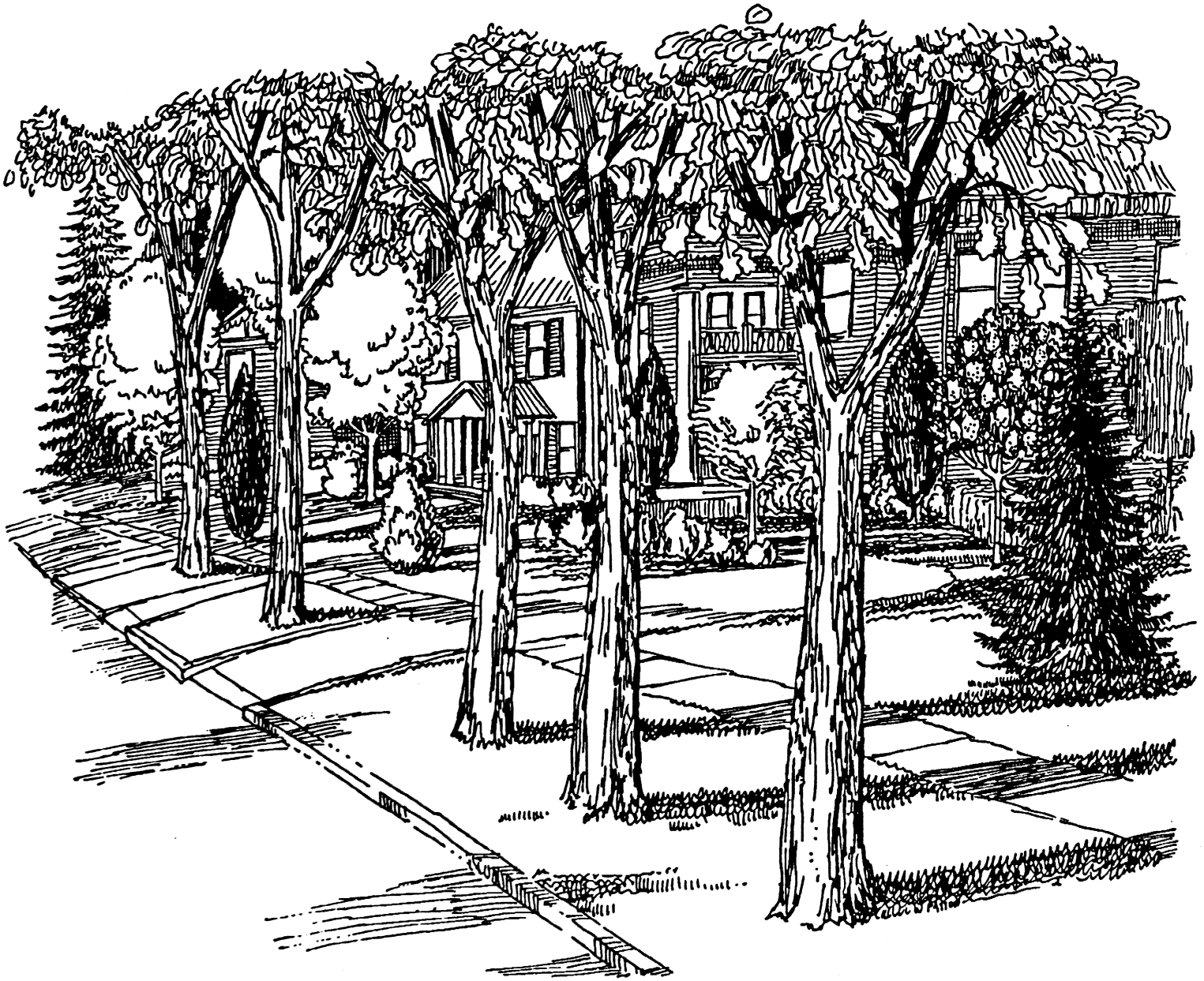


Tree Selection Guide

for street and landscapes throughout Idaho



Boise Urban Forestry
Boise Parks & Recreation Department

Tree Selection Guide

for street and landscapes throughout Idaho

a project of the
Urban Forestry Unit
of
Boise Parks & Recreation Department

CONTRIBUTORS:

Idaho Nursery Association
Idaho Power
J. Frank Schmidt & Son Company

REVIEWERS:

Amy Burnham - Parks & Recreation Design Unit
Joe Carter and Kevin Glenn - Jayker Tree Farm
Gary Moen, Advanced Instructor - Horticulture Dept., BSU
Dan Ritchie - The Lawn Company
John Sterling - Sterling Nursery
Keith Warren - J. Frank Schmidt & Son

URBAN FORESTRY STAFF CONTRIBUTORS:

Steve Churchillo, City Forester - Text
Dan Desjarlais, Tech. Specialist - Species Selection, Text
Brian Jorgenson, Forestry Assistant - Research & Species Selection, Text, Layout
Mary Jane Marlow, Forestry Coordinator - Project Manager, Design, Text
Jerry Stallsmith, Supervisor - Species Selection

Production: Urban Forestry Unit
Printing: City of Boise Central Services Division
Illustrations & Cover: Wayne Patton, Artist

The collaboration between the contributors, reviewers and Urban Forestry staff was critical to the development of this innovative tree selection guide. The recommendations contained within are the product of the best insights and perspectives of everyone involved, formulated in a spirit of cooperation with a high level of commitment to the intrinsic value of trees.



Boise, Idaho
208-384-4085 (TDD & Voice)

Table of Contents

INTRODUCTION	3
TREES...A BOISE HERITAGE	3
HOW TO USE THIS GUIDE	4
TREE FORMS	4
SYMBOLS	5
USDA ZONES	6
STREET TREE PLANTING PERMIT	6
PLAN BEFORE YOU PLANT	6
TREE PLANTING INSTRUCTIONS	7
MAINTAINING HEALTHY TREES	8
WATERING	8
MULCHING	8
FERTILIZING	8
PRUNING	9
PESTS	9
WEEDS & USE OF HERBICIDES	9
LANDSCAPE USES	10-12
TREE AVAILABILITY	12
CLASS I	13-19
CLASS II	20-30
CLASS III	31-35
CONIFERS	36-45
ADDITIONAL RECOMMENDED TREE SELECTIONS	46-48
UNCOMMON LANDSCAPE TREES	49
RIGHTS-OF-WAY TREES NOT PERMITTED	49
TREES FOR IDAHO	50
CONTRIBUTING SPONSORS	51

INTRODUCTION

The Urban Forestry Unit of the Boise Parks & Recreation Department manages the publicly owned portion of Boise's urban forest resource which includes street, park, Greenbelt and cemetery trees. This guide was created to help answer the most commonly asked questions about appropriate tree selection in a number of different landscape applications, from home to commercial. The importance of planting the right tree in the right location is at the heart of sound community forestry practices.

In previous publications this guide was primarily used by homeowners to select trees for rights-of-way plantings. Over the years we have realized many people were using the guide for tree selection for other areas of their yard. In addition, architects and developers were using the guide for landscape plant selection. Therefore, we saw the need to broaden the species recommended and to note which trees were suited for street or landscape use.

At present there exists no statewide publication stating what tree species will grow successfully in a particular locale. To help address that dilemma, we obtained lists of trees from four areas throughout Idaho. The lists appear on page 50 with the name and phone number of the contact agency should you have further questions.

It is our hope that this guide will expand the availability of tree species marketed at nurseries throughout Idaho.

TREES...A BOISE HERITAGE

Long before Idaho received its statehood in 1890, early pioneers began the task of planting trees throughout Boise for the purpose of improving community appearance and providing cool shade in an otherwise harsh desert environment. Today, thousands of trees now grace our city thanks to the foresight of these early pioneers and more recently due to the ongoing efforts and commitment of city administrators and local citizenry.

Recent public awareness of the benefits of trees and their importance in achieving an enhanced quality of life, has spawned a national movement to secure a place for trees in every community. It has been demonstrated that trees possess the ability to trap air and underground pollutants, conserve energy, control erosion, produce oxygen, calm our senses, enhance property values and beautify our surroundings. Planting trees and nurturing them to maturity is one thing an individual can do to put society on the track to a sustainable future.

We recommend you keep this guide as a resource when selecting trees for Boise and throughout Idaho. We hope you enjoy all the features this guide has to offer, as much as we have enjoyed compiling this comprehensive information.



*Boise Urban Forestry
Accredited Forestry Designation
Society of Municipal Arborists
1993*

HOW TO USE THIS GUIDE

This guide is divided into sections determined by the width, height and spacing requirements that trees will need at maturity. Broadleaf trees (trees that normally shed their leaves annually) have been arranged into classes, I, II, and III for easy reference. Conifers (mostly evergreen trees), are listed next in alphabetical order.

Class I Are small trees which normally do not reach a large height or trunk diameter. They can be planted beneath power lines and in smaller planting areas. Typical spacing 20-30 feet.

Class II Are usually considered medium sized trees and predominately planted for their shade and general landscape uses. Typical spacing 30-40 feet.

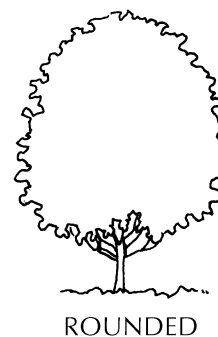
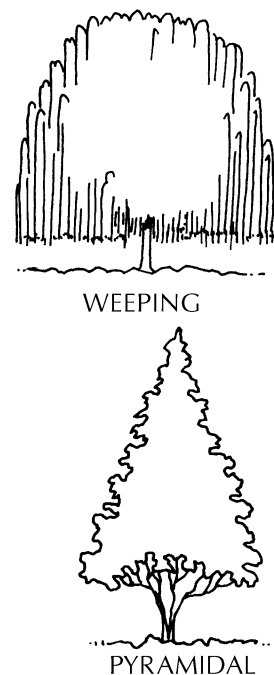
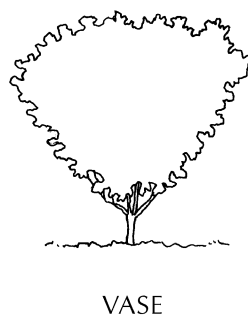
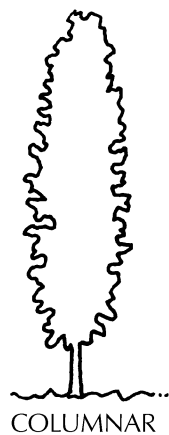
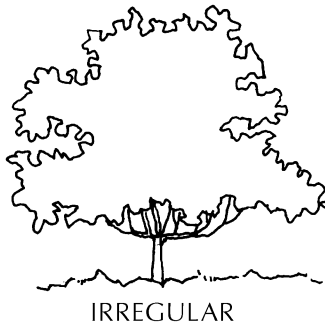
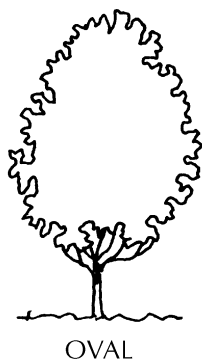
Class III Many are long-lived and attain large height and trunk diameter. When selecting a tree from this class, be sure you have ample room to accommodate it at maturity. Typical spacing 40-60 feet.

Conifers Provide year round greenery, screening, and serve as excellent wildlife sanctuaries. They generally should not be pruned and therefore need large growing areas away from buildings, sidewalks and driveways. Spacing varies with species.

Specific heights, crown spreads and other tree characteristics are found under the description of each tree.

TREE FORMS

The tree forms pictured here are examples of tree shapes at maturity. It should give you a good idea of how the tree will look and help you plan its inclusion in your land-scape. These forms are referred to under the tree characteristics in this guide.



