

A Guide to Seedling Selection

Director: Andrew S. Nelson

Center for Forest Nursery and Seedling Research

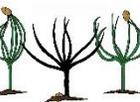
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| |
|--------------------------------------|
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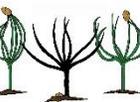
University of Idaho Center for Forest Nursery and Seedling Research, Franklin H. Pitkin Forest Nursery est.1909



Reveley Building



Seedlings in one of our greenhouses



Who we are



Eagerly serving Idahoans (L to R): Thomas McDonough, Morgan Gardner, Andrew Nelson, Lori Mackey, and Don Regan

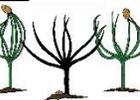
The University of Idaho is an equal opportunity/affirmative action employer and educational institution.

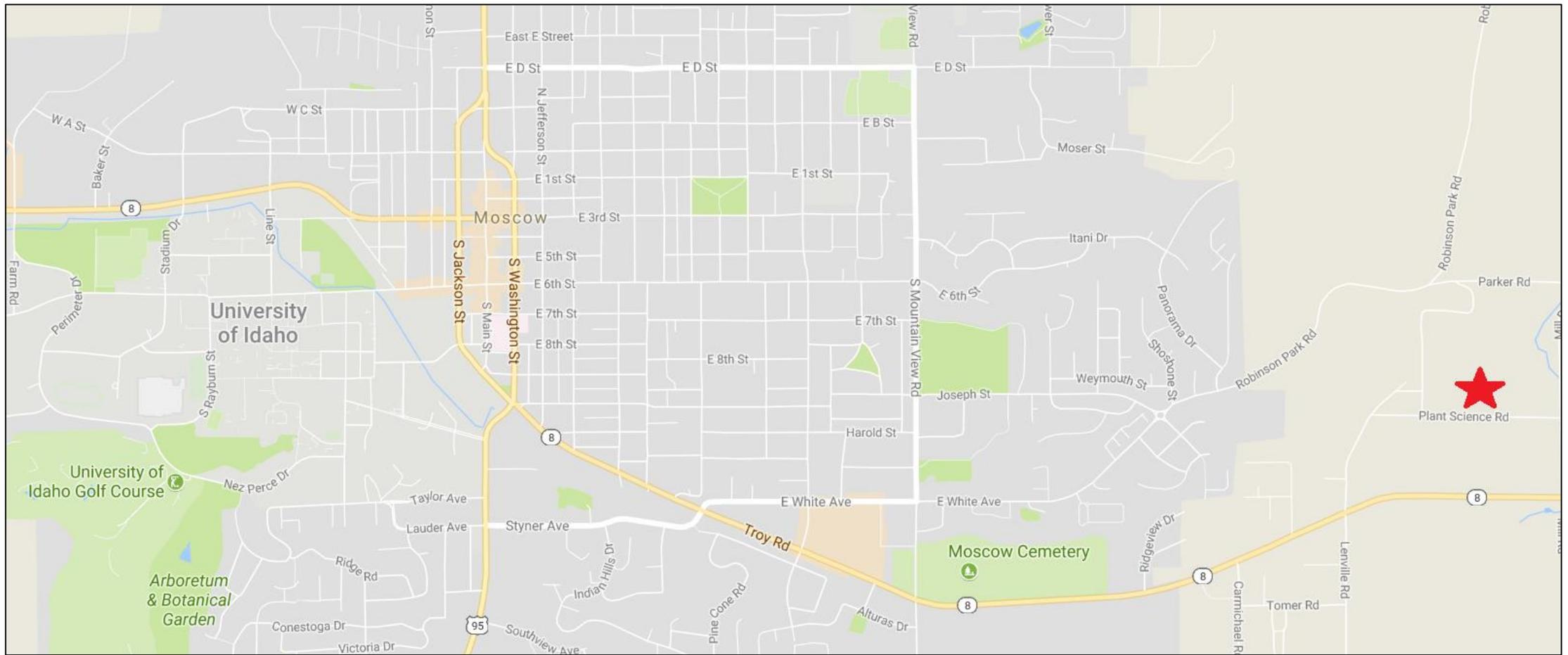
Please direct all inquires to : Pitkin Forest Nursery, College of Natural Resources, 1025 Plant Science Rd, Moscow, ID 83843; Phone (208) 885-3888
email: seedlings@uidaho.edu



We are a fully operational production container nursery that produces nearly 500,000 seedlings annually, including over 70 species of conifers, hardwoods and shrubs. We are also a hands-on teaching facility, giving our student employees the opportunity to learn all aspects of nursery production and management, as well as to understand the process of selecting seedlings for restoration, reforestations and conservation.

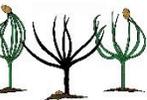
We are a proud member of the Idaho Nursery and Landscape Association and the Inland Empire Christmas Tree Association. We cooperate with private nursery owners through an advisory committee, keeping them up-to-date with our research findings.





We are located east of Moscow off Highway 8 on the University of Idaho Plant Science Farm.

1025 Plant Science Rd
Moscow Idaho 83843



We are open Monday- Friday 8:00am- 4:00pm
208-885-3888

seedlings@uidaho.edu

You can also visit us online and place seedling orders
at:

www.uidaho.edu/seedlings

Seedling Order Information

Seedling sales will begin September 1st

To place an order visit www.uidaho.edu/cnr/cfnr
or call 208-885-3888

Important Information:

- *All orders of 100 or more seedlings will require a 20% down payment within 1 week of order
- *Cancellation of **any order** after February 15th will forfeit the 20% down payment.
- *Payment is due, in full, at the time of pick up or delivery, no later than June 1st.
- *SuperStock species must be ordered in quantities of 5
- *5 cubic inch conifers must be ordered in quantities of 20



Pinyon Pine seedling emerging from its protective seed coat.



Seedling plugs at 20, 10, and 5 in³



Groundcovers and Shrubs at a Glance

| Species | Idaho Native | Mature Height (ft) | Evergreen | USDA Zones | Drought Hardy | Showy Flowers |
|------------------------|--------------|--------------------|-----------|------------|---------------|---------------|
| Juniper, Horizontal | x | 2-4 in | x | 3-9 | x | |
| Kinnikinnick | x | 2-6 in | x | 2-6 | x | |
| Alder, Thinleaf | x | 15-30 | | 2-7 | | |
| Ash, Native Mountain | x | 6-20 | | 3-6 | | |
| Bayberry | | 5-6 | x | 2-6 | x | |
| Bitterbrush, Antelope | x | 3-4 | | 3-6 | x | x |
| Boxwood, Mountain | x | 1-4 | x | 3-5 | | |
| Ceanothus, Redstem | x | 3-10 | | 4-9 | | x |
| Cherry, Choke- | x | 10-25 | | 2-6 | x | x |
| Cinquefoil, Shrubby | x | 4-6 | | 2-7 | x | x |
| Currant, Golden | x | 6-15 | | 2-6 | x | x |
| Currant, Red Flowering | x | 6-9 | | 4-8 | x | x |
| Dogwood, Redosier | x | 6-15 | | 2-8 | | |
| Elderberry, Blue | x | 6-15 | | 3-6 | | x |
| Hawthorn, Black | x | 15-20 | | 4-7 | | |



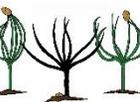
Groundcovers and Shrubs at a Glance Cont.

| Species | Idaho Native | Mature Height (ft) | USDA Zones | Drought Hardy | Showy Flowers |
|----------------------|--------------|--------------------|------------|---------------|---------------|
| Huckleberry, Mtn | x | 3-6 | 4-8 | | |
| Lilac, Common Purple | | 10-15 | 3-7 | x | x |
| Maple, Rocky Mtn | x | 6-20 | 4-6 | | |
| Ninebark, Mallow | x | 5-7 | 2-5 | x | x |
| Oceanspray | x | 5-10 | 3-7 | x | x |
| Plum, American | | 15-25 | 3-8 | | x |
| Rose, Rugosa | | 4-6 | 2-7 | x | x |
| Rose, Woods | x | 2-6 | 3-6 | x | x |
| Serviceberry | x | 10-20 | 2-6 | x | x |
| Snowberry | x | 3-6 | 3-6 | x | |
| Sumac, Oakleaf | x | 4-7 | 3-6 | x | x |
| Syringa, Lewis | x | 6-9 | 3-6 | x | x |
| Willow, Arctic Blue | x | 10-15 | 3-7 | | |
| Willow, Coyote | x | 20-25 | 4-6 | | |
| Willow, Drummond | x | 9-12 | 4-9 | | |



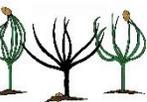
Hardwoods at a Glance

| Species | Idaho Native | Seedling Height (in) | Mature Height (ft) | USDA Zones | Drought Hardy | Showy Flowers |
|----------------------|--------------|----------------------|--------------------|------------|---------------|---------------|
| Apple, Common Wild | | 7-12 | 25-30 | 3-8 | | x |
| Aspen, Quaking | x | 8-12 | 30-40 | 2-8 | | |
| Birch, Western Paper | x | 10-15 | 60-80 | 2-6 | | |
| Birch, Water | x | 10-17 | 15-30 | 4-6 | | |
| Cherry, Black | | 10-18 | 40-50 | 3-9 | | x |
| Chestnut, American | | 12-25 | 75-90 | 4-8 | | x |
| Cottonwood, Black | x | 10-14 | 60-150 | 3-9 | | |
| Maple, Bigtooth | x | 6-15 | 30-50 | 3-6 | x | |
| Maple, Sugar | | 10-30 | 60-70 | 3-8 | | |
| Oak, Bur | | 8-17 | 60-75 | 2-8 | x | |
| Oak, Bur-Gambel | | 5-13 | 20-40 | 3-8 | x | |
| Poplar, Idaho Hybrid | x | 10-14 | 50-80 | 3-7 | | |
| Walnut, Black | | 12-30 | 50-75 | 4-9 | | |



Conifers at a Glance

| Species | Idaho Native | Seedling Height (In) | Mature Height (ft) | USDA Zones | Drought Hardy | Christmas Trees |
|------------------------|--------------|----------------------|--------------------|------------|---------------|-----------------|
| Cedar, Incense | | 10-17 | 60-150 | 5-8 | x | |
| Cedar, Western Red | x | 8-15 | >100 | 5-7 | | |
| Douglas Fir, Rocky Mtn | x | 8-16 | >100 | 4-6 | | x |
| Fir, Canaan | | 7-20 | 40-60 | 4-7 | | x |
| Fir, Concolor | x | 5-15 | >100 | 3-7 | | x |
| Fir, Corkbark | | 4-15 | 30-60 | 4-7 | | x |
| Fir, Fraser | | 5-11 | 40-60 | 4-7 | | x |
| Fir, Grand | x | 6-14 | >100 | 4-7 | | x |
| Fir, Subalpine | x | 4-12 | 40-100 | 2-6 | | x |
| Hemlock, Western | x | 8-20 | 170-200 | 4-7 | | |
| Juniper, Rocky Mtn | x | 7-14 | 20-30 | 3-7 | x | |
| Larch, Western | x | 8-15 | >100 | 3-7 | | |
| Pine, Austrian | | 5-12 | 40-60 | 3-7 | x | x |
| Pine, Bristlecone | | 4-8 | 20-30 | 4-7 | x | |
| Pine, Limber | x | 5-11 | 20-40 | 3-7 | x | |
| Pine, Lodgepole | x | 6-12 | 50-100 | 3-8 | | |
| Pine, Pinyon | | 4-9 | 20-30 | 4-8 | x | x |
| Pine, Ponderosa | x | 5-15 | >100 | 3-6 | x | |
| Pine, Scotch | | 5-16 | 40-70 | 3-7 | x | x |
| Pine, Western White | x | 4-10 | >100 | 3-9 | | |
| Spruce, Blue | x | 5-13 | 50-60 | 2-7 | x | x |
| Spruce, Engelmann | x | 9-17 | >100 | 2-6 | | |
| Spruce, Norway | | 10-19 | 60-80 | 2-7 | | x |

