Populus</i> species Poplars/Aspens	Soft wood subject to decay. Shallow roots. Aphids.
Locust, Black	<i>Robinia pseudoacacia</i>	Extremely susceptible to locust borer. Brittle wood.
Maple, Boxelder	<i>Acer negundo</i>	Soft wood subject to decay. Boxelder bug is a nuisance. Currently allowed by Nampa.
Maple, Freeman	<i>Acer freemanii</i>	High root systems, avoid planting near driveways/sidewalks. Soft wood subject to decay. Heat intolerant.
Maple, Red	<i>Acer rubrum</i>	High root systems, avoid planting near driveways/sidewalks. Soft wood subject to decay. Heat intolerant.
Maple, Silver	<i>Acer saccharinum</i>	High root systems, Prone to internal decay. Poor branch structure.
Tree of Heaven	<i>Ailanthus altissima</i>	Poor branch attachments and prone to internal decay.
Walnut, Black	<i>Juglans nigra</i>	Heavy aphid infestations. Messy seeds. Toxic to other plants.
Willows	<i>Salix</i> species	Soft wood subject to decay. Shallow roots. Aphids.

ADDITIONAL RECOMMENDED TREE SELECTIONS

The following tables list additional trees which are attractive and hardy in suitable planting sites. More information concerning these species may be found at a local nursery.

Class I Broadleaf Trees – Range generally in height from 10 to 40 feet.

TREE	ZONE	CHARACTERISTICS
Alder, Red	4-6	Suitable for riparian and home landscapes. Tolerates wet conditions. Yellow fall color.
Cherry, Higan <i>Prunus subhirtella</i>	5-6	A pink flowering species in upright & weeping varieties. 'Pendula' most well known.
Cherry, Oriental <i>Prunus serrulata</i> varieties	5-6	Profusion of pink or white flowers in late April. Vase shaped, also columnar & weeping varieties.
Cherry, Yoshino <i>Prunus x yedoensis</i>	5-6	Fragrant, white-pink flowers depending on variety. Growth-Fast to 30'. Graceful/curving branches.
Dogwood, Kousa <i>Cornus kousa</i>	5-6	Beautiful horizontal branching. Perhaps hardier & more drought & disease tolerant than <i>C. florida</i> . White or pink flowers.
Hawthorn, Douglas <i>Crataegus douglasii</i>	4-6	Native western tree w/shiny, black fruit attractive to birds/small mammals. White flowers.
Hawthorn, English <i>Crataegus laevigata</i>	5-6	Showy red or white flowers depending on variety. Fruit is usually sparse.
Hawthorne, Green <i>Crataegus viridis</i>	5-6	Attractive small tree with silvery bark and dark green glossy leaves. 'Winter King'
Hawthorne, Lavalley <i>Crataegus x lavalleyi</i>	5-6	Small oval crowned tree having lustrous dark green leaves turning bronze/red in fall. White flowers.
Hornbeam, American <i>Carpinus caroliniana</i>	3-9	Adaptable tree that is wildlife friendly and tolerant of urban conditions. Leaves have double toothed margins and turn an attractive orange-red color in the fall. Bark is bluish-gray, smooth, and heavily fluted.
Magnolia, Star <i>Magnolia stellata</i>	4-6	Single specimen or accent plant. Multi-stemmed tree with 4" fragrant white flowers in March. Several varieties available.
Maple, Japanese <i>Acer palmatum</i>	5-8	Attractive foliage with burgundy red coloring. A slender airy tree suited for use as a small tree for lawns, patios, entryways. One of the hardiest of Japanese maples, with good sun tolerance. Deciduous. 'Bloodgood', 'Fireglow', 'Emperor I'.
Maple, Rocky Mountain <i>Acer glabrum</i>	3-6	Native to the mountain regions of NW U.S. Red color of winged seed & new twigs, beautiful against green leaves.
Maple, Shantung <i>Acer truncatum</i>	4-8	Small deciduous understory tree. Good fall color with purples, reds, yellows mixed in.
Mountain Ash, European <i>Sorbus aucuparia</i>	4-6	Upright/oval with white flowers & clumps of bright red fruit eaten by birds. A member of the Rose family.
Plum, Purple Leaf <i>Prunus cerasifera</i>	5-6	Dark purple foliage with light pink flowers in spring. Certain varieties are not cold-hardy in Idaho.
Serviceberry, Saskatoon <i>Amelanchier alnifolia</i>	5-6	White flowers, orange/red fall color & dark purple berries. Great landscape tree. Wildlife friendly. Native to the Great Plains. Needs to be used more across the valley.
Maackia, Amur <i>Maackia amurensis</i>	3-7	Small deciduous flowering tree (fragrant). Olive green leaves, 7-13 leaflets. Coppery bark exfoliates on mature trees.