SYMBOLS

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



Solar Friendly Trees — 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. Solar friendly trees provide shade during the Summer and a large percentage of sunlight penetration during the Winter, which results in a solar energy efficient home. Solar friendly trees have an open branch structure, leaf out late in the Spring, and drop their leaves early in the Fall.

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



Drought Tolerance — No tree can survive in permanently dry soil. Some tree species, however, 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:

Lower
Water
Demand



Moderate
Water
Demand



Higher
Water
Demand



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 trees regularly in hot, dry periods.



Wildlife Friendly - Produces fruit, nuts, shelter or nesting sites for animals and birds



Street Tree - OK to plant in the rights-of-way along streets (permit required)



Utility Friendly - OK to plant under utility lines



Windbreaks - Helps screen and deflect winds away from homes and buildings

USDA ZONES

The United States Department of Agriculture has 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 5:	-20 to -10°F
Zone 4:	-30 to -20°F	Zone 6:	-10 to 0°F

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

STREET TREE PLANTING PERMIT

If you are a Boise resident and wish to plant a tree in the public rights-of-way (property extending beyond the roadway to the abutting private property), you will need a permit from the Urban Forestry Unit. There is no charge for the permit or the labor to plant it. We have several programs from which to select and purchase a tree. Please call 384-4085 for further information on cost, available species and maintenance responsibilities. Trees that are purchased and planted under this City program are guaranteed for a period of one year, **if properly watered and cared for by the property owner**. After the tree is planted, you will be billed for the cost of the tree.



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 procedures known 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 and space or shade limitations. Selecting a tree that meets the site conditions **is the single most important factor in guaranteeing its success**. Begin by making a sketch of your property showing existing vegetation, utilities, sidewalks and driveways. When planting more than one tree or groups of trees, be conscious of the different planting space required for each species. Be sure to group those needing similar growing conditions together (i.e. water, light and soil types). In Idaho you **must** call Digline at 1-800-342-1585 before digging.




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

- A. **Landscaping purpose** — To provide shade, color, a screen from the wind or to enhance wildlife habitat.
- B. **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.
- C. **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 for soil testing information.
- D. **Maintenance** — All trees need regular watering, routine pruning and periodic inspection for pests and disease. Planning now can save time and money later.

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. Each has advantages and disadvantages, but a sturdy tree will result by carefully following the procedures outlined below.

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 become established in the native soil. Continue with the steps below, depending on the type of stock you are planting.

Type	Planting Procedures
Container Stock 	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.
Balled & Burlapped (B&B) 	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.
Bare Root 	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.

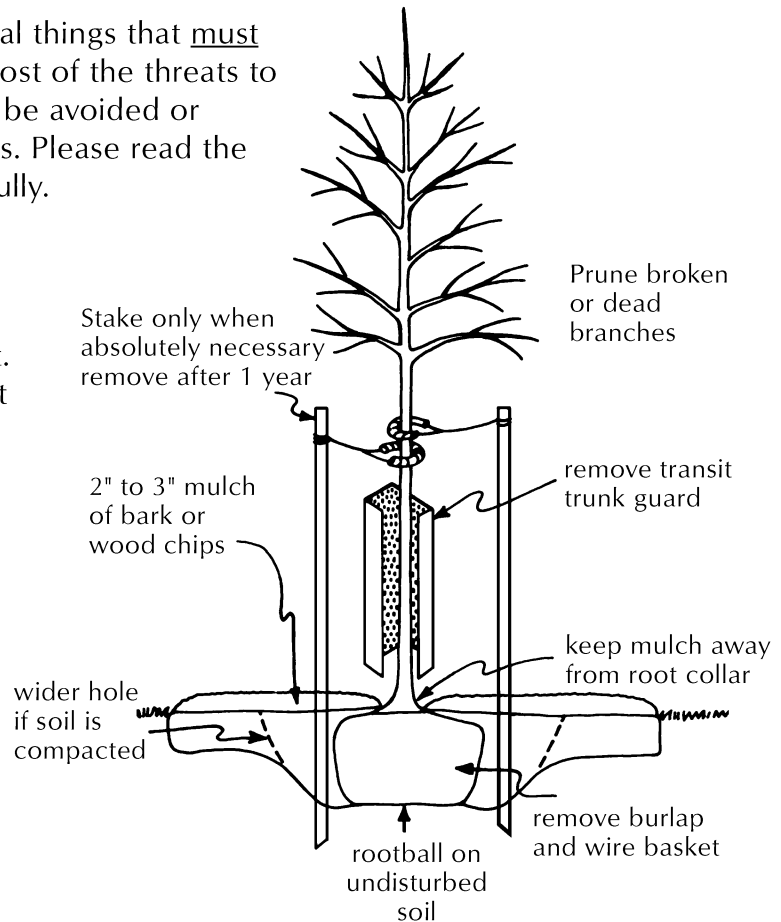
2. Stand back and inspect the tree from several sides to make sure it's straight. If not, move the tree in the hole until it stands straight. Backfill with soil around the roots until the hole is half full. Water sparingly to settle the soil and remove air pockets. Lightly tamp the soil in with the shovel handle to compress the soil around the root ball, taking care not to damage the roots. Continue adding soil until the hole is filled. **Do not** cover the top of the root ball with soil.
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. Unless you live in a windy area, it is not necessary to stake the tree. If you do stake, remove them after one year. Stake if the root ball is fractured or the trunk is not stable.

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 carefully.

WATERING

Watering the tree regularly during the first year is critical to its establishment. Apply about 1½" of water per week at one time, rather than watering daily. Place a shallow pie pan under the tree canopy and water the area until 1½" accumulates in the pan. Depending on your sprinkler system, it may take ½ hour to 3-4 hours. Begin watering in the Spring when soils start drying out and continue until Fall. Deduct rainfall received during the week from the 1½" total. Water more often in periods of drought and 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 6' diameter. Keep mulch away from the tree trunk a few inches to avoid trunk rot. As mulch decomposes, it enriches the soil and provides organic matter and beneficial micro-organisms.

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. 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 procedure. 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. For more information or for a list of licensed tree pruners please call 384-4085.



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.

In selecting the trees for the illustrated section of this guide, we have chosen species that have adapted well to our local environment. Although we have listed certain pests associated with these trees, with the proper attention to correct planting procedures, growing conditions and maintenance, you will promote a tree's best protection against pests...**good health.**

WEEDS AND THE USE OF HERBICIDES



Keep the area around your tree free of weeds and other competing plants. Use wood chip mulch to suppress the weeds or remove them by hand when possible. Avoid the use of herbicides near the tree as certain formulations may seriously injure or kill the tree. If you do decide to use herbicides, avoid getting any on the leaves, branches, trunk or near the root area of any plant you wish to keep. 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.

Landscape Uses of Trees in This Guide

Each of the tree species pictured in this selection guide is listed below in alphabetical order with some outstanding features, qualities and possible landscape uses. This table is not meant to limit uses of these trees, but rather to assist you in selecting better trees for particular landscaping situations. You are encouraged to plant species where you feel they will serve your needs while maintaining healthy growth and good aesthetic qualities.

Species Common Name	Ever-green	Showy Flowers	Fall Color ¹	Street Tree ²	Drought Tolerant	Wildlife/ Natural	Solar Friendly	Powerline Friendly	Wind Break	Page
Alder, Mountain			•			•	•			20
Arborvitae, Eastern	•									36
Ash, Green			•	•	•	•	•			20
Ash, Raywood			•	•		•	•			21
Ash, White			•	•		•	•			21
Baldcypress, Common			•							36
Beech, European			•	•		•	•			31
Birch, River				•		•	•			22
Birch, Water							•	•		47
Buckeye, Yellow		•	•	•			•			47
Catalpa, Northern		•		•	•		•			31
Cedar, Alaska	•									47
Cedar, Eastern Red	•				•	•			•	47
Cedar, Western Red	•					•				47
Cherry, Higan		•		•	•	•	•	•		46
Cherry, Oriental		•	•	•		•	•	•		46
Cherry, Yoshino		•		•		•	•	•		46
Chokecherry, Common		•	•	•		•	•	•		46
Coffeetree, Kentucky		•		•	•		•			32
Corktree, Amur			•	•		•	•			22
Cottonwood, Black			•			•	•			32
Crabapple, Red Flowering		•		•	•	•	•	•		13
Crabapple, White Flowering		•		•	•	•	•	•		13
Dogwood, Flowering		•	•	•		•	•	•		14
Dogwood, Kousa		•	•	•		•	•	•		46
Douglasfir	•				•	•			•	37
Falsecypress, Lawson	•									37
Filbert, Turkish			•	•	•	•	•			23
Fir, White	•				•	•			•	38
Ginkgo			•	•			•			23
Goldenraintree		•	•	•	•		•	•		14
Hackberry, Common				•	•	•	•			24
Hawthorn, Douglas		•	•		•	•	•	•		46
Hawthorn, English		•	•	•	•	•	•	•		46

¹ Tree species having outstanding red, yellow or orange fall color. See individual tree characteristics for description of fall foliage color.

² Permit required to plant trees on public right-of-way property. There is no cost for the permit. Call Boise Urban Forestry at 384-4085.

Species Common Name	Ever-green	Showy Flowers	Fall Color ¹	Street Tree ²	Drought Tolerant	Wildlife/ Natural	Solar Friendly	Powerline Friendly	Wind Break	Page
Hawthorn, Green		●	●	●	●	●	●	●		46
Hawthorn, Laval		●	●	●	●	●	●	●		46
Hawthorn, Singleseed		●		●	●	●	●	●		46
Hawthorn, Washington		●	●	●	●	●	●	●		15
Hickory, Shagbark			●		●	●	●			47
Honeylocust, Thornless			●	●			●			24
Hornbeam, European				●			●			25
Horsechestnut, Common		●		●		●	●			25
Incensecedar, California	●					●				38
Ironwood				●			●			47
Juniper, Chinese	●				●	●		●		47
Juniper, Rocky Mountain	●				●	●				39
Larch, European			●			●				39
Lilac, Japanese Tree		●		●			●	●		15
Linden, American		●		●			●			26
Linden, Littleleaf		●		●	●					26
Linden, Silver		●		●						27
Magnolia, Cucumbertree				●						27
Magnolia, Saucer		●					●	●		16
Magnolia, Star		●	●				●	●		46
Maple, Amur			●		●	●	●	●		16
Maple, Bigtooth			●			●	●	●		46
Maple, Black			●	●		●	●			47
Maple, Hedge			●	●	●	●	●	●		17
Maple, Norway			●	●		●	●			28
Maple, Rocky Mountain			●			●	●	●		46
Maple, Sugar			●	●		●	●			28
Maple, Sycamore				●		●	●			47
Mountain Ash, European		●	●			●	●	●		46
Oak, Bur				●	●	●				33
Oak, English				●	●	●				33
Oak, Red			●	●	●	●				34
Oak, Sawtooth			●	●	●	●				47
Oak, Shumard			●	●	●	●				47
Oak, Swamp White				●	●	●				34
Pagodatree, Japanese		●		●	●		●			29
Pear, Callery		●	●	●			●	●		17
Persimmon, Common		●	●	●	●	●	●			29
Pine, Austrian	●				●	●			●	40
Pine, Bristlecone	●				●	●		●		40
Pine, Eastern White	●					●			●	47
Pine, Himalayan	●					●				47
Pine, Japanese Black	●				●	●				48
Pine, Japanese White	●					●				48

¹ Tree species having outstanding red, yellow or orange fall color. See individual tree characteristics for description of fall foliage color.