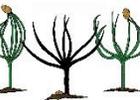


USDA Hardiness Zones

| | | | | | |
|----------------|---|---------------|-----|----------------|---|
| Aberdeen | 4 | Moscow | 5 | Spokane, WA | 5 |
| American Falls | 4 | Mountain Home | 6 | Walla Walla | 5 |
| Arco | 4 | Nezperce | 6 | Pullman | 5 |
| Blackfoot | 4 | Orofino | 6 | Kettle Falls | 5 |
| Boise | 6 | Paris | 4 | | |
| Bonnars Ferry | 5 | Payette | 5-6 | Pendleton, OR | 5 |
| Burley | 5 | Pocatello | 4 | LaGrande | 5 |
| Caldwell | 6 | Preston | 4 | Bend | 5 |
| Cascade | 6 | Rexberg | 4 | Ontario | 5 |
| Challis | 4 | Rigby | 4 | | |
| Coeur d'Alene | 5 | Rupert | 5 | Logan, UT | 6 |
| Council | 6 | Salmon | 4 | Odgen | 6 |
| Driggs | 4 | Sandpoint | 5 | Salt Lake City | 6 |
| Dubois | 4 | Shoshone | 5 | Sandy | 6 |
| Emmett | 6 | St. Anthony | 4 | | |
| Fairfield | 5 | St. Maries | 5 | | |
| Gooding | 5 | Stanley | 4 | | |
| Grangeville | 6 | Sun Valley | 5 | | |
| Hailey | 5 | Soda Springs | 4 | | |
| Idaho City | 6 | Twin Falls | 5 | | |
| Jerome | 6 | Weiser | 6 | | |
| Kamiah | 6 | | | | |
| Lewiston | 6 | Missoula, MT | 5 | | |
| Malad | 5 | Libby | 5 | | |
| Marsing | 6 | Hamilton | 4 | | |
| McCall | 5 | Dillon | 4 | | |

| Average Annual Minimum Temperature for each Zone | |
|---|---------------|
| Zone 2 | -50 to -40° F |
| Zone 3 | -40 to -30° F |
| Zone 4 | -30 to -20° F |
| Zone 5 | -20 to -10° F |
| Zone 6 | -10 to 0° F |

If your city isn't listed here, you can find your zone at the USDA website: <http://planthardiness.ars.usda.gov/>



Why Plant a Windbreak?

Windbreaks are for...

- **Home energy conservation.** Windbreaks can decrease winter heating costs 10-40% and reduce cold air infiltration into your home by 75%
- **Improved Crop Yield.** Yields are higher on the lee sides of windbreaks -anywhere from 5 to 44%- because lower wind speeds evaporate less moisture from the soil and plants.
- **Reduced Soil Erosion.** A windbreak will decrease wind speed close to the ground up to 50%, reducing the winds ability to blow away your topsoil and productivity.
- **Snow Drift Control.** A properly placed windbreak will keep snow from drifting across driveways, farm lanes, or access roads.
- **Wildlife Habitat.** Wildlife use windbreaks for cover, food, and reproduction. Studies show 50-80 bird nests per mile of windbreak.
- **Increased Home Value.** Healthy trees around your home add value to your property.

Check out our publication *Planning and Planting a Five-Row Windbreak*, available for download from our website at www.uidaho.edu/seedlings or call 208-885-3888 and we can email one to you.



Animal Damage

Seedlings can be damaged by livestock, deer and elk, or other small animals. Broadleaf species are especially vulnerable to browsing. Here are a few hints to help you protect seedlings from animal damage

Big Game

Deer and elk can inflict serious damage to seedlings, especially deciduous trees and shrubs. They will eat nearly any kind of plant when hungry enough. You can protect seedlings with mechanical barriers or by using chemical browse inhibitors.

Mechanical Barriers – a 6 to 8’ tall fence is an option for keeping big game from your seedlings (See pub. below) Another option is tree tubes, which work well only for deciduous trees. Made of photodegradable plastic, tubes come at various lengths. A tube at least 6’ tall is necessary to prevent deer and elk browsing. Trees grow taller and faster in tubes and will soon be above the browse line.

Chemical Inhibitors- Your local Idaho Department of Fish and Game officer will have info on chemical inhibitors to spray on your seedlings.

Livestock

Your windbreak will grow best if you keep livestock out of it. Livestock trample and eat small seedlings. Once the trees are bigger, livestock can cause damage by rubbing off or eating the bark and browsing on lower branches. Removal of lower branches by browsing reduces the effectiveness of your windbreak. Fencing is the easiest way to keep livestock away from your windbreak.



Animal Damage Continued

Rodents

Voles- Common throughout Idaho, voles attack the base of seedlings and small trees. If the tree is not completely girdled by gnawing, it might be left in such a weakened state that summer stress might kill it. Trees can be protected in several ways: clean cultivation, barriers, poison, and traps. Clean cultivation is a simple way to keep these pests from your seedlings. Voles don't like to cross bare soil, so a weed-free zone around your trees will help discourage feeding. Plowing or tilling a 6' wide strip on either side of the row helps keep the pests away. This also improves seedlings growth by reducing competition for water and nutrients by weeds. A piece of 4" PVC pipe or tree tube placed around new seedlings will also help to keep rodents away. Poisoning the voles might be necessary when populations are high. These pesticides often require a pesticide license to purchase and apply.

Gophers –Pocket gophers can be a terrible problem. They usually gnaw off the roots, often leaving the above ground portion of the seedling or tree standing. They have also been known to eat entire seedlings. They can be difficult to eradicate. Clean cultivation, as described above, will greatly reduce gopher feeding. Trapping and/or poisoning can also be effective.



Ordering Useful Publications

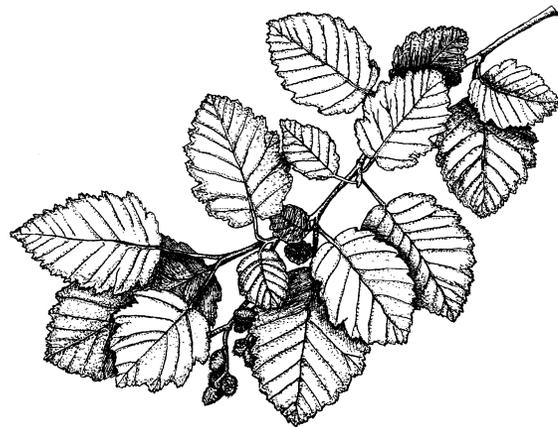
Ag Publications at the University of Idaho has several helpful publications. They can be contacted at 208-885-7982. Their catalog and ordering information can be viewed online at :
<http://www.cals.uidaho.edu/edComm/catalog.aspx>

Some useful rodent control information can be found through Oregon State University. They have many downloadable publications in their catalog, which can be found at : <https://catalog.extension.oregonstate.edu/>

If you have any questions or suspect an insect, disease, or planting site problem, contact your local county extension agent, Idaho Department of Lands forester, or give us a call.



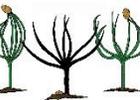
Thinleaf Alder (*Alnus incana* var *tenuifolia*)



Quick Look:

- Native Shrub
- Max Height: 30'
- Max Width: 8'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Riparian and Soil Stabilization
- Super Stock
- Zones 2-7

Thinleaf alder is the most common alder in Idaho. It is found throughout the state as a small tree or large bush from 2000 feet to low subalpine. Like other alders, it thrives in moist to wet places. Thinleaf alder can reach 30 feet tall and is very useful in riparian revegetation.



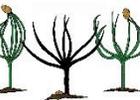
Apple, Common Wild (*Malus pumila*)



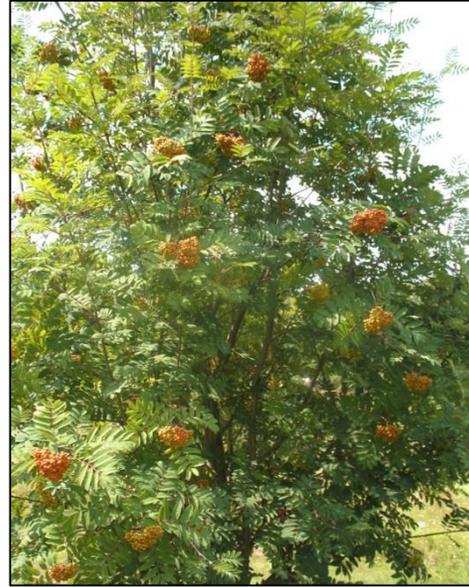
Quick Look:

- Non-Native Hardwood
- Max Height: 30'
- Max Width: 12'
- Drought Hardy: No
- Growth Rate: Medium
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Windbreak
- Super Stock
- Zones 3-8

Common Wild Apple, introduced from Europe and Asia, is now commonly naturalized throughout Idaho. With full sun and moderate moisture it usually grows to about 12 to 20' with a nearly equal spread, but can reach heights up to 30'. It is used in the outer rows of multiple-row windbreaks. Small edible apples follow fragrant white flowers.



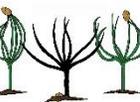
Ash, Native Mountain (*Sorbus scopulina*)



Quick Look:

- Native Shrub
- Max Height: 20'
- Max Width: 8'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds and large mammals
- Uses: Riparian
- Super Stock
- Zones 3-6

Native Mountain Ash grows 6 to 20 ft tall throughout the mountains of Idaho. White flower clusters, orange berries, and yellow and orange fall color makes Native Mountain-Ash a great landscape shrub.

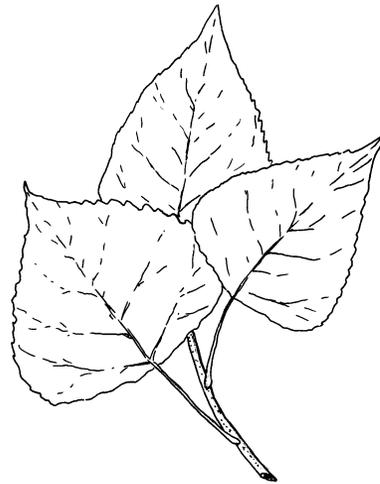


Aspen, Quaking (*Populus tremuloides*)

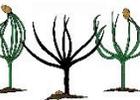


Quick Look:

- Native Hardwood
- Max Height: 40'
- Max Width: 30'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Riparian and Reforestation
- Super Stock
- Zones 2-8



Quaking Aspen is an Idaho native which quickly grows to about 40 feet. The limbs and trunk are smooth, white to light-green to gray in color. Its leaves are round and "quake" or flutter in the breeze, turning a golden color in the autumn. Quaking aspen spread by seeds and root shoots and will form groves over time. They are hardy throughout Idaho and not too particular about soil as long as the soil is moist.



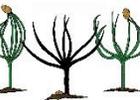
Bayberry (*Myrica pensylvanica*)



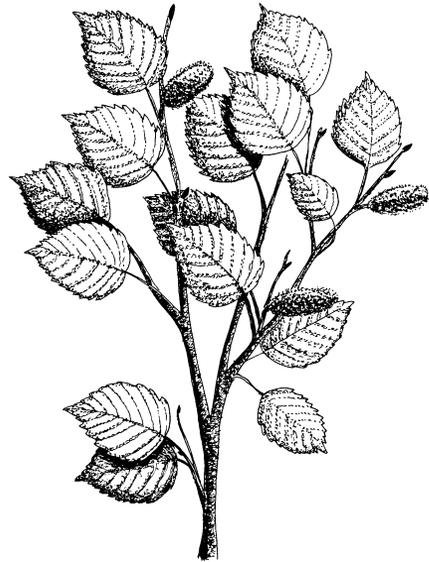
Quick Look:

- Non-Native Shrub
- Max Height: 6'
- Max Width: 12'
- Drought Hardy: Yes
- Growth Rate: Fast
- Wildlife Benefits: Birds, and small mammals
- Uses: Hedge
- Super Stock
- Zones 2-6

Bayberry is a semi-evergreen shrub native to the East Coast of the U.S. and Canada. This fast-growing shrub can reach 5 to 6 feet tall with a mounded irregular shape and upright branching habit. The foliage is dark green, leathery, and very aromatic when crushed. During harsh winters, leaves may turn bronze or tan and fall, but in mild winters can remain green. Female plants produce small, gray-blue, waxy berries. Bayberry is a very tough shrub, tolerating a variety of soils including swampy, dry, acidic, alkaline, and saline. It prefers full sun but will tolerate partial shade. It responds well to pruning and can be shaped into a hedge or topiary.