Class II Broadleaf Trees – Range generally in height from 40 to 60 feet.

TREE	ZONE	CHARACTERISTICS
Buckeye, Yellow <i>Aesculus octandra</i>	4-6	Upright to oval crowned tree with leaf & flowers similar to horsechestnut. Large fruit with no prickly spines.
Empress, Tree <i>Paulownia tomentosa</i>	5-8	Showy, fragrant, foxglove-like lavender flowers. Fast growing, native to China. Vanilla aroma.
Ironwood <i>Ostrya virginiana</i>	3-6	Very graceful pyramidal tree with a rounded crown in maturity. Leaf similar to American Elm. Few pests or diseases.
Katsura <i>Cercidiphyllum japonicum</i>	4-8	Grown for its beautiful shape and round/oval leaves similar to Redbud leaves. Good fall color. Tolerates clay soils.
Maple, Sycamore <i>Acer pseudoplatanus</i>	5-6	Oval to round crown similar to Norway Maple. Salt tolerant. Adaptable to many environments/conditions.
Oak, Sawtooth <i>Quercus acutissima</i>	5-6	Becomes established easily. Quite adaptable to hot climates. Moderate growth with oval form. Yellow fall color.
Rubber Tree, Hardy <i>Eucommia ulmoides</i>	4-7	Attractive glossy green foliage. Resistant to insects/disease. Native to China. Low branching.
Walnut, English <i>Juglans regia</i>	6	Nut producing tree. Adapts to poor soils. Limited cold hardiness. Edible nuts. May be toxic to other plants nearby.



Class III Broadleaf Trees – Range generally in height from 60 to 100 feet.

TREE	ZONE	CHARACTERISTICS
Oak, Pin <i>Quercus palustris</i>	4-8	Fast growing oak species, oval-pyramidal in form with low hanging branches. Leaves become bronze in the fall and persist through the winter. Bacterial leaf scorch can be a detrimental issue.
Oak, Shingle <i>Quercus imbricaria</i>	4-8	Willow shaped leaves that are 3-6 inches long, moderate growth rate with an oval-pyramidal form. Similar in appearance and form to pin oak. Adaptable to adverse soil conditions.

Conifers – Range generally in height from 10 to more than 100 feet.

TREE	ZONE	CHARACTERISTICS
Cedar, Eastern Red <i>Juniperus virginiana</i>	3-6	Small pyramidal evergreen with soft yellowish-green foliage. 'Cupressifolia' is a better variety.
Cedar, Western Red <i>Thuja plicata</i>	5-6	Large tree with drooping limbs of bright green, scale-like leaves turning bronze in winter.
Cedar, Lebanon <i>Cedrus libani</i>	6-9	Tall evergreen tree prized for its high quality timber, oils and resins. Native to Lebanon. 'stenocoma' zone 5.
Hemlock, Canadian <i>Tsuga canadensis</i>	3-7	Dense pyramidal conifer. Flat sprays of lacy evergreen foliage give the tree a graceful look. Smallest needles in the genus.

TV TREE SELECTION GUIDE - 2ND EDITION | CONTRIBUTING ORGANIZATIONS



TV TREE SELECTION GUIDE | PARTICIPATING ORGANIZATIONS

Municipal/County/State

ACHD – Jon Mills, Rick Shaw, & Dennis Meredith

City of Boise, Community Forestry – Mike Andrews, Steven Constable, Brian Jorgenson, & Debbie Cook

City of Caldwell, Design Review – Brian Billingsley

City of Eagle, Design Review – Barb Williams

City of Kuna, Planning & Zoning – Dawn Stephens

City of Meridian, Design Review – Brian McClure

City of Meridian, Parks & Recreation – Elroy Huff & Caleb Hood

City of Nampa, Parks & Recreation – Earl Moran & Adam Mancini

Idaho Department of Lands Community Forestry – Gerry Bates & Matt Perkins

Businesses/Organizations/Universities

Baxter Wholesale Nursery – Matt Wolff

Canopi Design – Mary Jane Marlow

College of Western Idaho – Dan Schults

Deguz Designs – Carissa DeGuzman

Franz Witte Nursery – Seneca Hull & Jake Koppes

Idaho Nursery & Landscape Association – Ann Bates

Idaho Power – Patti Best

J. Frank Schmidt – Guy Meacham, Nancy Buley, & Jeff Lafrenz

Jayker ReWholesale Nursery – Ed Hubbard & Holly Lostra

Jensen Belts Associates – Kim Siegenthaler & Josh Neill

TV Canopy Network – Lance Davisson & Emma Stammer

University of Idaho – Rich Guggenheim

Willow Creek Nursery – Eric Celmer