² Permit required to plant trees on public right-of-way property. There is no cost for the permit. Call Boise Urban Forestry at 384-4085.

Species Common Name	Ever-green	Showy Flowers	Fall Color ¹	Street Tree ²	Drought Tolerant	Wildlife/Natural	Solar Friendly	Powerline Friendly	Wind Break	Page
Pine, Limber	•				•	•			•	41
Pine, Lodgepole	•					•				48
Pine, Mugo	•				•	•		•	•	41
Pine, Pinyon	•				•	•				48
Pine, Ponderosa	•				•	•			•	42
Pine, Scotch	•				•	•			•	42
Pine, Western White	•					•			•	48
Planetree, London				•	•					35
Plum, Blireiana		•		•			•	•		18
Plum, Purpleleaf		•	•	•			•	•		46
Redbud, Eastern		•		•	•		•	•		18
Redwood, Dawn			•							43
Sequoia, Giant	•					•			•	43
Serviceberry, Saskatoon		•				•	•	•		46
Smoketree, Common		•	•				•	•		46
Spruce, Colorado	•					•			•	44
Spruce, Engelmann	•					•			•	48
Spruce, Norway	•					•			•	44
Spruce, Serbian	•				•	•			•	45
Spruce, White	•				•	•			•	45
Sumac, Staghorn		•	•		•	•	•	•		19
Sweetgum, American			•	•						30
Tuliptree		•	•	•			•			35
Walnut, English						•	•			47
Yellowwood, American		•	•	•			•			30

¹ Tree species having outstanding red, yellow or orange fall color. See individual tree characteristics for description of fall foliage color.

² Permit required to plant trees on public right-of-way property. There is no cost for the permit. Call Boise Urban Forestry at 384-4085.

Tree Availability

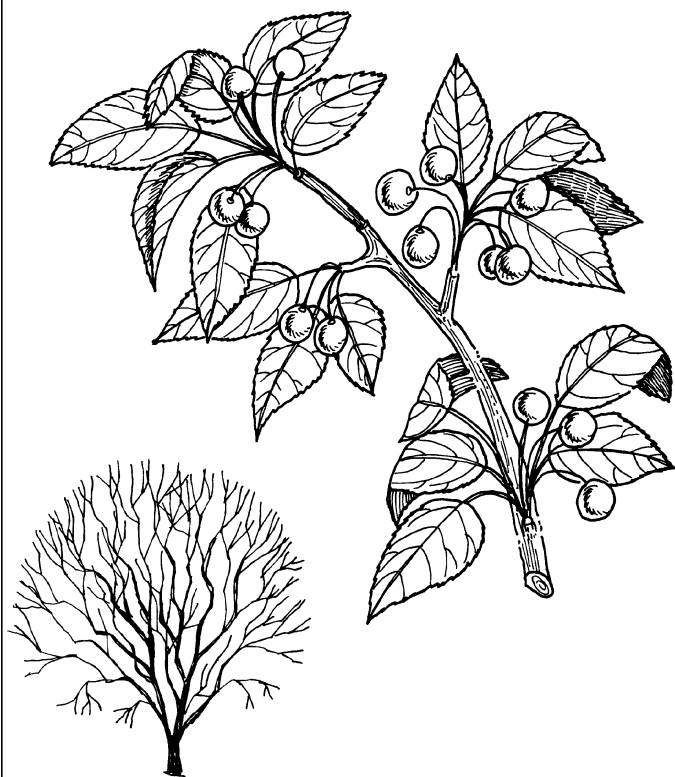
Many of the recommended trees listed in this guide are generally available at local nurseries. Trees grown at the City of Boise, Laura Moore Cunningham nursery, are available for street tree plantings only.

One major emphasis of this publication has been to introduce species that you may not be aware of and to encourage you to look and educate yourself on the best selection for your particular yard and growing area. Some of the trees within this brochure will need to be special ordered from your local nursery, as they may not ordinarily have them in stock. We are hoping this end user market demand will spur Idaho nurseries to widen their landscape tree stock.

Many of the specimens available for viewing are located on private property but can be viewed from the public rights-of-way. Please respect the privacy of individual property owners. **Do not trespass on their land.**

Crabapple, Red Flowering

Botanical Name: Malus spp.



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

● Characteristics

Selection of the variety of this popular small tree is usually based on flower color (varies from 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. Can be very beautiful.

● 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 however.

● Growth Rate

Medium/fast, depending on variety. Short-lived to 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

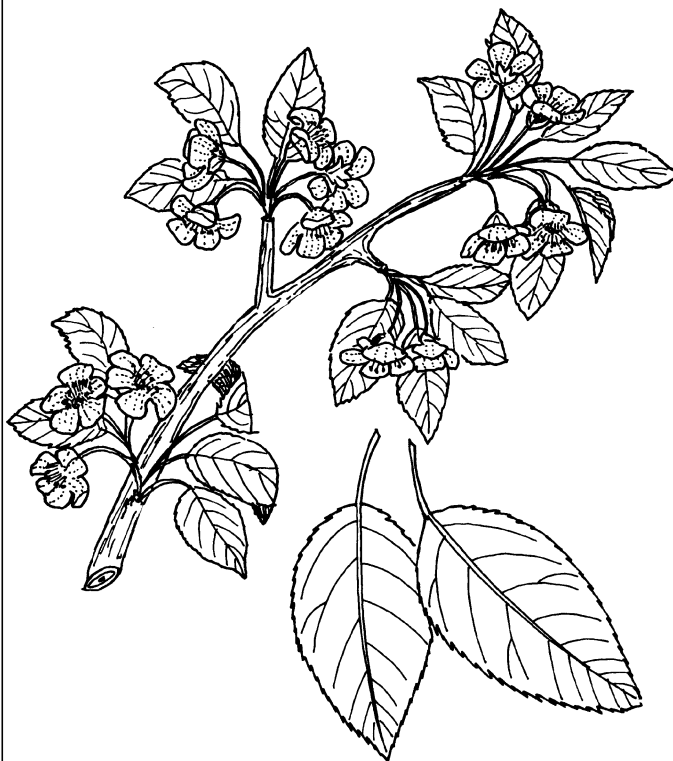
'Prairiefire'	- pink/red flowers with red persisting fruit.
'Robinson'	- deep pink flowers with red persisting fruit.
'Indian Summer'	- rose red flowers with bright red persisting fruit.
'Strawberry Parf.'	- pink flowers; yellow fruit not persisting.
'Purple Prince'	- purple-leaf form; maroon fruit not persisting.
'Coralburst'	- rose-pink flowers; bronze, non-persisting fruit.

● Where to See

- West side of Capitol Blvd. - across from BSU

Crabapple, White Flowering

Botanical Name: Malus spp.



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

● Characteristics

Same characteristics as those under Red Flowering Crabapple, except flower color is pure white. Fruit color among the varieties are red, orange or gold and winter persistence of the fruit on the tree also differs, some remaining until spring. Again, apples 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 however.

● Growth Rate

Medium/fast, depending on variety. Short-lived to at most 50 years.

● Disease and Insect Pests

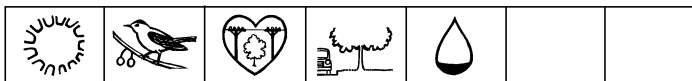
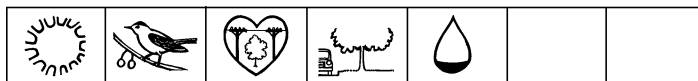
See under Red Flowering Crabapple.

● Commonly Available Varieties

'Donald Wyman'	- excellent selection, bright red persisting fruit.
<i>sargentii</i>	- dwarf spreader, 8-10 ft. high, red persisting fruit.
'Spring Snow'	- carries almost no fruit; good patio tree.
'Red Jewel'	- heavy flower and fruit producer; bright red fruit.
'Adirondack'	- heavy flowering, compact form; bright red fruit.
'Harvest Gold'	- somewhat columnar form; gold, persisting fruit.
<i>transitoria</i>	- 'Schmidtcutleaf' has tiny golden fruit & is cut-leaf.

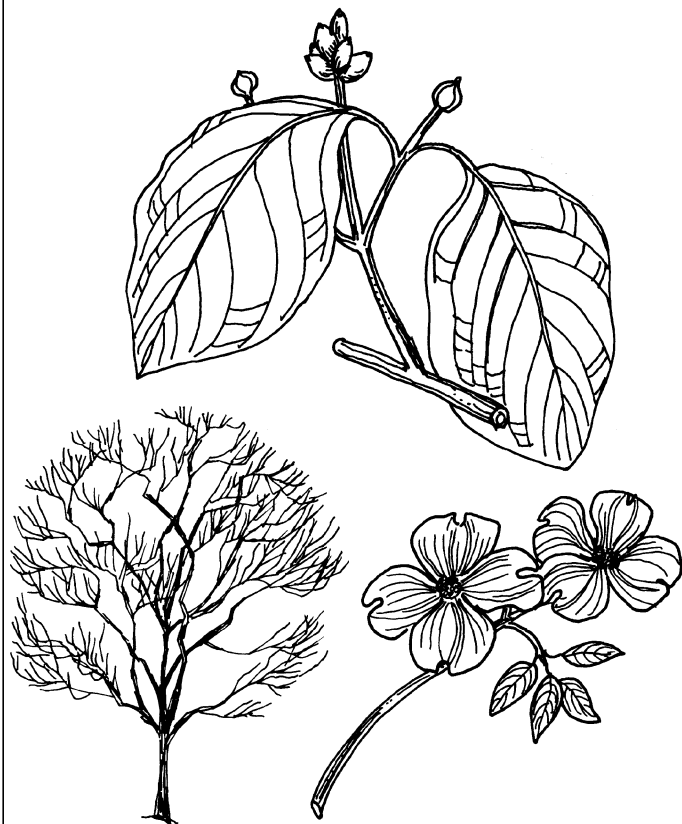
● Where to See

- In front of BSU Student Union Building



Dogwood, Flowering

Botanical Name: Cornus florida



Family	Cornaceae	Fall Color	Excellent red
Form	Irregular, unique	Seed	Red, stone fruit
Size	20-25 ft. high 20-30 ft. spread	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 by many 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. Appealing to birds and wildlife.

● Growing Conditions (Hardy in Zones 5-6)

Water: Moderate to high water demand.

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

● Commonly Available Varieties

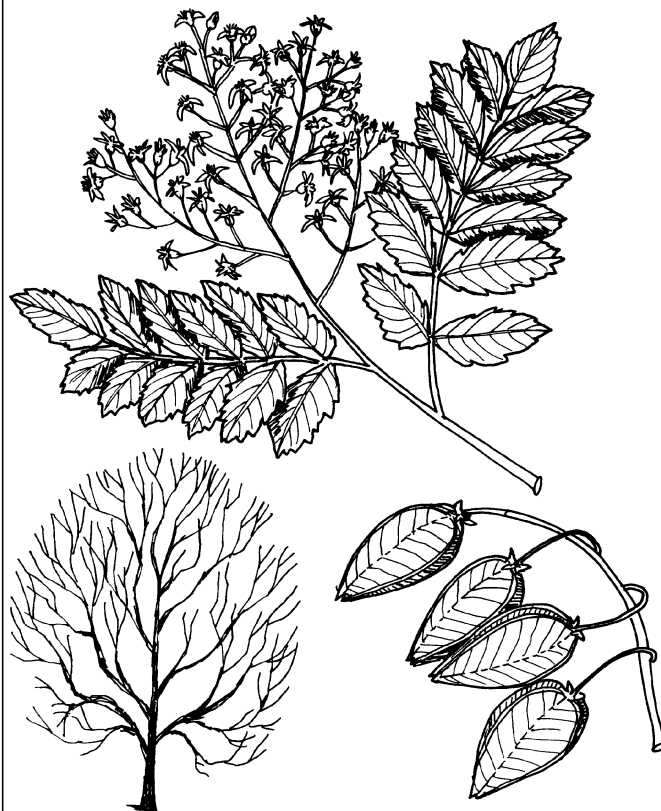
'Cloud 9' - does better in heat; excellent flowering specimen.