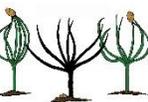
Birch, Water (*Betula occidentalis*)



Quick Look:

- Native Hardwood
- Max Height: 30'
- Max Width: 12'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds, and small mammals
- Uses: Riparian and Soil Stabilization
- Super Stock
- Zones 4-6

Water Birch is an Idaho native tree found along our streams. It may reach heights of 30 feet with several trunks, but it is more commonly found as large shrubs with dense thickets of stems which make it a great species for stream bank stabilization. The bark is reddish brown to yellowish brown and doesn't peel like paper birch. Water birch grows in a wide variety of soils and elevations and is very flood tolerant. The wood is hard and heavy and good for firewood. This species is more resistant to wood borers than other birches.



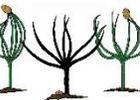
Birch, Western Paper (*Betula papyrifera* var. *commutata*)



Quick Look:

- Native Hardwood
- Max Height: 80'
- Max Width: 35'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds, and small mammals
- Uses: Riparian and Reforestation
- Super Stock
- Zones 2-6

Western Paper Birch is native in northern Idaho and may grow to 80 feet. Its crown, more open than on other birches, is rounded or pyramid-shaped with leaves sometimes 4 inches long. The bark turns white and peels in long, narrow, papery, horizontal strips. It is hardy throughout Idaho and not too particular about soil as long as the soil is moist. Lack of moisture during the growing season will make this tree susceptible to borers.



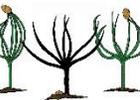
Bitterbrush, Antelope (*Purshia tridentata*)



Quick Look:

- Native Shrub
- Max Height: 4'
- Max Width: 8'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Soil Stabilization and Windbreak
- Super Stock
- Zones 3-6

Antelope Bitterbrush is a very drought and heat tolerant native shrub of Idaho. It usually grows 3 to 4 feet tall, but can sometimes grow taller in lower elevations. This shrub has a silvery appearance and produces yellow flowers. Antelope bitterbrush is very long lived and has long tap roots, reaching 15 to 18 feet deep, which allow it to survive on rocky and arid sites. It is quite adaptable, and is found on all slopes and aspects usually on well-drained soils. It is intolerant, however, of shade and saline soils. Antelope bitterbrush has been used extensively in land reclamation, watershed erosion control, and habitat improvement.



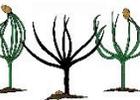
Boxwood, Mountain (*Pachistima myrsinites*)



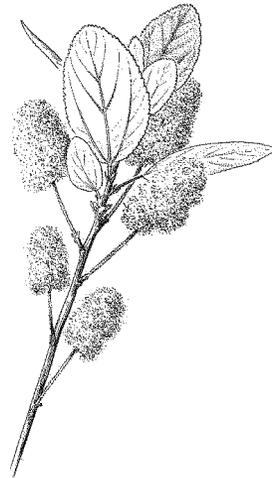
Quick Look:

- Native Shrub
- Max Height: 3'
- Max Width: 3'
- Drought Hardy: No
- Growth Rate: Slow
- Wildlife Benefits: Birds and large mammals
- Uses: Soil Stabilization and Hedge
- Super Stock
- Zones 3-5

Mountain boxwood, also known as Mountain lover or Oregon boxwood, is an Idaho native, evergreen shrub rarely growing over 3 feet tall. It is densely branched with many small, dark green, glossy leaves. It grows on dry to moist sites in shaded and open mountain areas, and tolerates frost pockets well. It also is not too picky about the soil and can grow in well drained, shallow, gravelly soils as well as in clay and silt-loams. Mountain boxwood can be shaped easily and makes a great landscape plant, groundcover, or small hedge. It is also an evergreen shrub. We also recommend it for revegetating disturbed sites.



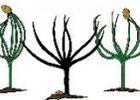
Ceanothus, Redstem (*Ceanothus sanguineus*)



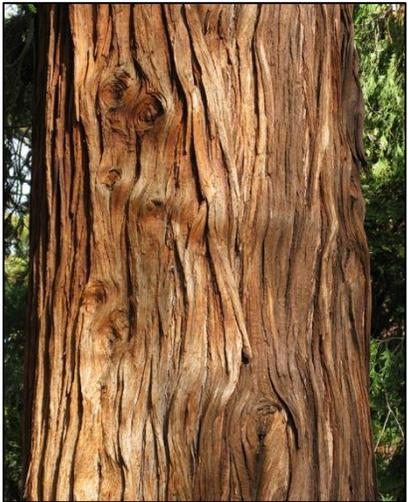
Quick Look:

- Native Shrub
- Max Height: 10'
- Max Width: 10'
- Drought Hardy: No
- Growth Rate: Slow
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Soil Stabilization
- Super Stock Only
- Zones 4-9

Redstem ceanothus is an Idaho native shrub maturing at a moderate to fast rate of 3-10 feet tall. Found mostly in moist to dry open woods at low to moderate elevations, Redstem ceanothus is moderately drought tolerant, prefers full sun and a pH of 6.5-8.0. The deep root system is good for soil stabilization, especially in logged sites or road cuts. The nitrogen fixing ability of redstem ceanothus helps promote other species by improving soil quality, making this plant a great choice for mixed plantings, especially with conifers. The white, fragrant flowers and deep red stems also make it a desirable landscape choice.



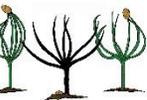
Cedar, Incense (*Calocedrus decurrens*)



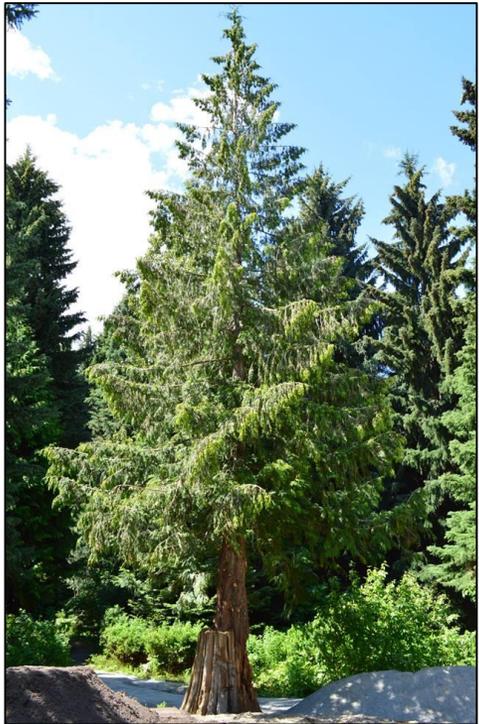
Quick Look:

- Non-Native Conifer
- Max Height: 150'
- Max Width: 20'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds and small mammals
- Uses: Hedge, Soil Stabilization, and windbreak
- Super Stock
- Zones 5-8

Incense Cedar is a moderate to fast-growing conifer native to southern Oregon and the Sierra Nevada Mountains of California. This false cedar grows in a conical shape and can reach heights of 60 to 150 feet. Drought-tolerant once established, incense cedar prefers dry areas and does well on southwestern slopes. In Idaho, we recommend planting it at or below 4,000 feet in elevation. It endures shade as a seedling, but requires more sunlight as it matures. The wood is strong, straight-grained, and resists rot, making it ideal for exterior siding, decking, cedar chests and pencils. We recommend incense cedar as a windbreak, hedge or ornamental.



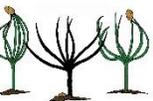
Cedar, Western Red (*Thuja plicata*)



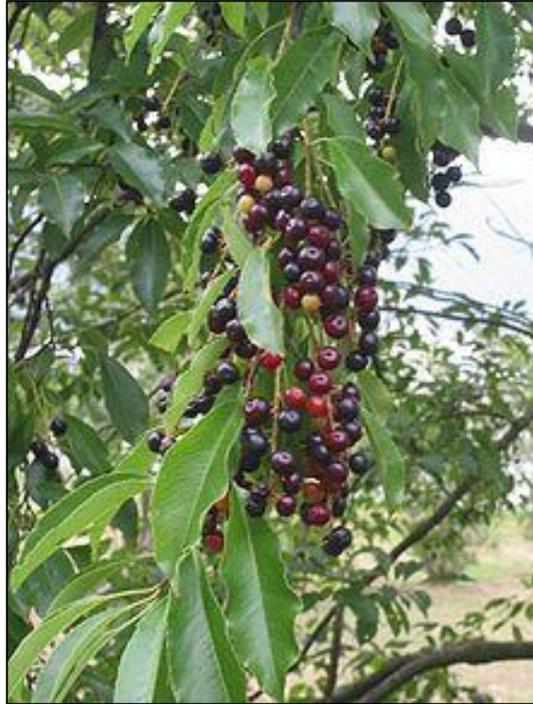
Quick Look:

- Native Conifer
- Max Height: 150'
- Max Width: 35'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Large mammals
- Uses: Hedge and Reforestation
- Super Stock and 10 in³
- Zones 5-7

Western red-cedar is a northern Idaho native recommended for reforestation and riparian enhancement. It can reach mature heights of 150 feet and 4 feet in diameter, although in the wild trees grow to over 18 feet in diameter. The heartwood of the western red-cedar is one of Idaho's most useful and valuable primarily because it resists decay. It is used for almost every purpose requiring exposure to the elements such as shingles, shakes, fence posts, outdoor furniture, and siding. In the wild, this cedar is found on moist slopes and along stream banks. Western red-cedar is a fast grower, but it must have ample water.



Cherry, Black (*Prunus serotina*)



Quick Look:

- Non-Native Hardwood
- Max Height: 50'
- Max Width: 30'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds and small mammals
- Uses: Specialty crop and windbreak
- Super Stock
- Zones 3-9

Black Cherry, most commonly known for its use in fine furnishings, is a medium-sized tree (40 to 50 feet tall). Growing best in deep, well-drained soils, it has proven to be very hardy in Idaho, easily withstanding late spring and early fall frosts. This species is moderately drought resistant, but may need supplemental water for establishment. Black cherry is one of our most handsome domestic woods, long sought for its excellent quality and high value. Desirable wood qualities, combined with its hardiness, high wildlife value, and the relative scarcity of this species, make it an ideal tree for planting in plantation and conservation settings.



Cherry, Choke (*Prunus virginiana* var. *melanocarpa*)



Quick Look:

- Native Shrub
- Max Height: 25'
- Max Width: 20'
- Drought Hardy: Yes
- Growth Rate: Fast
- Wildlife Benefits: Birds, large, and small mammals
- Uses: Soil stabilization and windbreak
- Super Stock
- Zones 2-6

Chokecherry is a very hardy, large shrub or small tree, growing fast to a mature height of 10 to 25 feet. This Idaho native bears white flowers clustered in hanging spikes that later produce dark, purple fruits. The fruits are a wildlife favorite and make good jellies and pies. Because of its dense growth form, chokecherry is an excellent choice for outer rows of multiple-row windbreaks.