● Where to See

- Cathedral of the Rockies, northeast. corner of Franklin and N. 11th Street
- B.S.U. Campus, in front of Simplot/Micron Building

Goldenraintree

Botanical Name: Koelreuteria paniculata



Family	Sapindaceae	Fall Color	Yellow
Form	Round	Seed	Papery "lantern"
Size	30-40 ft. high 30-40 ft. spread	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 the 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 two feet per growing season on a good site.

● Disease and Insect Pests

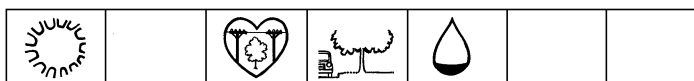
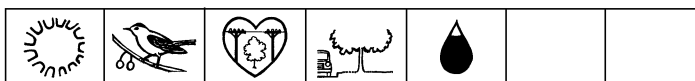
Mostly free of major pests.

● Commonly Available Varieties

'September' - flowers late; may not be as hardy as species.

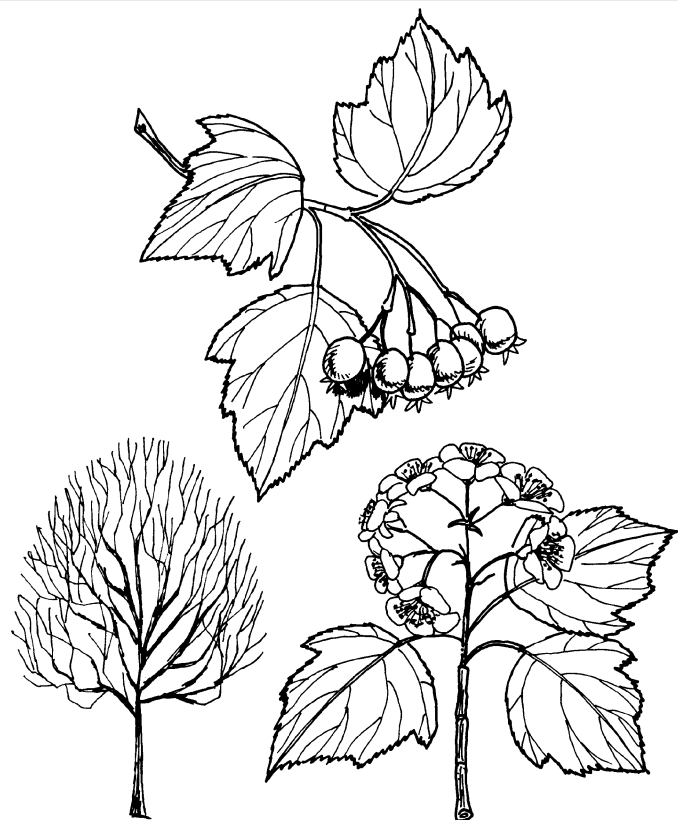
● Where to See

- B.S.U. Campus, eastside of Applied Technology Building
- Southwest corner of Franklin and North 4th Street



Hawthorn, Washington

Botanical Name: *Crataegus phaenopyrum*



Family	Rosaceae	Fall Color	Orange/red
Form	Oval/rounded	Seed	Red, berry-like
Size	20-30 ft. high 18-25 ft. spread	Flower	White clusters in late spring

• Characteristics

Emerging leaves in spring are reddish purple changing to glossy dark, three-lobed green in summer. Beautiful flower display for two weeks in May. Fruit sets in late summer and colors to outstanding bright red in September (persistent). Fall color is consistent. Good plant for wildlife, but thorns may present a problem in high traffic areas.

• Growing Conditions (Hardy in Zones 4-6)

Water: Quite drought tolerant in maturity.

Light: Full sun.

Soil: Adaptable, but not good in poorly drained soils.

• Growth Rate

Moderate; one to two feet per year. Short-lived to 60 years at most.

• Disease and Insect Pests

Fireblight, leaf rust, tent caterpillars, scale, leaf spots, mites.

• Commonly Available Varieties

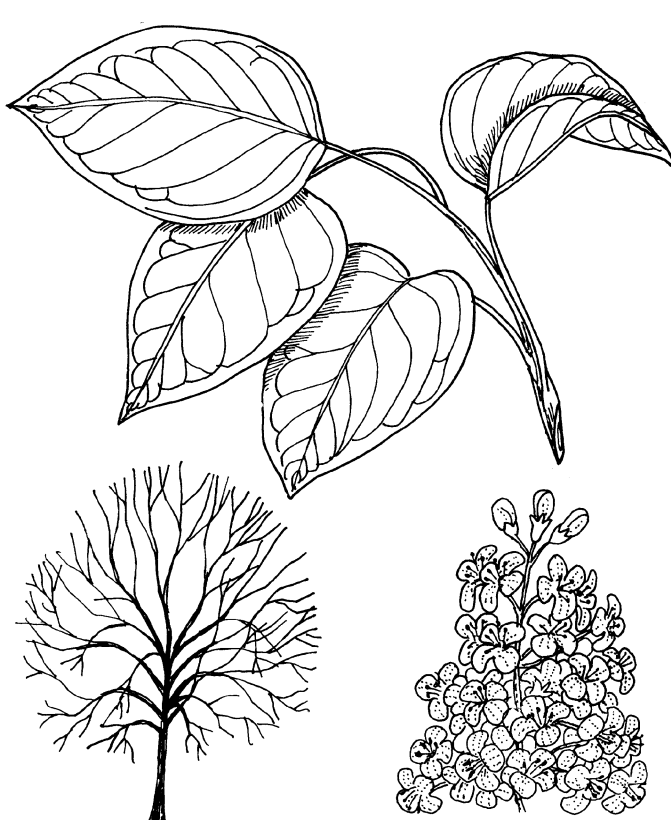
Some columnar forms exist. See your local nursery.

• Where to See

- Boise Main Library parking lot; 715 S. Capitol Blvd.

Lilac, Japanese Tree

Botanical Name: *Syringa reticulata*



Family	Oleaceae	Fall Color	Brown
Form	Oval/round	Seed	1" capsules
Size	20-30 ft. high 15-25 ft. spread	Flower	Showy 8" cluster of white in June

• Characteristics

A great selection for attractive, fragrant summer flowering. Dark green oval leaf in summer with attractive cherry-like reddish/brown bark. Branches and leaves arch with maturity, giving a graceful appearance. Good landscape tree with possible street tree uses.

• Growing Conditions (Hardy in Zones 4-6)

Water: Moderate water demand.

Light: Full sun for best flowering.

Soil: Loose, well-drained. Somewhat adaptable.

• Growth Rate

Medium; one foot per year.

• Disease and Insect Pests

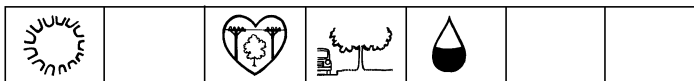
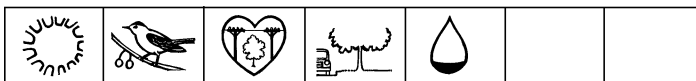
Borers, leaf and stem blights, leaf miners and scale. Mostly on stressed trees. By themselves not of great importance.

• Commonly Available Varieties

'Ivory Silk' - Dense branching and heavy flower production.

• Where to See

- 1211 W. Boise Ave., E. of Marie's LaFiesta Restaurant



Magnolia, Saucer

Botanical Name: Magnolia x soulangiana



Family	Magnoliaceae	Fall Color	Yellow/brown
Form	Pyramidal/round	Seed	Cone-like cluster
Size	20-30 ft. high 20-30 ft. spread	Flower	Pink/purple to white, 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 while interior petals are pure white. Medium green leaves are 4-6" long. Buds are soft and wooly. Late spring frosts will sometimes kill the new flower buds.

● Growing Conditions (Hardy in Zones 5-6)

Water: High water demand.
Light: Full sun/partial shade.
Soil: Needs good loam with high organic matter content.

● Growth Rate

Medium; one to two feet per year on a good site. Moderate life-span of about 100 years.

● Disease and Insect Pests

Several leaf spots and cankers. Magnolia scale, Tuliptree scale and others. Sapsuckers often drill holes in the trunk, doing little harm.

● Commonly Available Varieties

Look for differing flower characteristics.

● Where to See

- 2401 Broadway; (corner of Broadway and Melrose)

Maple, Amur

Botanical Name: Acer ginnala



Family	Aceraceae	Fall Color	Brilliant red
Form	Round	Seed	Winged
Size	15-20 ft. high 15-20 ft. spread	Flower	Spring, fragrant yellowish white

● Characteristics

A small tree or large shrub, usually multi-stemmed. Very effective as a landscape tree and a superb screen or massing plant. One of the first trees to leaf out in spring. Dark green summer leaves give way to a startling red/orange in autumn. Maple winged seeds remain on tree into winter months, adding seasonal interest.

● Growing Conditions (Hardy in Zones 3-6)

Water: Best in moist soil, somewhat drought tolerant in maturity.
Light: Full sun/partial shade. Fall color is best in full sun.
Soil: Tolerates various types of soil. Alkaline soil adaptable.

● Growth Rate

Medium/fast; one to two feet per growing season. Moderate life-span.

● Disease and Insect Pests

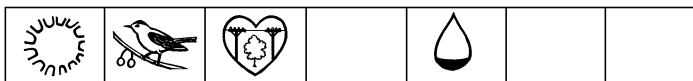
Verticillium wilt, otherwise mostly free of major pests.

● Commonly Available Varieties

'Flame' - densely branched, bright red fruit and fall color.

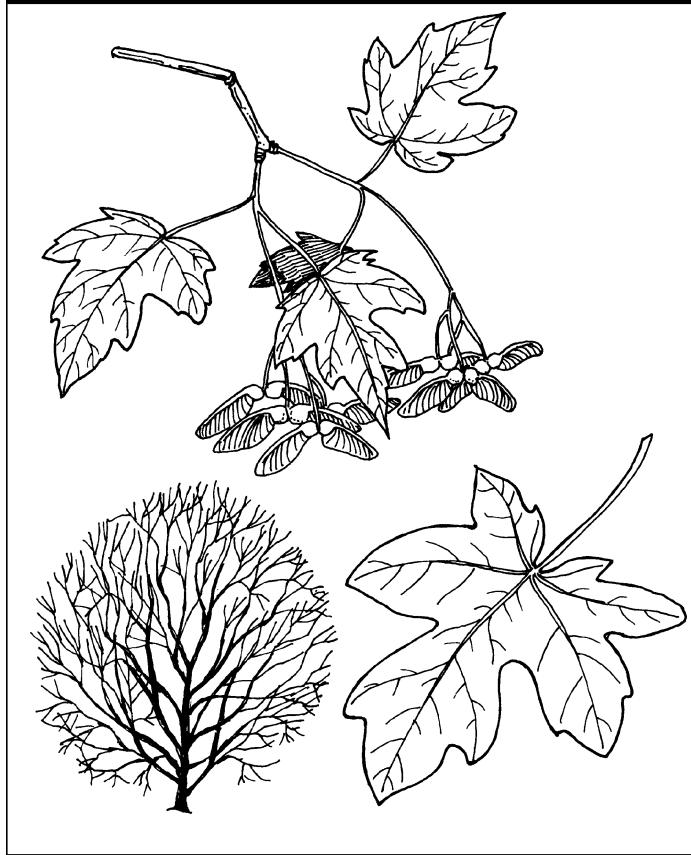
● Where to See

- Greenbelt on B.S.U. campus just west of foot bridge
- B.S.U. campus towers located on southwest. berm



Maple, Hedge

Botanical Name: Acer campestre



Family	Aceraceae	Fall Color	Yellow
Form	Round/oval	Seed	Winged, autumn
Size	25-35 ft. high 25-35 ft. spread	Flower	Inconspicuous

● Characteristics

Dark green leaves, fuzzy underneath, cast a dense shade. Often develops good fall color. A good street or landscape tree for many situations. Not common, but deserving of more frequent plantings. Holds leaves late into autumn.