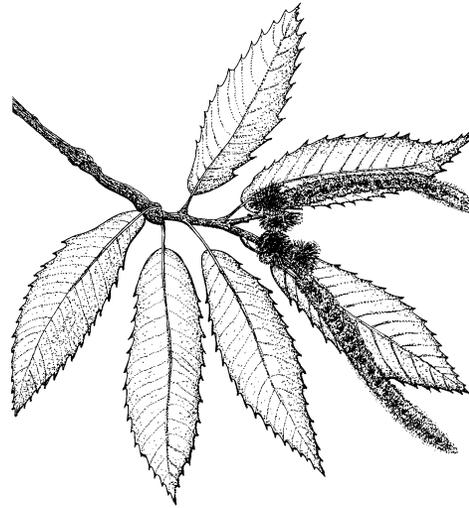


Chestnut, American (*Castanea dentata*)



Quick Look:

- Non-Native Hardwood
- Max Height: 100'
- Max Width: 40'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds, large, and small mammals
- Uses: Specialty Crop and windbreak
- Super Stock
- Zones 4-8



The American Chestnut grows to around 100 feet tall, 4 feet in diameter, with massive, wide-spreading branches and a broad crown. The good news is that it can be grown in the Inland Northwest blight-free! The valuable wood is rot-resistant, light, and durable and used in a variety of ways, from furniture to railroad ties. It prefers a well-drained soil with a pH of 5.5 to 6.5 and will not tolerate high pH or poorly drained soils. Once established they are quite drought-tolerant.



Cinquefoil, Shrubby or Bush (*Daisiphora floribunda*)



Quick Look:

- Native Shrub
- Max Height: 6'
- Max Width: 4'
- Drought Hardy: Yes
- Growth Rate: Slow
- Wildlife Benefits: Birds and small mammals
- Uses: Soil Stabilization and windbreak
- Super Stock
- Zones 2-7

Shrubby or Bush Cinquefoil is a flowering Idaho native that grows from low valleys to mountain peaks - in wetland to upland sites and rock ledges. It is tolerant of cold, heat, drought, flooding, saline, acidic and alkaline soils. It thrives in calcareous soils and full sun and blooms continuously from June until frost! Shrubby cinquefoil seedlings establish easily and will reach their mature height of 4 to 6 feet in 5 years or so. We recommend it for stabilizing streambanks and revegetating disturbed sites, roadcuts, and mine tailings. Shrubby cinquefoil can also be used in the outer row of a windbreak and as a landscape ornamental.



Cottonwood, Black (*Populus trichocarpa*)



Quick Look:

- Native Hardwood
- Max Height: 150'
- Max Width: 30'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Reforestation, riparian, and windbreak
- Super Stock
- Zones 4-8

Black cottonwood reaches heights of 60 to 150 feet tall or taller and 2 to 3 feet in diameter. It is the tallest native western hardwood and the largest of the poplars. This fast growing Idaho native is found mostly in moist to wet soils of valleys, stream banks and floodplains. Black cottonwood prefers deep river soils and full sun. An interesting feature of the black cottonwood is the "summer snow" created by the white cotton-like seed blowing in the wind.



Currant, Golden (*Ribes aureum*)



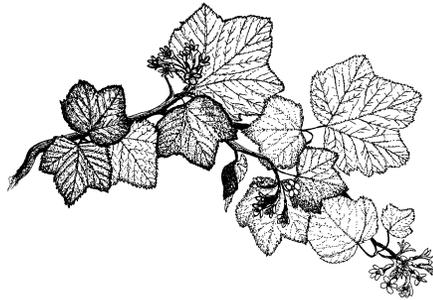
Quick Look:

- Native Shrub
- Max Height: 15'
- Max Width: 3'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds and small mammals
- Uses: Hedge, soil stabilization, and windbreak
- Super Stock
- Zones 2-6

Golden Currant is an Idaho native shrub. This deciduous plant has many desirable characteristics: attractive form, height growth of 8 to 15 feet, yellow flowers early in spring, edible fruits, no thorns, drought tolerant, works well as a natural hedge, good wildlife browse, and is excellent for soil stabilization. Grows best with moderate summer watering.



Currant, Red-Flowering (*Ribes sanguineum*)



Quick Look:

- Native Shrub
- Max Height: 8'
- Max Width: 10'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds and small mammals
- Uses: Hedge, soil stabilization, and windbreak
- Super Stock
- Zones 4-8

Red-flowering Currant bears pendulous, red flower clusters on a 6 to 8 foot shrub in spring, followed by blue to black berries in fall that are unpalatable to humans. The leaves are maple-like and turn yellow in autumn. This shrub prefers dry to moist, well-drained sites in full sun to partial shade. It would be an excellent choice as a landscape plant, soil stabilizer, natural hedge, or in the outer row of multiple-row windbreaks.



Dogwood, Redosier (*Cornus sericea*)



Quick Look:

- Native Shrub
- Max Height: 9'
- Max Width: 10'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds and small mammals
- Uses: Hedge, soil stabilization, and windbreak
- Super Stock
- Zones 2-8

Redosier dogwood is a very common Idaho native, deciduous shrub that grows 5-9 feet tall. It thrives in our coldest areas. This dogwood, unlike domestic dogwoods which have large single flowers, bears clusters of small, white flowers in spring. The foliage is brilliant red in the fall. Redosier dogwood prefers moist, rich soils in either sun or shade.



Elderberry, Blue (*Sambucus cerulea*)



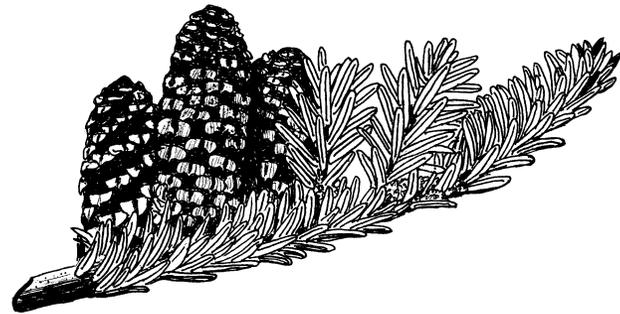
Quick Look:

- Native Shrub
- Max Height: 15'
- Max Width: 20'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Soil stabilization and windbreak
- Super Stock
- Zones 3-6

Blue elderberry or Blueberry elder is another of Idaho's wonderful native shrubs. It grows 6 to 15 feet tall and has large, creamy white flower clusters in the spring that develop into abundant clumps of bluish-black berries. It does prefer moist, sunny, acidic conditions and does not fare well in alkaline or dry sites. Elderberry is one of the favorites for revegetating sites because of its wildlife value, productivity, adaptability, and ease of establishment. It is also widely used for stabilizing banks and riparian restoration. Perhaps it's best known for its berries, and the wonderful wine, jelly, jam, and syrup they make. A cautionary note- the berries should be cooked first before eaten as they are mildly toxic. The leaves and stems are poisonous as well and should not be consumed.



Fir, Canaan (*Abies intermedia*)



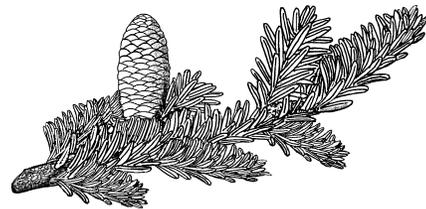
Quick Look:

- Non-Native Conifer
- Max Height: 60'
- Max Width: 20'
- Drought Hardy: No
- Growth Rate: Slow
- Wildlife Benefits: --
- Uses: Christmas Trees
- Super Stock
- Zones 4-7

Canaan Fir is native to the Virginias, and is named after the Canaan Valley in West Virginia where it was first discovered. It has many of the characteristics of the Fraser fir but will better tolerate adverse conditions than the Fraser, such as wet sites and late frosts. This fir prefers a deep, fertile loam, but does well in a variety of soil types. It will not tolerate a dry, upland site on a western or southern exposure. Our seed source comes from selected stands in Virginia.



Fir, Corkbark (*Abies lasiocarpa* var *arizonica*)



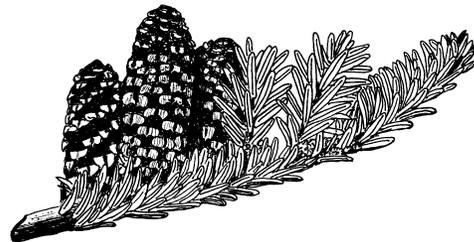
Quick Look:

- Non-Native Conifer
- Max Height: 60'
- Max Width: 20'
- Drought Hardy: No
- Growth Rate: Slow
- Wildlife Benefits: --
- Uses: Specialty crop and Christmas Trees
- Super Stock
- Zones 4-7

Corkbark fir has the same spire-like shape of the subalpine fir, but with whitish, corky bark and blue foliage. It is native to the Rocky Mountains of southern Colorado, Arizona and New Mexico and attains a height of 30 to 60 feet. Like the subalpine fir, it is also found at high elevations and prefers a moist, acid soil. Corkbark fir is a popular Christmas tree and ornamental because of its narrow, pyramidal habit and beautiful blue foliage.



Fir, Fraser (*Abies fraseri*)



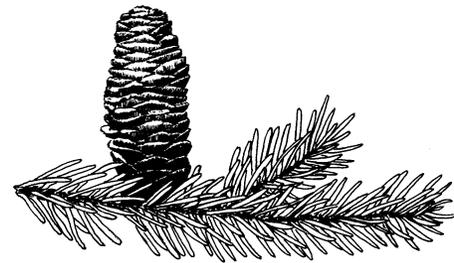
Quick Look:

- Non-Native Conifer
- Max Height: 60'
- Max Width: 35'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: --
- Uses: Christmas Trees
- Super Stock
- Zones 4-7

The Fraser Fir is a beautiful, fast-growing tree, with its shiny, dark green needles, wonderful fragrance, and narrow, spire-like form. The underside of the needles are silvery, making the tree almost glisten, and the branches are stiff making it a popular Christmas Tree. It prefers well-drained soils, but it has been shown to also do well in the clay soils of the Palouse region of Idaho. Our seed source comes from selected stands in the Roan Mountains of North Carolina.



Fir, Grand (*Abies grandis*)



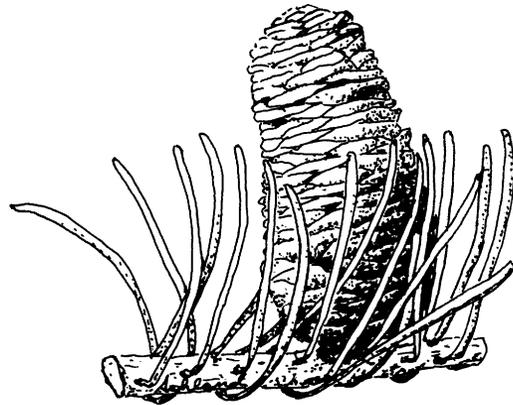
Quick Look:

- Native Conifer
- Max Height: 200'
- Max Width: 20'
- Drought Hardy: No
- Growth Rate: Medium
- Wildlife Benefits: Birds, small, and large animals
- Uses: Reforestation and Christmas Trees
- Super Stock
- Zones 4-7

Beautiful, aromatic, glossy green needles on sweeping branches make Grand Firs a popular Christmas tree and ornamental. Grand fir grows well in a variety of environments and is tolerant of fluctuating water tables and floods. It occurs most frequently on deep, moist alluvial soils, in gulches, along streams, and on gentle slopes of northerly exposure. Our seed source comes from the Clearwater River drainage.



Fir, Rocky Mountain Concolor (*Abies concolor* var. *concolor*)



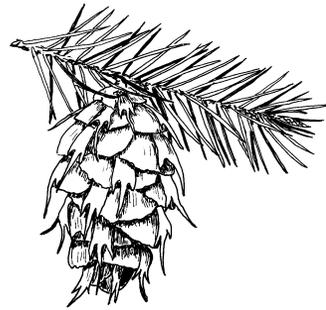
Quick Look:

- Native Conifer
- Max Height: >100'
- Max Width: 20'
- Drought Hardy: No
- Growth Rate: Slow
- Wildlife Benefits: Birds
- Uses: Windbreak and Christmas Trees
- Super Stock
- Zones 3-7

Concolor Fir, or white fir, has nice symmetry and beautiful blue-gray needles. It's a large tree, reaching over 125 feet at maturity, and may live for 250 to 300 years. Concolor fir is found on higher elevation, cool, northern exposures but is adaptable to a wide range of soil types and moisture, making it useful in a windbreak. This fir is used extensively in the Christmas tree industry. We grow seed collected in the Santa Fe National Forest in New Mexico.



Fir, Rocky Mtn. Douglas (*Pseudotsuga menziesii* var. *galauca*)



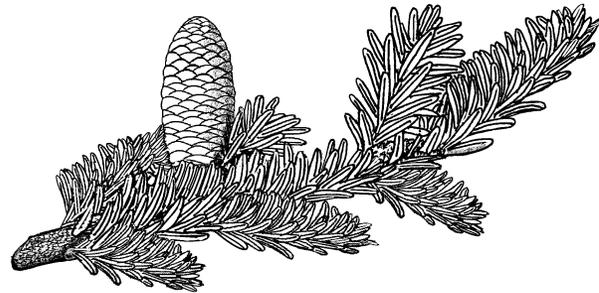
Quick Look:

- Native Conifer
- Max Height: 100'
- Max Width: 30'
- Drought Hardy: No
- Growth Rate: Slow
- Wildlife Benefits: Birds
- Uses: Reforestation, Windbreak and Christmas Trees
- Super Stock, 5in³
- Zones 4-7

Douglas-fir, also known as red-fir, is an Idaho native with a medium growth rate. It is considered one of the most valuable timber tree species in the United States. Douglas-fir is also used extensively as Christmas trees. It needs a well-drained soil for best growth and can reach mature heights of over 100 feet. Our seed is collected near Moscow, ID.



Fir, Subalpine or Alpine (*Abies lasiocarpa*)



Quick Look:

- Native Conifer
- Max Height: 100'
- Max Width: 20'
- Drought Hardy: No
- Growth Rate: Slow
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Reforestation and Christmas Trees
- Super Stock
- Zones 2-6

Subalpine fir is native to the western mountains of North America. In the wild it grows at middle to higher elevations, but it makes a wonderful landscape tree at lower elevations as well. This tree is known for its slender and spire-like shape. It has very dense beautiful dark green foliage and all the needles point upwards. This tree retains its branches right down to the ground, so it provides good cover for mammals and birds. Its bark is thin and light gray in color and it will begin to furrow as the tree gets older. Subalpine fir require moist soil and they handle cold temperatures well.



Hawthorn, Black (*Crataegus douglasii* var *douglasii*)



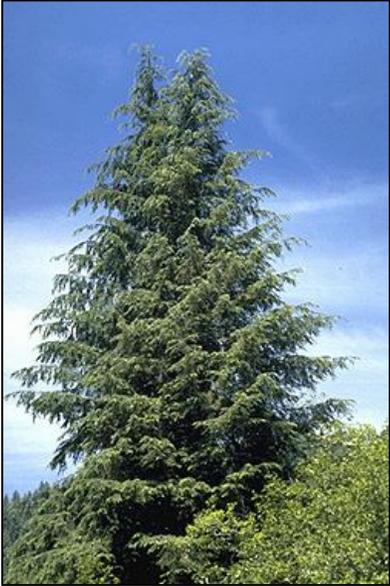
Quick Look:

- Native Shrub
- Max Height: 20'
- Max Width: 10'
- Drought Hardy: No
- Growth Rate: Slow
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Riparian, Soil Stabilization, and Windbreak
- Super Stock
- Zones 4-7

Black Hawthorn, or Douglas Hawthorn, is a slow-growing large shrub or small tree reaching 20 feet at maturity. This Idaho native forms dense, thorny thickets that provide excellent soil and streambank stabilization, as well as cover and nesting sites for magpies and thrushes. Our seed is collected in northern Idaho.



Hemlock, Western or Pacific (*Tsuga heterophylla*)



Quick Look:

- Native Conifer
- Max Height: 200'
- Max Width: 30'
- Drought Hardy: No
- Growth Rate: Slow
- Wildlife Benefits: --
- Uses: Riparian and Reforestation
- Super Stock
- Zones 4-7



Western or Pacific hemlock, one of our most beautiful native conifers, has down sweeping branches and feathery foliage. It is also one of our largest conifers, reaching 170 to 200 feet tall. It is not drought tolerant, but prefers moist, cool climates at elevations of 1600 to 4200 feet. This is the state tree of Washington.



Huckleberry, Mountain or Black (*Vaccinium membranaceum*)



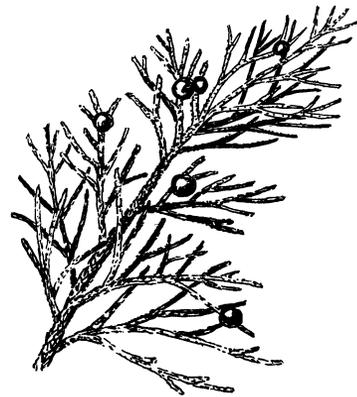
Quick Look:

- Native Shrub
- Max Height: 6'
- Max Width: 6'
- Drought Hardy: Yes
- Growth Rate: Slow
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Soil Stabilization
- Super Stock
- Zones 4-8

Mountain huckleberry is a long-lived native shrub that grows slowly to 4-6 feet tall. It produces a flavorful blackish-purplish fruit that is highly sought out by humans and animals alike. Besides eating them fresh, they are also used in jams, jellies, sauces, pancakes, muffins, wines, etc. The plants themselves require a moist, well-drained, acidic soil that is high in organic matter. Mountain huckleberry also has outstanding fall color with orange to red to maroon hues. Huckleberries require temperatures around freezing in the winter and do best when covered with 1 to 2 feet of snow throughout the winter.



Juniper, Horizontal (*Juniperus horizontalis*)



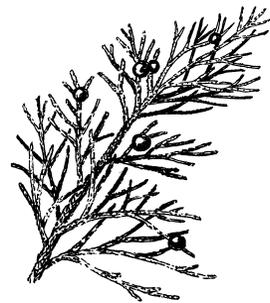
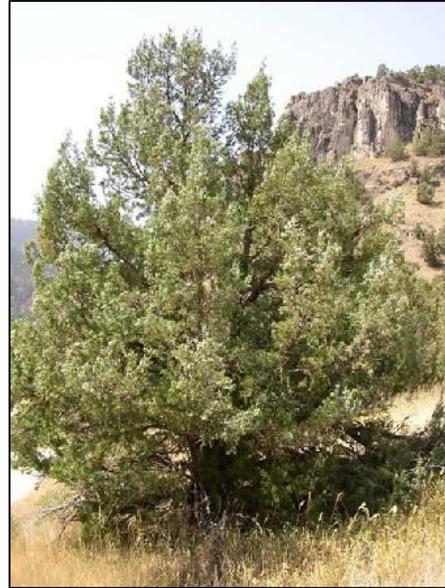
Quick Look:

- Native Groundcover
- Max Height: 4"
- Max Width: 8'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds and large mammals
- Uses: Soil Stabilization
- Super Stock
- Zones 3-9

Horizontal juniper, or creeping juniper is an Idaho native groundcover that is highly drought tolerant making it an excellent choice for any xeriscape situation. It prefers full sun and adapts well to clay, sand, gravel, and compacted soils. It will also grow in acidic to slightly alkaline soils. This juniper rarely grows taller than 6 inches, but can spread up to 8 feet wide, making it a natural choice for soil stabilization and erosion control projects. In the cold of winter the dark green foliage takes on a purple hue. This juniper is also well suited for bonsai.



Juniper, Rocky Mountain (*Juniperus scopulorum*)



Quick Look:

- Native Conifer
- Max Height: 30'
- Max Width:15'
- Drought Hardy: Yes
- Growth Rate: Slow
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Hedge and Windbreak
- Super Stock
- Zones 3-7

Rocky Mountain Juniper, an Idaho native, attains heights of 20 to 30 feet with a medium to rapid growth rate. Although highly drought tolerant, Rocky Mountain juniper grows on a wide range of soils and will tolerate a high water table. It forms a very dense, symmetrical crown and is a superior small tree for windbreaks in this region. In winter it changes color from shades of gray to purple gray.



Kinnikinnick (*Arctostaphylos uva ursi*)



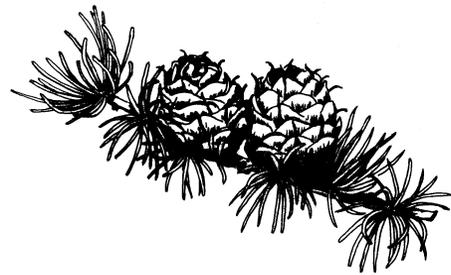
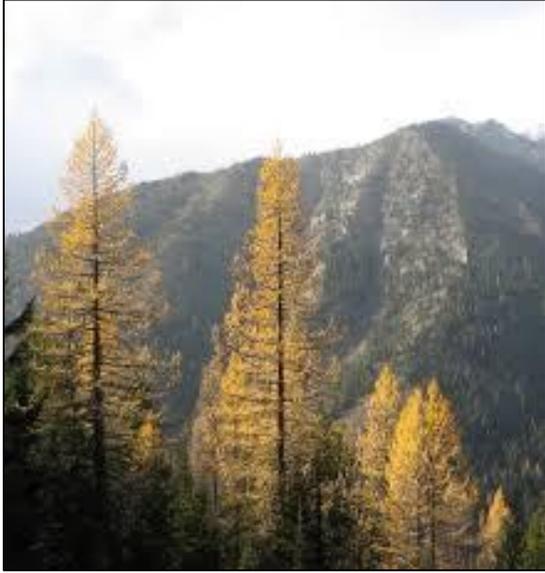
Quick Look:

- Native Groundcover
- Max Height: 6"
- Max Width: 15'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Soil Stabilization
- Super Stock
- Zones 2-6

Kinnikinnick, also known as bearberry, is a beautiful, spreading, evergreen ground cover. The whitish-pink, bell-shaped flowers are followed in fall by red berries that persist into winter, making the branches useful for fall and Christmas decorating. This Idaho native has a moderate growth rate, likes the sun, and is excellent for erosion control since it does well on a variety of sites ranging from moist to dry.



Larch, Western (*Larix occidentalis*)



Quick Look:

- Native Conifer
- Max Height: 70'
- Max Width: 15'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: --
- Uses: Reforestation
- Super Stock, 5 in³
- Zones 3-7

Western Larch is an Idaho native recommended primarily for reforestation. It attains maximum growth on deep, moist, porous soils in high valleys, and on northerly or westerly exposed slopes. Seedling growth is exceptional, as 4-year-old plants may exceed 8 to 10 feet in height.

Western larch is one of very few deciduous conifers, that is, it loses its needles each winter. If you order larch seedlings, you'll notice they have very few needles, if any, and the needles are a deep red to maroon. Although the seedlings look dead, don't worry — this spring the buds will open and new, green needles will grow. Next fall the needles will begin their annual ritual of turning yellow and falling to the ground.



Lilac, Common Purple (*Syringa vulgaris*)



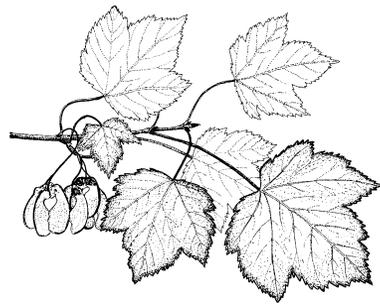
Quick Look:

- Non-native Shrub
- Max Height: 15'
- Max Width:12'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds
- Uses: Hedge, soil stabilization, and windbreak
- Super Stock
- Zones 3-7

Common purple lilac has a moderate growth rate and reaches 10 to 15 feet in height. Its dense growth and adaptability to a wide range of environments make it an excellent choice for outer rows of windbreaks. Their large, fragrant blossoms add aesthetic value in spring. Lilacs do well on alkaline or acidic soils, are highly resistant to drought and cold, and are very long lived.