● Growing Conditions (Hardy in Zones 5-6)

Water: Quite drought tolerant in maturity.

Light: Full sun/partial shade.

Soil: Tolerates poor, alkaline soil and compaction.

● Growth Rate

Slow; a foot or less per year.

● Disease and Insect Pests

Mostly free of major pests.

● Commonly Available Varieties

'Queen Elizabeth' - more vigorous than species; branches at 45°

● Where to See

- Fairmont Park (southeast of swimming pool)

Pear, Callery

Botanical Name: Pyrus calleryana



Family	Rosaceae	Fall Color	Scarlet, purple
Form	Oval/pyramidal	Seed	Small, apple-like
Size	25-35 ft. high 20-30 ft. spread	Flower	Carried in white 3" clusters

● Characteristics

An outstanding flowering tree with glossy green leaves that turn a scarlet red in autumn. Spring flowering display is unequalled, one source describes the tree as a white cloud when in flower. An excellent street tree and also good in the home landscape.

● Growing Conditions (Hardy in Zones 5-6)

Water: Moderate demand; somewhat drought tolerant in maturity.

Light: Full sun.

Soil: Adaptable to varying soil types.

● Growth Rate

Medium/fast; between a foot and two feet per year. Short-lived to 60 years.

● Disease and Insect Pests

Fireblight, brown rot. Fireblight resistance seems to vary.

● Commonly Available Varieties

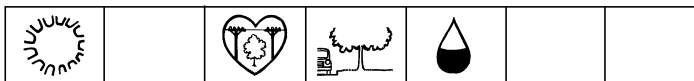
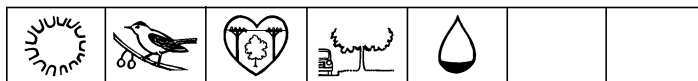
'Aristocrat' - a broad, spreading form; fast growth.

'Chanticleer' - a narrow, oval form; good for smaller spaces.

'Capitol' - a very narrow, columnar form. Use in tight spaces.

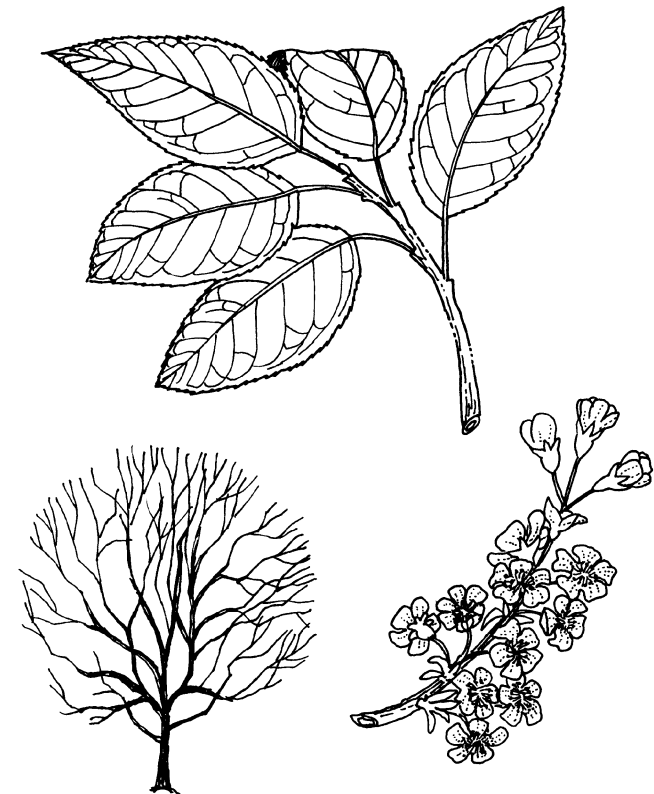
● Where to See

- Harrison Blvd. median strip



Plum, Blireiana

Botanical Name: Prunus x blireiana



Family	Rosaceae	Fall Color	Reddish bronze
Form	Round	Seed	1" plum; edible
Size	15-20 ft. high 15-20 ft. spread	Flower	1" double pink; April

● Characteristics

Densely branched small tree with reddish purple foliage. Flowers appear before leaves in spring. Fruit is also reddish purple and may become 'lost' in the foliage during the summer months when in full leaf. A standout in the landscape.

● Growing Conditions (Hardy in Zones 5-6)

Water: Moderate water demand.

Light: Full sun.

Soil: Well-drained, adaptable to many soil types.

● Growth Rate

Medium/fast; two feet per year in good sites. Short life-span of 35-50 years.

● Disease and Insect Pests

Aphids, tent caterpillars, borers, scale, cankers. The species is prone to attack from many pests and maintaining growth vigor is vital.

● Commonly Available Varieties

Species only.

● Where to See

- Surrounds Lakewood subdivision on Bergeson Street

Redbud, Eastern

Botanical Name: Cercis canadensis



Family	Fabaceae	Fall Color	Yellow/green
Form	Round	Seed	Bean-like pod
Size	20-30 ft. high 20-25 ft. spread	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 a reddish/purple color then turn dark green. Exceptional in many landscapes and great in natural settings. Very nice floral display in 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; one foot per growing season in good sites. A short-lived species often living only 30-50 years.

● Disease and Insect Pests

Cankers, Verticillium wilt, tree and leaf hoppers, scale and caterpillars.

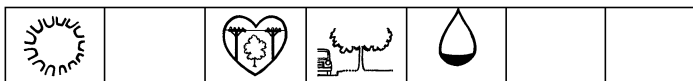
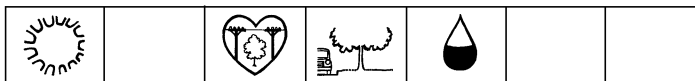
● Commonly Available Varieties

Look for choices between single and multi-stemmed forms.

● Where to See

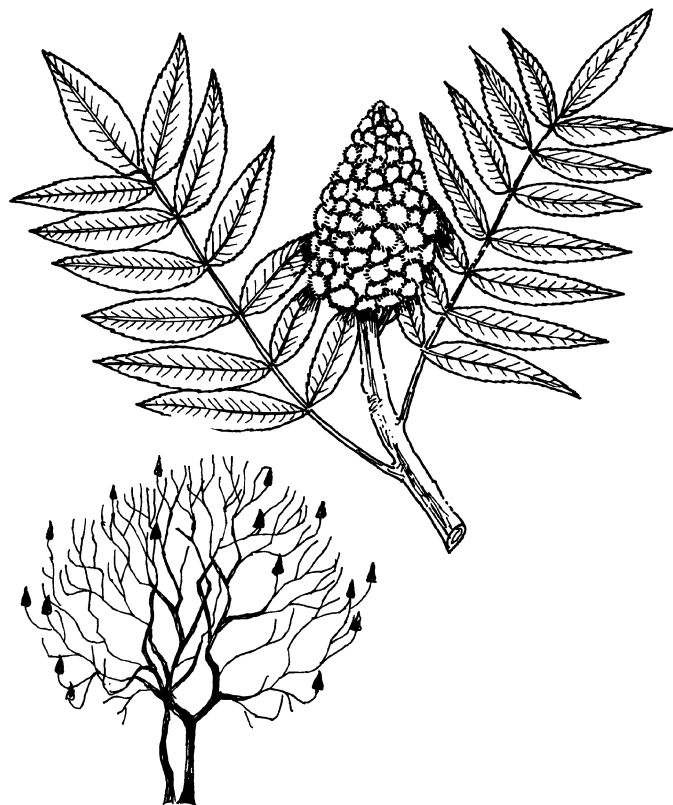
- Greenbelt B.S.U campus directly south of Footbridge

- 804 & 806 E. Boise Ave., just past Garfield Elementary



Sumac, Staghorn

Botanical Name: *Rhus typhina*



Family	Anacardiaceae	Fall Color	Bright red
Form	Irregular/open	Seed	Velvety cluster
Size	15-25 ft. high 10-15 ft. spread	Flower	5-10" high greenish cluster

• Characteristics

Attractive, spreading small tree. Care must be taken in selecting a planting site as this species spreads from the roots and may quickly overtake a site. Excellent for holding soils on steep slopes. Fall color and winter persistent fruit are quite attractive for people and wildlife. Very similar to Smooth Sumac but with soft, wooly twigs.

• Growing Conditions (Hardy in Zones 3-6)

Water: Drought tolerant in maturity.

Light: Full sun.

Soil: Prefers good drainage; tolerates poor alkaline soils.

• Growth Rate

Fast; two feet or more in a growing season. As with many species that grow quickly, the Sumac is short-lived. It will mature at about 35 years of age.

• Disease and Insect Pests

Verticillium wilt, otherwise mostly free of major pests.

• Commonly Available Varieties

'Laciniata' - leaves divided, giving a fern-like appearance.

• Where to See

- 5506 Overland Road (El Gringo Restaurant, side patio)

TREE SEASONS

By Joel York
Boise School 5th Grader

Trees are nice in the middle of Spring,

They make a nice knock,
not a loud ping.

Trees are nice in the middle of Summer,

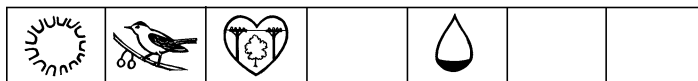
They make nice sticks,
for a real good drummer.

Trees are nice in the middle of Fall,

They make good poles,
if you make a long call.

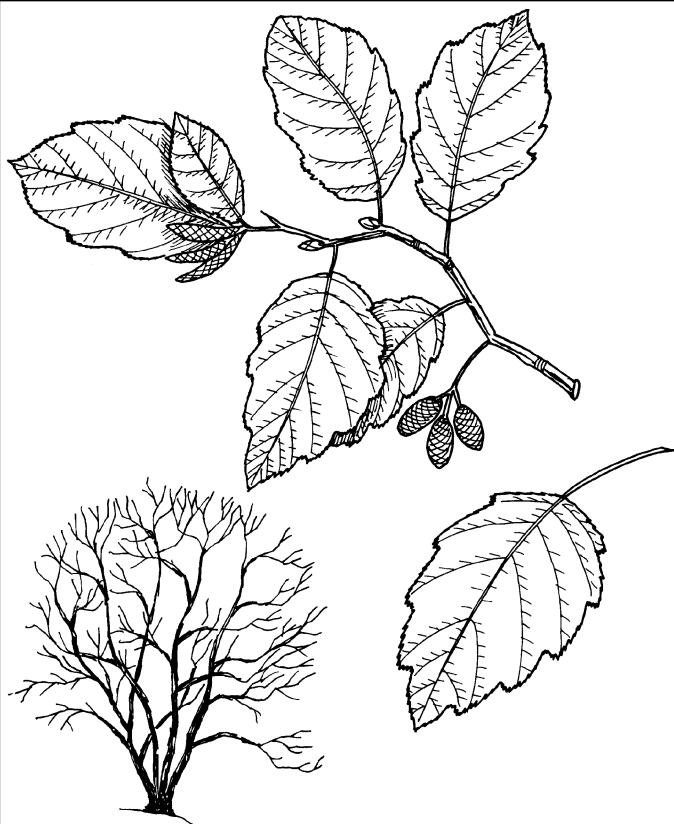
Trees are nice in the middle of Winter.