Maple, Rocky Mountain (*Acer glabrum var douglasii*)



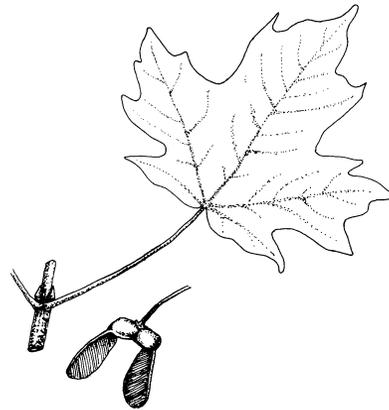
Quick Look:

- Native Shrub
- Max Height: 20'
- Max Width: 15'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Riparian and Soil Stabilization
- Super Stock
- Zones 4-6

Rocky Mountain Maple or Douglas Maple is a long lived, multiple-stemmed, shade tolerant shrub or small tree. This northern Idaho native usually grows from 4 to 15 feet, but it may reach heights of 20 to 40 feet. It favors moist-wet sites and does well on north exposures. In arid areas, it is found in the mountains and moist canyons. Rocky Mountain maple prefers a well-drained, acidic-neutral soil comprised of silt, sand, gravel, or rock. Fall color is beautiful — yellow and orange. Our seed source comes from northern Idaho.



Maple, Sugar (*Acer saccharum*)



Quick Look:

- Non-Native Hardwood
- Max Height: 70'
- Max Width: 45'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds and small mammals
- Uses: Specialty Crop
- Super Stock
- Zones 3-8

Sugar Maple is a large deciduous tree native to the northeastern U.S. A source of maple sugar, it grows moderately fast to about 60 to 70 feet or more. Good fall color of yellows, oranges, and reds. Plant where it has access to plenty of water — deep watering and periodic fertilizing will help keep roots down below the soil surface.



Milkweed, Showy (*Asclepias speciosa*)



Quick Look:

- Native Perennial
- Max Height: 5'
- Max Width: 3'
- Drought Hardy: No
- Growth Rate: Medium
- Wildlife Benefits: Birds and Insects
- Uses: Landscaping and Pollinator Gardens
- Super Stock
- Zones 3-10

Showy milkweed is an Idaho native, perennial forb with beautiful, fragrant, rosy-pink, 5-pointed star flowers. Showy milkweed grows 3-5' tall and spreads by rhizomes, forming large clumps. The stems die to the ground in the winter and grow back each spring. It prefers full sun and is quite cold and drought tolerant after its second year of establishment. This milkweed can grow in many soil types and is commonly found growing along ditches and roads as well as meadows and fields. Planting this species is beneficial because it, along with other types of milkweeds, is required for survival and reproduction of monarch butterflies. Monarch butterflies feed on the nectar and lay their eggs on the leaves of the milkweed. The milkweed is perfect for home landscaping and use in a butterfly garden or prairie meadow.



Ninebark, Common or Mallow (*Physocarpus malvaceus*)



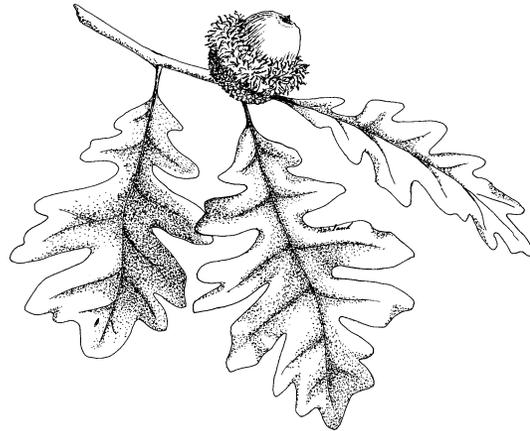
Quick Look:

- Native shrub
- Max Height: 7'
- Max Width: 7'
- Drought Hardy: Yes
- Growth Rate: Fast
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Hedge, soil stabilization, and windbreaks
- Super Stock
- Zones 2-5

Ninebark is a hardy Idaho native shrub with rounded clusters of white flowers and peeling bark. It can reach 7 feet at maturity, forming dense thickets. The thick growth also makes it a possibility for the outer rows of multiple-row windbreaks. This drought tolerant shrub provides brownish-red fall color.



Oak, Bur (*Quercus macrocarpa*)



Quick Look:

- Non-Native Hardwood
- Max Height: 75'
- Max Width: 80'
- Drought Hardy: Yes
- Growth Rate: Slow
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Specialty crop and windbreak
- Grown in 20 cu inch Jiffy Plugs
- Zones 2-8

Bur Oak, lovely, rugged and tolerant of adverse conditions, ranges westward into the Great Plains and eastern Montana. It will grow about 60 to 75 feet tall with a 30-foot spread. Its leaves are large (8 to 10 inches) with deep lobes. We grow seedlings from acorns collected near Filer, Idaho. Like other oaks, it should be watered during the first 2 to 3 dry seasons. Bur oak leaves turn a beautiful red color in the fall.



Oak, Bur-Gambel (*Quercus macrocarpa* var *gambelli*)



Quick Look:

- Non-Native Hardwood
- Max Height: 40'
- Max Width:80'
- Drought Hardy: Yes
- Growth Rate: Fast
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Specialty crop and windbreak
- Super Stock in 20 cu in Jiffy Plugs
- Zones 3-8



The Bur-gambel oak is a Bur oak hybrid which produces heavy crops of acorns at a young age. The drought tolerance of the Gambel oak combined with the cold tolerance of the bur oak make this hybrid one of the hardiest oaks.



Ocean-Spray (*Holodiscus discolor*)



Quick Look:

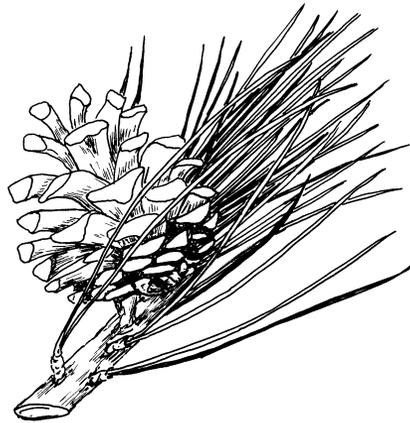
- Native Shrub
- Max Height: 20'
- Max Width: 6.5'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Soil Stabilization and Hedge
- Super Stock
- Zones 3-7



Ocean-spray is a native shrub that grows 5 to 20 feet tall. In late June and into July it produces tiny, cream-colored flowers packed into large, dense, drooping plumes at the end of its branches. It can be used in the exterior rows of multiple-row windbreaks or as a landscape plant. Faded flowers persist into winter, giving the plant a shaggy appearance.



Pine, Austrian (*Pinus nigra*)



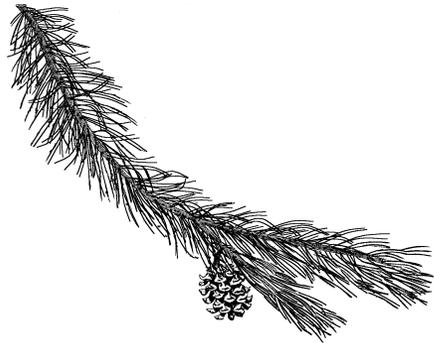
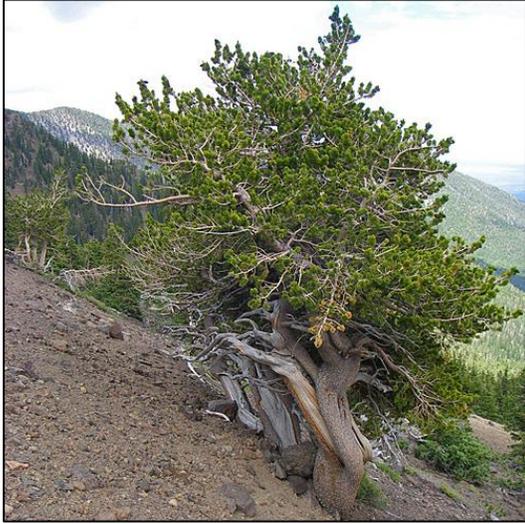
Quick Look:

- Non-Native Conifer
- Max Height: 60'
- Max Width: 40'
- Drought Hardy: Yes
- Growth Rate: Fast
- Wildlife Benefits: Birds and small mammals
- Uses: Windbreak and Christmas trees
- Super Stock
- Zones 3-7

Austrian Pine has a fast rate of growth, growing 18 to 24 inches a year once established, eventually achieving heights of 40 to 60 feet. It has a dense, dark green crown. It holds its lower branches very well and is an excellent tree with irrigation, making it ideal for windbreaks. If planted without supplemental watering in localities with less than 20 inches of annual precipitation, it needs a deep, fertile soil with good moisture-holding capacity. We grow seed from Macedonia selected for high density, excellent shape, and dark green foliage.



Pine, Bristlecone (*Pinus aristata*)



Quick Look:

- Non-Native Conifer
- Max Height: 30'
- Max Width: 6'
- Drought Hardy: Yes
- Growth Rate: Slow
- Wildlife Benefits: Birds and small mammals
- Uses: Specialty Crop
- Super Stock
- Zones 4-8

Bristlecone pine grows slowly into a bushy, multi-trunked tree or shrub. The needles of this pine are very unusual in that they are covered with white dots of dried resin giving the tree a frosted appearance. Bristlecones can adapt to alkaline, acidic, rocky, cold, or dry sites, and can cease growth during adverse years and resume growth in favorable years. Bristlecone pine can eventually reach 30 feet tall and 10 feet wide. Due to its picturesque growth habits, slow growth, and low water requirements, we recommend this pine for a smaller landscape, rock garden, or as an outdoor container plant. It can also be used as a bonsai plant, but must be kept outdoors.



Pine, Limber (*Pinus flexilis*)



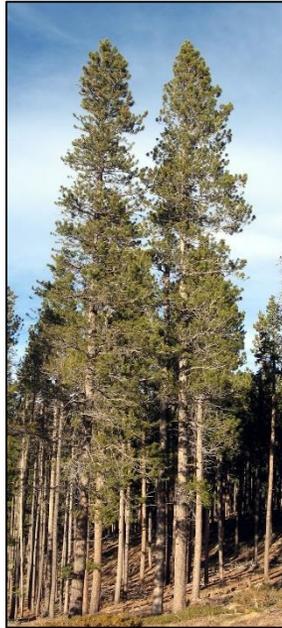
Quick Look:

- Native Conifer
- Max Height: 40'
- Max Width: 35'
- Drought Hardy: Yes
- Growth Rate: Slow
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Specialty crop
- Super Stock
- Zones 3-7

Limber pine, an Idaho native, is found in the mountains of east central Idaho. This slower growing, long lived tree reaches 20-40 feet tall and 15-30 feet wide, making it an excellent choice for many landscaping situations. Its drought, cold, and high elevation tolerance also make it a great candidate for revegetation projects. Limber pine can withstand severe environments and a range of soils, but grows best in full sun and well drained soil. This pine has deep tap roots, and is very windfirm. As the name implies, limber pine has very flexible branches which bend to withstand heavy snow and ice loads.



Pine, Lodgepole (*Pinus contorta var latifolia*)



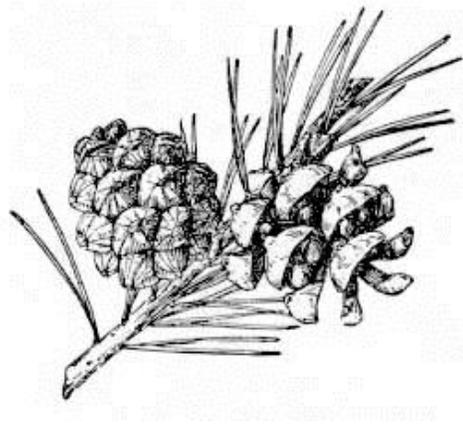
Quick Look:

- Native Conifer
- Max Height: 100'
- Max Width: 20'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds and small mammals
- Uses: Reforestation
- Super Stock, 5in³
- Zones 3-8

Lodgepole Pine is an Idaho native that rapidly grows into a 50 to 100 foot, straight, slender, branch-free tree. Native Americans used the long, slim saplings to make their buffalo-hide lodges, hence the name "lodgepole pine." This pine does well in a wide range of soil types and environments, although it prefers it cold and performs best on moist, well-drained, sandy or gravelly loam soils. It is commonly used to reclaim disturbed sites, and areas with dry soils or frost pockets where other species won't grow.