They make good tables,
for your Christmas dinner.



Alder, Mountain

Botanical Name: Alnus tenuifolia



Family	Betulaceae	Fall Color	Yellow
Form	Oval	Seed	Cone-like
Size	20-40 ft. high 15-25 ft. spread	Flower	2" catkins; pinkish in spring

● Characteristics

A little-known Idaho native often found near mountain streams and lakes. Suitable for the home landscape as a garden tree. Four-inch leaves emerge in spring with a tinge of red then turn dark green in summer. After turning a yellow fall color, leaves fall to reveal winter character of bright red buds and persistent seed "cones". This is a hardy, quality native which should be planted more often.

● Growing Conditions (Hardy in Zones 4-6)

Water: Moderate water demand.
Light: Full sun/partial shade.
Soil: Prefers well-drained, but somewhat adaptable.

● Growth Rate

Medium; one foot or more per year in best conditions.

● Disease and Insect Pests

Leaf miner, tent caterpillar, cankers.

● Commonly Available Varieties

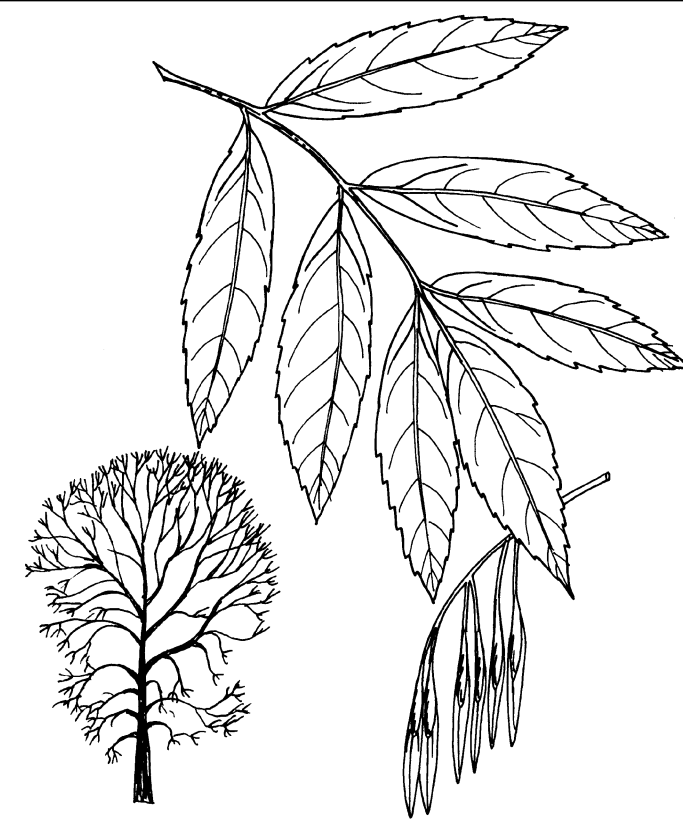
Species only.

● Where to See

- Boise State University Greenbelt
- Greenbelt along Loggers Creek

Ash, Green

Botanical Name: Fraxinus pennsylvanica



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

● Characteristics

Large, shiny dark green leaves usually having 5 or 7 oval leaflets. This tree is extremely hardy and grows under many conditions, thus it has become quite popular. Fall color can be good, but winter form may appear somewhat straggly. Reliable, tough landscape tree.

● Growing Conditions (Hardy in Zones 3-6)

Water: Quite drought tolerant in maturity.
Light: Full sun.
Soil: Tolerates heavy, alkaline soil and is salt tolerant.

● Growth Rate

Fast; two to three feet per growing season under ideal conditions.

● Disease and Insect Pests

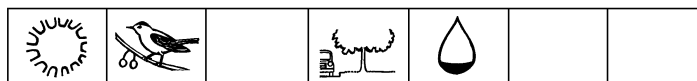
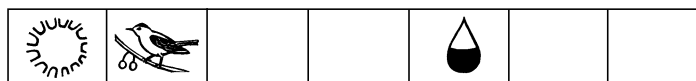
Many problems are associated with the all Ash species, including: cankers, viruses, leaf spot, flower gall (mites), borers, scale and more.

● Commonly Available Varieties

'Bergeson' - upright, fast growth; seedless; extremely hardy.
'Marshall' - mostly seedless, yellow in fall, fewer insect pests.
'Patmore' - mostly seedless; symmetrical form, very hardy.
'Urbanite' - more pyramidal form; thick, shiny leaves, seedless.

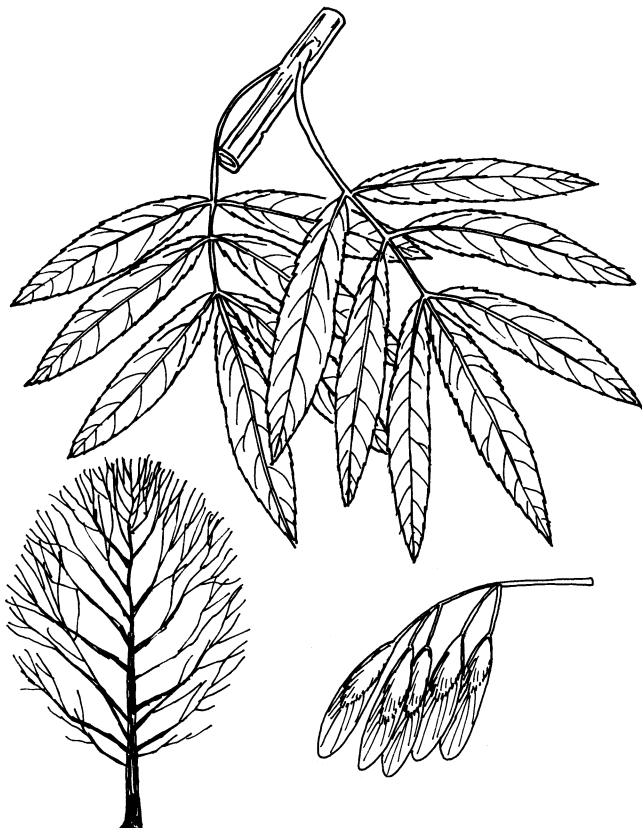
● Where to See

- Boise State University Student Union Building.
Lining University Drive



Ash, Raywood

Botanical Name: Fraxinus oxycarpa 'Raywood'



Family	Oleaceae	Fall Color	Reddish-purple
Form	Dense oval	Seed	Winged
Size	40-50 ft. high 30-40 ft. spread	Flower	Inconspicuous

• Characteristics

This species generally matures at a smaller height than other Ash species and is a good choice for the landscape. The leaves carry 7-9 dark green, very narrow leaflets of fine texture that change to a superior red/purple in autumn. Not commonly used, but could be planted more extensively.

• Growing Conditions (Hardy in Zone 5-6)

Water: Moderate water demand.

Light: Full sun.

Soil: Well-drained; somewhat adaptable.

• Growth Rate

Medium/fast; one to two feet per growing season.

• Disease and Insect Pests

See Green Ash.

• Commonly Available Varieties

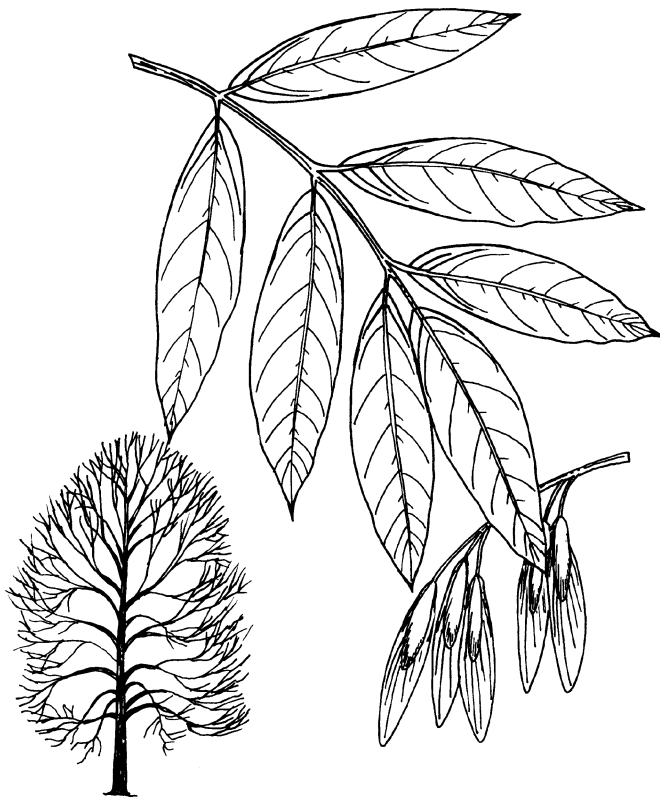
'Flame' - similar variety with bright red autumn foliage.

• Where to See

- South 9th Street, between Front and Myrtle Street

Ash, White

Botanical Name: Fraxinus americana



Family	Oleaceae	Fall Color	Purple/yellow
Form	Oval	Seed	Winged
Size	50-60 ft. high 35-45 ft. spread	Flower	Inconspicuous

• Characteristics

Superior tree species native to Eastern U.S. Beautiful fall color makes this a fine street or landscape tree. Leaves are 8-15 inches in length carrying 5, 7 or 9 dark green oval leaflets; they often color early and have fallen from the tree by mid-October.

• Growing Conditions (Hardy in Zones 4-6)

Water: Moderate water demand.

Light: Full sun.

Soil: Adaptable. Not as much as Green Ash, however.

• Growth Rate

Medium/fast; one to two feet per year on a good site. Medium life-span of 100-150 years.

• Disease and Insect Pests

See Green Ash.

• Commonly Available Varieties

'Autumn Applause' - reliable fall color on this seedless form.

'Autumn Purple' - fall color holds 2-4 weeks, seedless, superb.

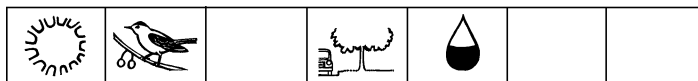
'Rosehill' - tolerates poor soils, seedless, bronze in fall.

'Skyline' - strong central branching, good branch angles.

• Where to See

- T.J. Maxx Plaza on Fairview Ave. at Milwaukee Street

- Median strip on Parkcenter Blvd.

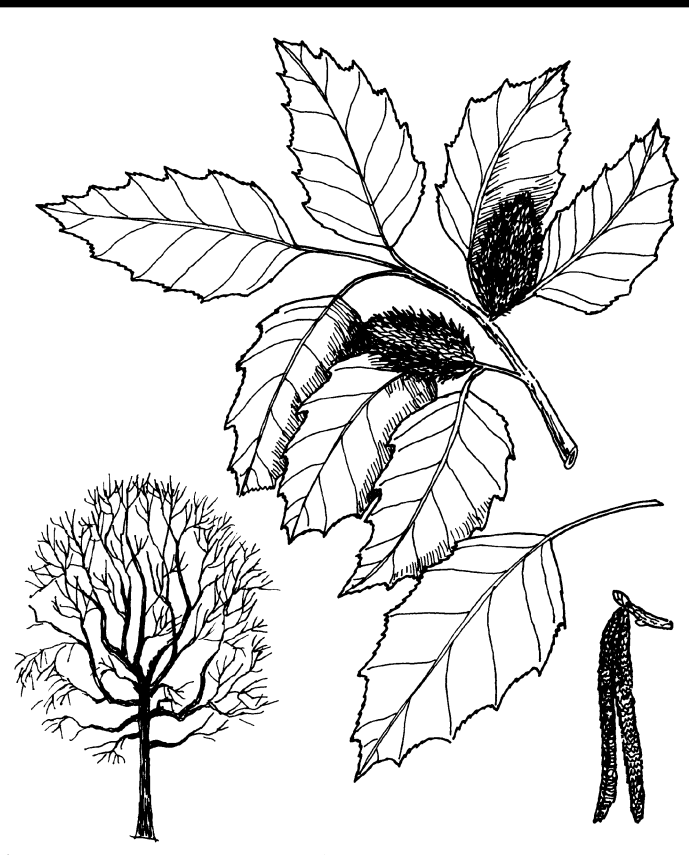


C
L
A
S
S

II

Birch, River

Botanical Name: Betula nigra



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

● Characteristics

This tree is most popular for its extremely attractive bark, which flakes off in areas to expose colors in orange-cinnamon-brown and even a little pink. Medium green leaves are oval and have a toothed margin. A quality specimen or naturalizing tree. Many forms of wildlife are attracted to this species.

● Growing Conditions (Hardy in Zones 4-6)

Water: Moderate to high water demand. Not drought tolerant.
Light: Partial to full shade.
Soil: Quite particular; acidic, cool fertile soil. Mulching helps.

● Growth Rate

Medium/fast; one to two feet per year in best conditions. Short-lived to 30-40 years.

● Disease and Insect Pests

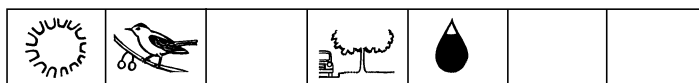
Not as troubled as other birches, but keeping the tree watered will enable it to repel borers, cankers and a host of other pests. Iron chlorosis (yellowing leaves) occurs in poor, alkaline soils.

● Commonly Available Varieties

'Heritage' - superior bark characteristics, more pest resistant.

● Where to See

- Parkcenter Park; south side of pond
- Northwest corner of Apple and Bergeson



Corktree, Amur

Botanical Name: Phellodendron amurense



Family	Rutaceae	Fall Color	Yellow
Form	Broad vase-shape	Seed	Small stone-fruit
Size	35-45 ft. high 30-40 ft. spread	Flower	Inconspicuous

● Characteristics

Long (10"-15") leaves carrying 7-13 glossy green leaflets. Interesting bark is deeply furrowed and cork-like. Makes a great lawn tree as it casts filtered shade, allowing good turf growth. Fruit is attractive to birds, but when bruised, is quite pungent. A seldom-used species that is very hardy in Idaho summers and winters.

● Growing Conditions (Hardy in Zones 4-6)

Water: Moderate water demand.
Light: Full sun.
Soil: Very adaptable; tolerates heavy alkaline soil.

● Growth Rate

Medium; one to two feet per growing season.

● Disease and Insect Pests

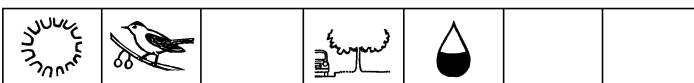
Verticillium wilt

● Commonly Available Varieties

'Macho' - seedless form with strong growth characteristics..

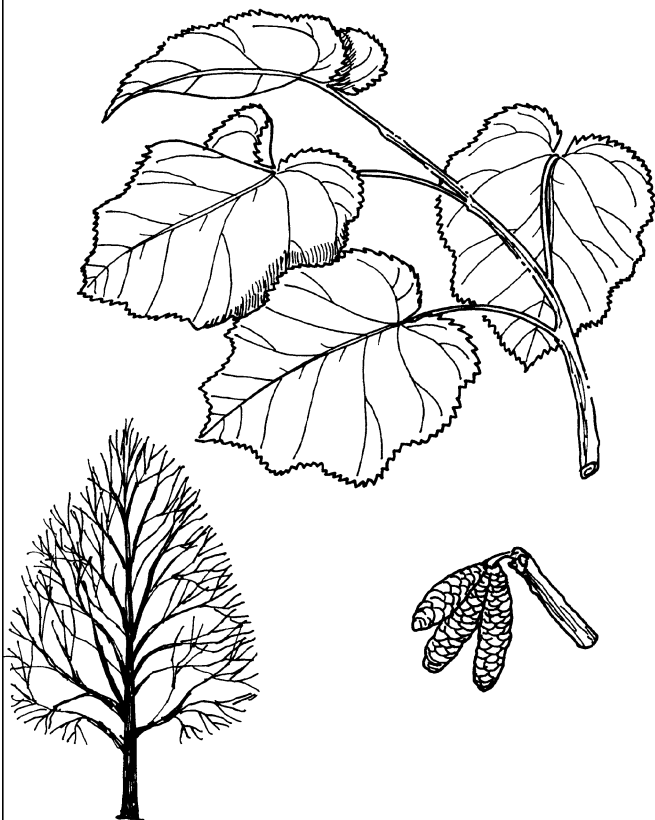
● Where to See

- Julia Davis Park - south of tennis courts
- Laura Moore Cunningham Nursery, S. Walnut and Lewis Street



Filbert, Turkish

Botanical Name: Corylus colurna



Family	Betulaceae	Fall Color	Yellow/purple
Form	Pyramidal	Seed	Half-inch nut
Size	40-50 ft. high 20-30 ft. spread	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.

● Growing Conditions (Hardy in Zones 5-6)

Water: Quite drought tolerant in maturity.

Light: Full sun.

Soil: Well-drained, loamy soil is best, but tolerates alkalinity.

● Growth Rate

Medium; one foot or more per growing season in a good site.

● Disease and Insect Pests

Mostly free of major pests.

● Commonly Available Varieties

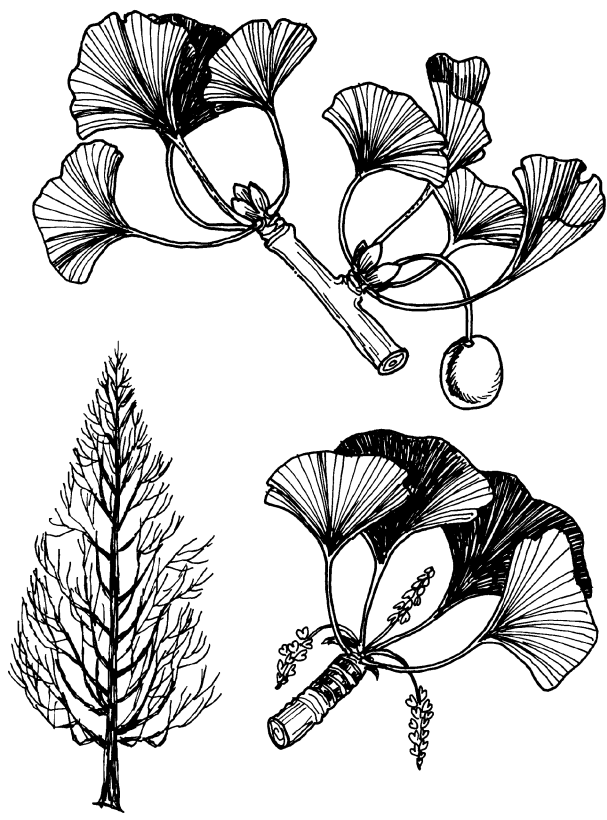
Species only.

● Where to See

- B.S.U. campus; south parking lot of Morrison Center, lining Diploma Drive

Ginkgo

Botanical Name: Ginkgo biloba



Family	Ginkgoaceae	Fall Color	Bright yellow
Form	Pyramidal/oval	Seed	Tan, fleshy fruit
Size	40-60 ft. high 30-50 ft. spread	Flower	Inconspicuous

● Characteristics

Unusual fan-shaped light green leaves are very soft in appearance and to the touch. Autumn color is a striking yellow. Seedless form is preferable as fruit odor is extremely unpleasant. The Ginkgo is the oldest species of tree on Earth - found in the fossil record for the last 225 million years and was once native to North America.

● Growing Conditions (Hardy in Zones 4-6)

Water: Moderate water demand.

Light: Full sun.

Soil: Well-drained, otherwise adaptable; alkaline and salt tolerant.

● Growth Rate

Slow/medium; one foot per growing season in best conditions.

● Disease and Insect Pests

Mostly free of major pests.

● Commonly Available Varieties

'Princeton Sentry' - upright, narrow form. Good in small areas.

'Magyar' - another narrow, upright form.

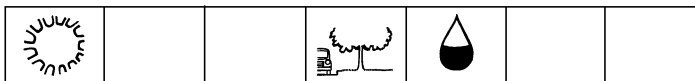
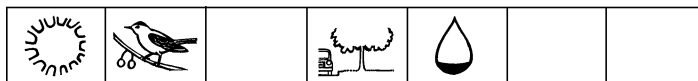
'Autumn Gold' - broad symmetrical form; good fall color.

● Where to See

- Lining Capitol Blvd. from Crescent Rim Drive to Boise River
- East of Zoo in Julia Davis Park, northeast of footbridge

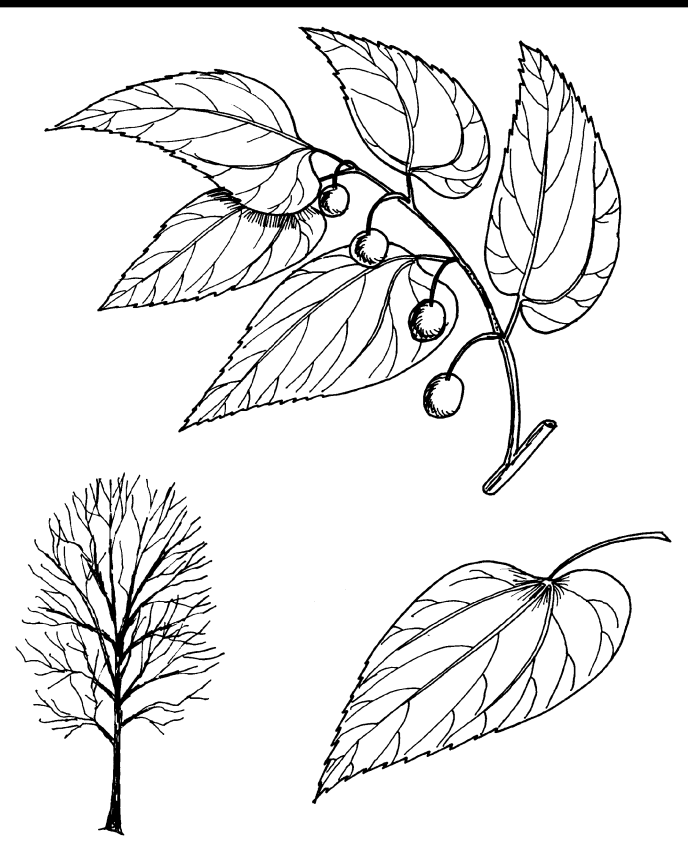
C
L
A
S
S

II



Hackberry, Common

Botanical Name: Celtis occidentalis



Family	Ulmaceae	Fall Color	Yellow
Form	Vase-shaped	Seed	Berry-like
Size	40-60 ft. high 40-60 ft. spread	Flower	In April, mostly inconspicuous

• Characteristics

A reliable tree under harsh and windy conditions. Medium green summer foliage turns yellow in autumn. Rough, corky bark adds to attractiveness in all seasons. Quite similar in form to the late, great American Elm, but not subject to Dutch Elm Disease. A good, tough street and shade tree.