Pine, Pinyon (*Pinus edulis*)



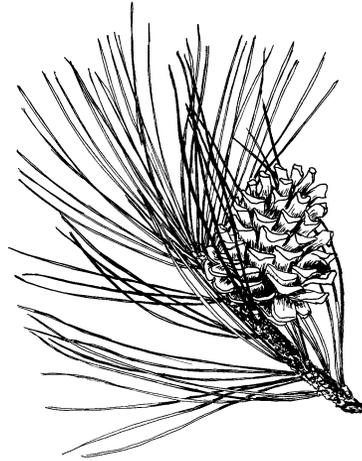
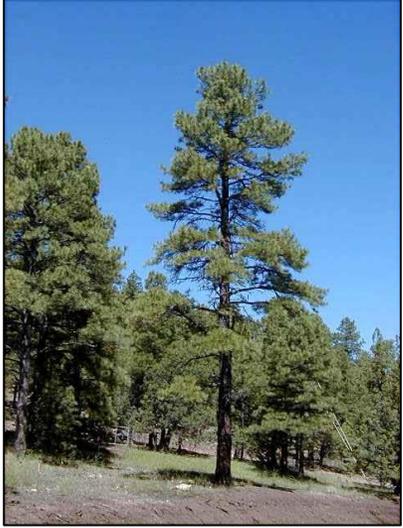
Quick Look:

- Non-Native Conifer
- Max Height: 30'
- Max Width: 20'
- Drought Hardy: Yes
- Growth Rate: Slow
- Wildlife Benefits: Birds and small mammals
- Uses: Specialty crop and Christmas tree
- Super Stock
- Zones 4-8

Pinyon pine or two-needle pinyon is a slow-growing, long-lived, 20 to 30 foot tree. It is extremely drought and cold tolerant, and has adapted to a wide range of soils, moisture conditions and temperatures. Pinyon pine is perhaps known best for its 'pine nuts' that the tree starts to produce around the age of 25 years. Pinyon pine are also popular as Christmas trees in the southwest because of their bluish color and aromatic needles. This is the state tree of New Mexico.



Pine, Ponderosa (*Pinus ponderosa* var *ponderosa*)



Quick Look:

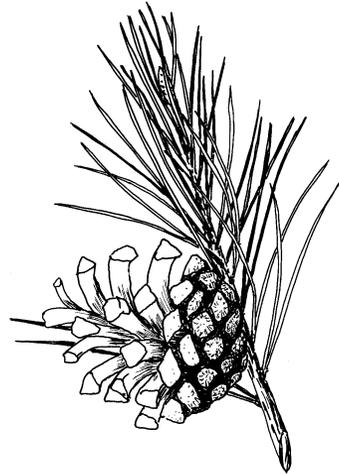
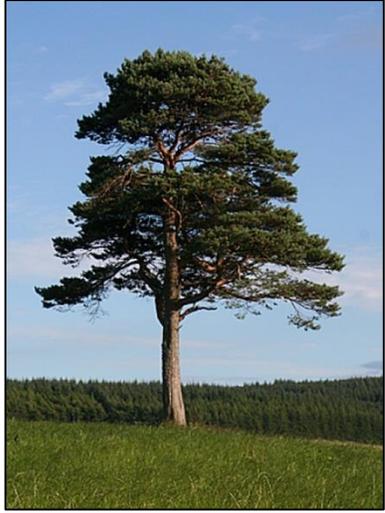
- Native Conifer
- Max Height: >100'
- Max Width: 30'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds and small mammals
- Uses: Reforestation and Windbreak
- Super Stock, 5in³
- Zones 3-6

Ponderosa Pine, also known as yellow pine or bull pine, is an Idaho native with a medium growth rate (18 to 24 inches a year once established), and can reach a mature height of over 100 feet. It is aptly named, for ponderosa means "large" and this pine is one of the largest pines in the world! It has excellent wood and is one of Idaho's most valuable timber trees.

Ponderosa pine withstands hot, dry sites well, and adapts to a variety of soil conditions but must have good drainage and full sunlight.



Pine, Scotch (*Pinus sylvestris*)



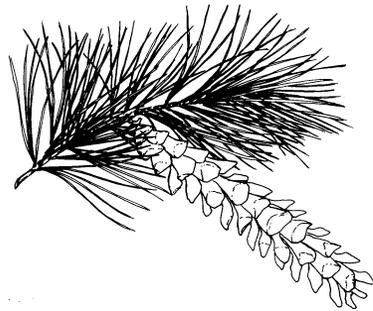
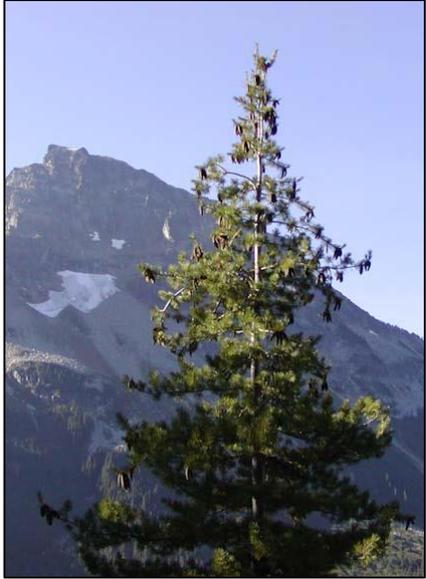
Quick Look:

- Non-Native Conifer
- Max Height: 70'
- Max Width: 40'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds and small mammals
- Uses: Windbreak and Christmas trees
- Super Stock
- Zones 3-7

Scotch Pine, native to northern Eurasia, can reach mature heights of 40 to 70 feet. Widely used for windbreaks, this pine is generally easy to establish, adapting well to a variety of soil conditions. They are also popular Christmas trees.



Pine, Western White (*Pinus monticola*)



Quick Look:

- Native Conifer
- Max Height: 200'
- Max Width: 40'
- Drought Hardy: No
- Growth Rate: Medium
- Wildlife Benefits: Birds and small mammals
- Uses: Reforestation
- Super Stock, 5in³
- Zones 3-9

Western White Pine is an Idaho native and the state tree. We recommend it for reforestation or landscape usage in northern portions of the state. This rapid growing evergreen with blue-green foliage grows best on rich, porous soils in moist valleys and on middle and upper slopes of northerly exposure. Our seed source, the R.T. Bingham White Pine Seed Orchard located at the University of Idaho, offers blister-rust resistance. Its the same seed source used by the Idaho Department of Lands and private industry.



Plum, American (*Prunus americana*)



Quick Look:

- Non-Native Shrub
- Max Height: 30'
- Max Width: 15'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Soil Stabilization and Windbreak
- Super Stock
- Zones 3-8

American Plum, a large shrub or small tree (20 to 30 feet tall), is native throughout the eastern and central U.S. It has rapid growth with wide-spreading branches and grows well in outer rows of multiple-row windbreaks. This plum flowers profusely in late spring, making it an attractive addition to any planting. Plums can be used to make jams, jellies, and pies.

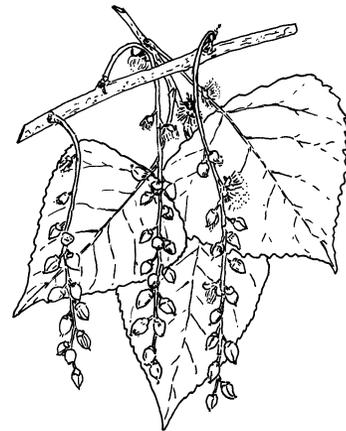


Poplar, Idaho Hybrid (*Populus spp.*)



Quick Look:

- Native Hardwood
- Max Height: 80'
- Max Width: 30'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds
- Uses: Riparian and Windbreak
- Super Stock
- Zones 3-7



Idaho Hybrid Poplar grows rapidly, as much as 6 to 10 feet a year under irrigated conditions. This variety is especially well adapted to the climate, soil, and growing conditions encountered in Idaho. If properly cultivated, this hybrid will offer quick wind protection or screening. This species will not produce the white cotton-like “summer snow” that other poplars do. They grow best on well-drained soils with high water and nutrient availability.



Rose, Rugosa (*Rosa rugosa*)



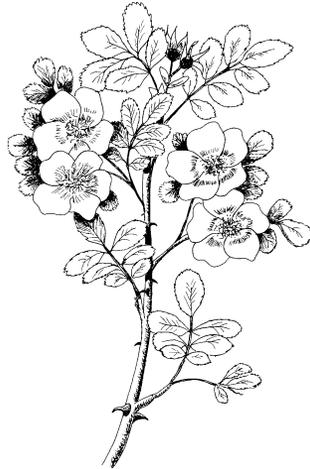
Quick Look:

- Non- Native Shrub
- Max Height: 6'
- Max Width: 6.5'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Soil Stabilization, Windbreak, and Hedge
- Super Stock
- Zones 2-7

Rugosa Rose is native to Europe and Central Asia and is an extremely hardy rose, withstanding hard freezes, wind, and drought, while still showing off good fall color. This rose grows 4 to 6 feet tall, making it good for single-row hedges or exterior rows of multiple-row windbreaks. Deep purple to pink to white flowers, up to 3 inches in diameter, give way to large red fruits (hips). They may flower the same year planted.



Rose, Woods (*Rosa woodsii*)



Quick Look:

- Native Shrub
- Max Height: 6'
- Max Width: 6.5'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Soil Stabilization and Windbreak
- Super Stock
- Zones 3-6

Woods Rose, an Idaho native shrub, grows in a wide range of soil types and textures, although it favors moist, well-drained soils. It flourishes in moderate shade to full sun and tolerates high pH and limestone-derived soils. This hardy, drought tolerant 2 to 6 foot high shrub spreads by rhizomes, making it an effective tool in revegetating sites along streambanks and road cuts. The 2-inch pink flowers are followed by rose hips that provide vitamin C and can be dried and used in teas, jellies, fruitcakes, and puddings. Our seed source is northern Idaho.



Serviceberry (*Amelanchier alnifolia*)



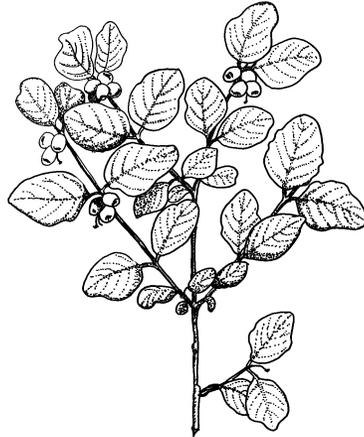
Quick Look:

- Native Shrub
- Max Height: 20'
- Max Width: 5'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Soil Stabilization and Windbreak
- Super Stock
- Zones 2-6

Serviceberry is an Idaho native called many things: Juneberry, shadblow, serviceberry, sarvisberry, Saskatoon serviceberry, and amelanchier. Serviceberry is a deciduous shrub or small tree, growing to about 20 feet. In early spring, it has drooping white or pinkish flowers that fade rapidly, replaced with purple, edible fruits. New foliage is purplish - fall color is red. Plants are extremely cold-hardy and drought resistant once established and ideal for exterior rows of multiple-row windbreaks.



Snowberry (*Symphoricarpos albus*)



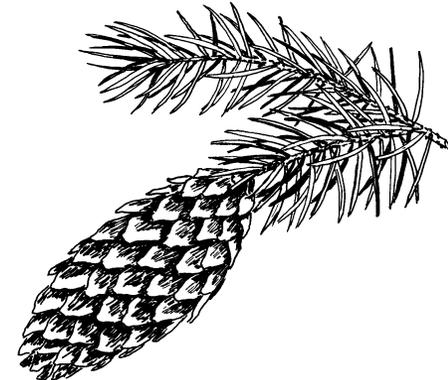
Quick Look:

- Native Shrub
- Max Height: 6'
- Max Width: 13'
- Drought Hardy: Yes
- Growth Rate: Fast
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Soil Stabilization and Windbreak
- Super Stock
- Zones 3-6

Snowberry is a common Idaho native shrub that grows in a wide variety of soil types and environmental conditions. It produces white berries in the fall and usually grows 3 to 4 feet high but can reach 6 feet in riparian areas. Snowberry spreads by underground rhizomes, forming a dense thicket. This characteristic makes it a great plant for bank and soil stabilization and erosion control.



Spruce, Colorado Blue (*Picea pungens*)



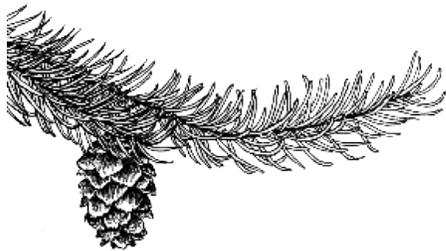
Quick Look:

- Native Conifer
- Max Height: 60'
- Max Width: 20'
- Drought Hardy: Yes
- Growth Rate: Slow
- Wildlife Benefits: Birds and small mammals
- Uses: Windbreak and Christmas tree
- Super Stock, 5in³
- Zones 2-7

Blue Spruce can grow unusually slow the first 1 to 3 years after planting, but has a medium growth rate after that. Its crown is very dense with attractive pyramidal form, reaching heights of 50 to 60 feet. It makes an excellent windbreak species in most regions of the state and traps and holds snow well. The color varies from green to blue, but we grow seedlings from seed collected on the Kaibab National Forest in Arizona to ensure a higher percentage of blue foliage.



Spruce, Engelmann (*Picea engelmannii*)



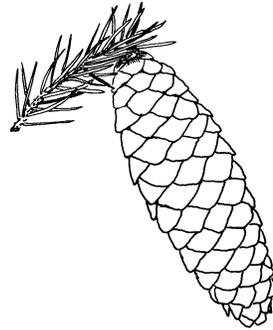
Quick Look:

- Native Conifer
- Max Height: >100'
- Max Width: 20'
- Drought Hardy: No
- Growth Rate: Slow
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Reforestation
- Super Stock
- Zones 2-6

Engelmann spruce is adapted to high elevations and has a slim, rapidly tapering crown that sheds heavy snow. This Idaho native prefers deep, loamy soils of high moisture content. It is primarily used for the reforestation of cool, moist sites near timberline. Engelmann spruce is generally greener than blue spruce, although specimens have been found that range from gray-green to silver-blue.



Spruce, Norway (*Picea abies*)



Quick Look:

- Non-Native Conifer
- Max Height: 80'
- Max Width: 30'
- Drought Hardy: No
- Growth Rate: Medium
- Wildlife Benefits: Birds, small, and large mammals
- Uses: Windbreak and Christmas Tree
- Super Stock
- Zones 2-7

Norway Spruce, a native of Europe, attains heights of 60 to 80 feet. Although spruce in general are slow growers compared to other conifer species, Norway spruce has one of the fastest growth rates of the spruces. Norway spruce grows in many soil conditions and environments, but prefers moist, deep soils with high fertility.



Sumac, Oakleaf (*Rhus trilobata*)



Quick Look:

- Native Shrub
- Max Height: 6'
- Max Width: 8'
- Drought Hardy: Yes
- Growth Rate: Slow
- Wildlife Benefits: Birds and small mammals
- Uses: Soil Stabilization, Windbreak, and Hedge
- Super Stock
- Zones 3-6

Oakleaf Sumac, formerly skunkbush sumac, is very drought tolerant. Growing 3 to 6 feet tall, it forms clumps and is suited to the outer rows of multiple-row windbreaks. The deep green summer foliage changes to bronzy red in fall, and clusters of red fruit develop in late summer. It prefers a well-drained soil.



Syringa, Lewis or Mockorange (*Philadelphus lewisii*)



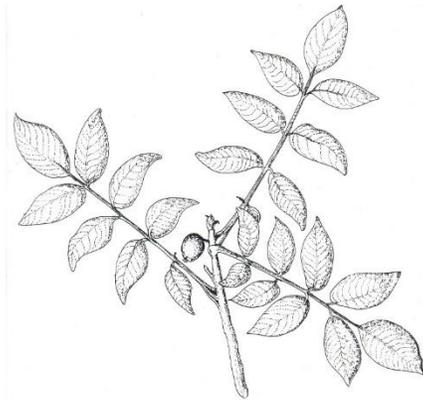
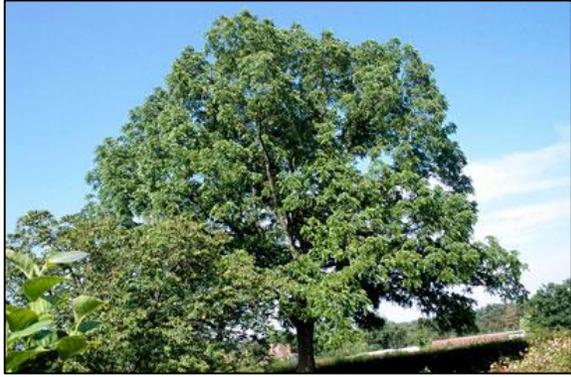
Quick Look:

- Native Shrub
- Max Height: 20'
- Max Width: 12'
- Drought Hardy: Yes
- Growth Rate: Medium
- Wildlife Benefits: Birds and small mammals
- Uses: Soil Stabilization and Windbreak
- Super Stock
- Zones 3-6

Lewis Syringa or Mockorange, a widespread Idaho native and the state flower, grows 6 to 20 feet tall. It is not to be confused with *Syringa vulgaris*, our common lilac. This beautiful shrub is named after Captain Meriwether Lewis who first discovered it along the Clearwater River in 1806. In early summer, delicate and fragrant white flowers cover this shrub, making it an attractive addition to any landscape. It's very drought tolerant, often growing on rocky hillsides and in cracks in basalt fields. Syringa could probably be used in outer rows of multiple-row windbreaks.



Walnut, Black (*Juglans nigra*)



Quick Look:

- Non-Native Hardwood
- Max Height: >100'
- Max Width: 75'
- Drought Hardy: No
- Growth Rate: Medium
- Wildlife Benefits: --
- Uses: Specialty Crop and Windbreak
- Super Stock
- Zones 4-9

Black walnut, from the eastern U.S. forests, has one of the most valued woods in the country. Its used in cabinet making, gunstocks, and furniture. This tree is medium to fast growing with a single, long smooth trunk, reaching 100-120 feet in height, although it can get as high as 150 feet under optimum conditions. It does well in the interior rows of multiple-row windbreaks. Black walnut prefers deep, well-drained neutral soils but will tolerate drier sites Black walnut leaves contain a toxic compound which is injurious to nearby crops such as tomatoes, potatoes, apples and blackberries. Our seed comes from a Purdue #1 black walnut plantation in north central Idaho.



Willow, Arctic Blue (*Salix purpurea*)



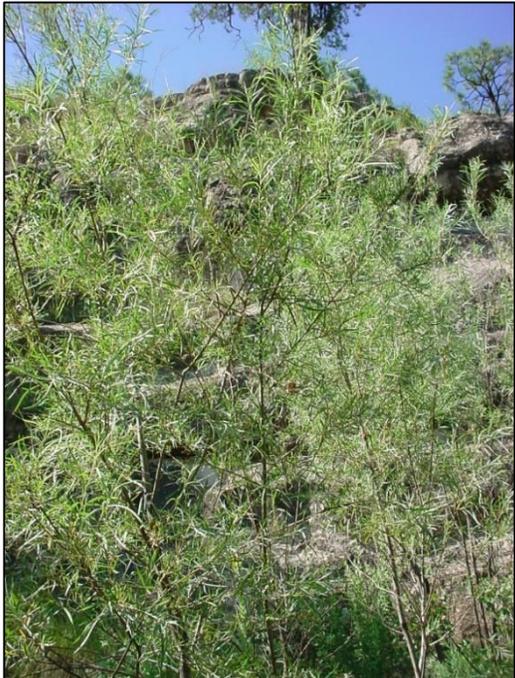
Quick Look:

- Native Shrub
- Max Height: 15'
- Max Width: 7'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Bird and small mammals
- Uses: Soil Stabilization, Windbreak, and Hedge
- Super Stock
- Zones 3-7

Arctic Blue Willow grows into a very dense mound, making it a superb living snow fence or hedge. It's also ideal for planting as a single-row windbreak or in exterior rows of multiple-row windbreaks. Arctic blue willow has a moderate growth rate, prefers moist soils, and reaches a mature height of 10 to 15 feet.



Willow, Coyote (*Salix exigua*)



Quick Look:

- Native Shrub
- Max Height: 25'
- Max Width: 15'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds and large mammals
- Uses: Soil Stabilization and Riparian
- Super Stock
- Zones 4-6

Coyote Willow is an Idaho native shrub that is probably found in every county in the state. It reaches 25 feet at maturity and spreads by underground roots, forming colonies. It grows in moist sands and gravel and requires a minimum of 20 to 25 inches annual precipitation if not on a perennial stream. This willow is used in conservation plantings for streambank stabilization, riparian site restoration, and wildlife habitat. We grow the USDA NRCS release 'Silvar' from eastern Washington.



Willow, Drummond (*Salix drummondiana*)



Quick Look:

- Native Shrub
- Max Height: 12'
- Max Width: 15'
- Drought Hardy: No
- Growth Rate: Fast
- Wildlife Benefits: Birds, large mammals, and honeybees
- Uses: Soil Stabilization and Riparian
- Super Stock
- Zones 4-9

Drummond Willow is an Idaho native shrub reaching 12 feet at maturity with a canopy width of 15 feet. It's commonly found in mountainous portions of Idaho, especially on steep, stony-lined streams. It grows in moist sands and gravel and requires a minimum of 20 to 25 inches annual precipitation if not on a perennial stream. Drummond willow is recommended for erosion control, riparian site restoration and wildlife habitat. Willow pollen is an important food source in the spring for honeybees. We grow the USDA NRCS release 'Curlew' from eastern Washington



University of Idaho
College of Forestry, Wildlife, and Range Sciences
Forest Nursery Advisory Committee

CHARTER

Adopted February 10, 1986

The College's recent planning process, called a "quest for Excellence", identified topical areas in which the College could excel. The Nursery is identified in the Plan by faculty and resource leaders as such an area. The College is unique among western forestry schools in having an operational nursery for student training, faculty and student research, and public service. The College Nursery, due to Dr. David Wenny's efforts, has received both a regional national reputation for the quality of the seedlings, graduates, and operational research. The Nursery is a laboratory for continuous exploration and product refinement concurrent with the University of Idaho's mission: teaching, research and service.

Establishment of an Advisory Committee was proposed in the new Forest Nursery Role and Mission Statement developed during fall 1985 during discussions with the Kootenai Valley Nursery Exchange and private seedling producers. Private, state, and federal advisors, selected from nominees by these organizations-the objective being a balanced representation from all user groups. The Committee is to provide a forum for communication to facilitate the open and honest exchange of ideas to solve and prevent misunderstandings and problems. The basic premises are that several heads are better than one, external advice can guide the program to greater excellence, relevance and service while also providing mutual support.

The Responsibilities of the Nursery Advisory Committee are to:

1. Assist the Nursery in developing goals, objectives and programs towards greater excellence and relevance to needs
2. Help keep the nursery informed of emerging resource problems, needs and situations that can be addressed within the framework of the College's mission.
3. Become informed about nursery activities, problems and operations and advise the College on their implementation and resolution.
4. Help promote communication, understanding and support for nursery programs among constituent groups.
5. Help generate funding, internships, and jobs to support nursery teaching and research.

Notes from each meeting with information, suggestions and recommendations developed by the Advisory Committee will be presented by the Committee Chairman in writing to the Dean of the College of Forestry, Wildlife and Range Sciences with copies to the Forest Resources Department Head. The Chairman of the Forest Nursery Advisory Committee will be a member of CFWR Guidance Council so as to represent Nursery interests in that larger advisory body that focuses on total College programs.



About this Catalog

Authors

Pitkin Forest Nursery Staff

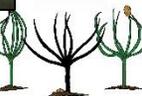
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Pitkin Forest Nursery
1025 Plant Science Road
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www.uidaho.edu/seedlings



Picture Sources

*Picture Sources Start with top left image

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