• Growing Conditions (Hardy in Zones 4-6)

Water: Quite drought tolerant in maturity.

Light: Full sun.

Soil: Very adaptable; will do well in nearly any soil.

• Growth Rate

Medium/fast; one to two feet of growth per year. Moderate life-span to 130 years.

• Disease and Insect Pests

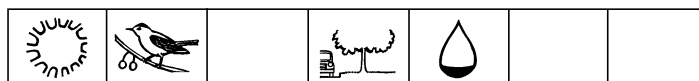
Witches broom (an abnormal branch growth), hackberry nipple-gall (causes wart-like projections on leaves), scale.

• Commonly Available Varieties

'Prairie Pride' - resistant to pests; good form and growth rate.

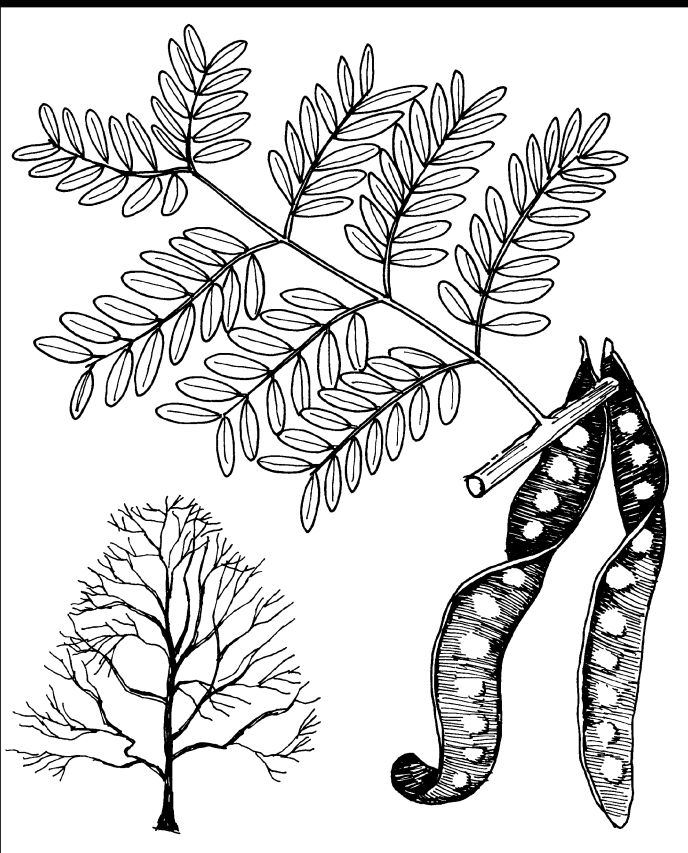
• Where to See

- Julia Davis Park - east of Zoo along Julia Davis Drive
- East side of Parkcenter Blvd., south of River Run entrance



Honeylocust, Thornless

Botanical Name: Gleditsia triacanthos var. inermis



Family	Fabaceae	Fall Color	Pale yellow
Form	Irregular/rounded	Seed	Bean-like pod
Size	30-60 ft. high 40-50 ft. spread	Flower	Yellow, fragrant, inconspicuous

• Characteristics

A hardy tree with finely textured, delicate leaves made up of 20-30 small oval leaflets that permit sunlight to filter through. Fall color can be impressive, but leaves fall early. Tiny leaves not usually considered messy, but seed pods may be. A popular selection in many areas, it is becoming overplanted and may become prone to insect and disease pests.

• Growing Conditions (Hardy in Zones 4-6)

Water: Somewhat drought resistant in maturity.

Light: Full sun.

Soil: Adaptable. Tolerant of salt and soil alkalinity.

• Growth Rate

Fast; often two feet or more per year. Moderate life-span to 100 years.

• Disease and Insect Pests

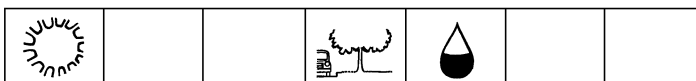
Cankers, spider mites, leaf hoppers, plant bugs, borers, and others.

• Commonly Available Varieties

'Shademaster' - mostly seedless; fast growth; upright and spreading.
'Skyline' - more pyramidal form; gold fall color; spider mites.
'Moraine' - broad, graceful form; seedless, good fall color.

• Where to See

- Willow Lane Athletic Complex parking lot (on Willow Lane off State).
- Lining University Drive at B.S.U. football stadium parking lot.



Hornbeam, European

Botanical Name: Carpinus betulus



Family	Betulaceae	Fall Color	Yellow/green
Form	Pyramidal/oval	Seed	Small nut
Size	40-50 ft. high 30-40 ft. spread	Flower	Brown catkins & 3-lobed bracts

● Characteristics

An exceptional landscape tree for small yards, malls, planter boxes and street plantings. Long, narrow, dark green toothed leaves are usually free of damage from insects or diseases. Bark is grey and has a smooth, yet muscular texture. Good tree for screening, can be clipped into a hedge form. Fine winter appearance as well.

● Growing Conditions (Hardy in Zones 5-6)

Water: Moderate water demand.

Light: Full sun/partial shade.

Soil: Adaptable. Tolerates heavy, alkaline soil.

● Growth Rate

Slow/medium; one foot or less per growing season in good conditions.

● Disease and Insect Pests

Mostly free of major pests.

● Commonly Available Varieties

'Fastigiata' - more compact and narrow than the natural forms.

● Where to See

- 500 N. 8th Street (St. Michael's Episcopal Cathedral)

- Entry median, Lake Harbor community, State Street at Harbor Lane

Horsechestnut, Common

Botanical Name: Aesculus hippocastanum



Family	Hippocastanaceae	Fall Color	Yellow/brown
Form	Rounded/oval	Seed	Walnut-like, 2"
Size	40-60 ft. high 40-50 ft. spread	Flower	10" long ivory-tipped red cluster

● Characteristics

A striking species in flower. Clusters of showy ivory/red flowers cover the tree in May. Shade-giving, dark green leaves composed of 5 or 7 leaflets arranged in a fan-like fashion. A quality tree for many landscapes. Spiked seed capsules can be heavily produced, thus a preferred food for squirrels and deer.

● Growing Conditions (Hardy in Zones 4-6)

Water: Moderate water demand. Not for dry areas.

Light: Full sun/partial shade.

Soil: Well-drained; tolerates some alkalinity.

● Growth Rate

Medium; one foot or slightly more per year.

● Disease and Insect Pests

Quite prone to summertime leaf scorch. Other possible problems include leaf blotch, anthracnose, canker, scale and borers.

● Commonly Available Varieties

'Baumannii' - long-lasting flowers, seedless; large white flowers.

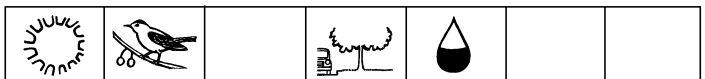
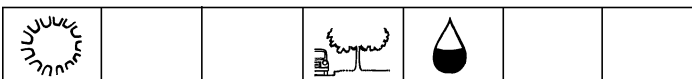
● Where to See

- Capitol Park, east of Capitol Blvd., where walkways cross

- Julia Davis Park, east of the Zoonorthwest corner

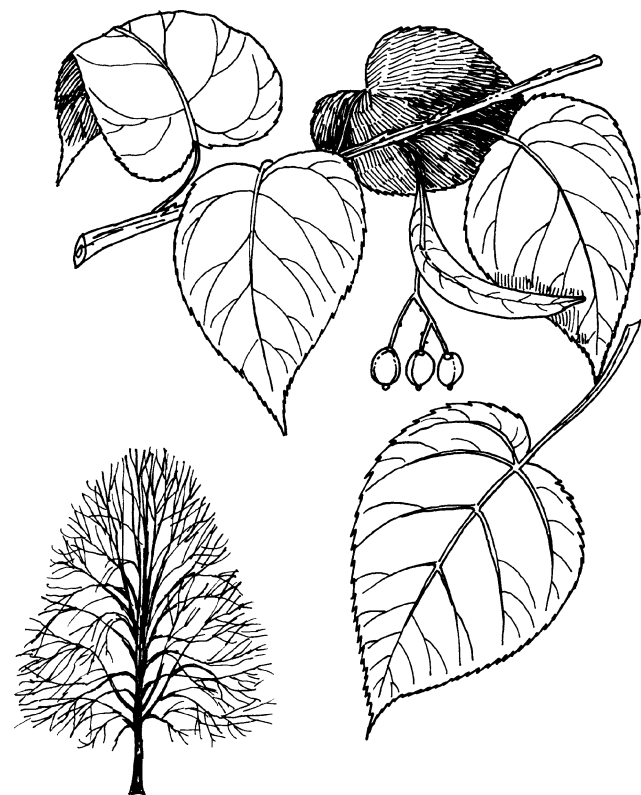
C
L
A
S
S

II



Linden, American

Botanical Name: Tilia americana



Family	Tiliaceae	Fall Color	Yellowish green
Form	Pyramidal/oval	Seed	Nut-like, small
Size	40-60 ft. high 30-40 ft. spread	Flower	Small, yellow & fragrant; June

● Characteristics

Large, heart-shaped leaves cast dense summertime shade. Summer flowers are pleasantly fragrant and attractive, attached to leaf-like wing, as are seeds in fall. Bees are reported to make the finest honey from these flowers. In winter, reddish colored twigs can be very appealing. Native to Eastern U.S.

● Growing Conditions (Hardy in Zones 3-6)

Water: Moderate water demand. Not drought tolerant.

Light: Full sun/partial shade.

Soil: Best in well-drained, loamy soil. Alkaline soil tolerant.

● Growth Rate

Medium; one foot or more per growing season in a favorable location. Medium life-span to 100 years.

● Disease and Insect Pests

Aphids are a frequent pest, and aphid 'honeydew' drip on cars is frustrating to owners. Also Verticillium wilt, leaf miners, scale and mites. In hot, dry summers leaves take on a brownish cast.

● Commonly Available Varieties

'Redmond' - dense pyramidal form; fast growth.

'Legend' - pyramidal; leaves resist summer discoloration.

● Where to See

- 1812 Potter Drive

Linden, Littleleaf

Botanical Name: Tilia cordata



Family	Tiliaceae	Fall Color	Yellow
Form	Pyramidal/oval	Seed	Nut-like, small
Size	40-60 ft. high 30-40 ft. spread	Flower	Small, yellow & fragrant; June

● Characteristics

Excellent lawn or street tree. Medium-sized heart-shaped leaves are dark green. Fall color can be good, but often is subdued. Can look quite formal due to pyramidal shape. More heat and drought tolerant than other Lindens. Reliable tree, but expect bees when in flower.

● Growing Conditions (Hardy in Zones 4-6)

Water: Quite drought tolerant in maturity.

Light: Full sun.

Soil: Well-drained, fertile soil. Alkaline soil tolerant.

● Growth Rate

Medium; one foot or more per growing season in good conditions. Moderate life span.

● Disease and Insect Pests

See American Linden.

● Commonly Available Varieties

'Chancellor' - upright, narrow form; dense and symmetrical.

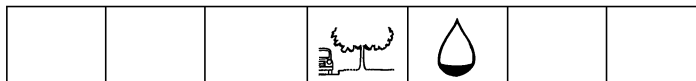
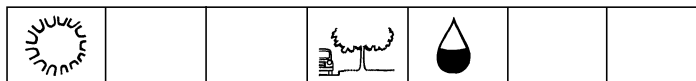
'Glenleven' - larger leaves, more spreading form; fast growth.

'Greenspire' - popular, attractive choice; tough tree.

'Corzam' - columnar form with smaller, thicker leaves.

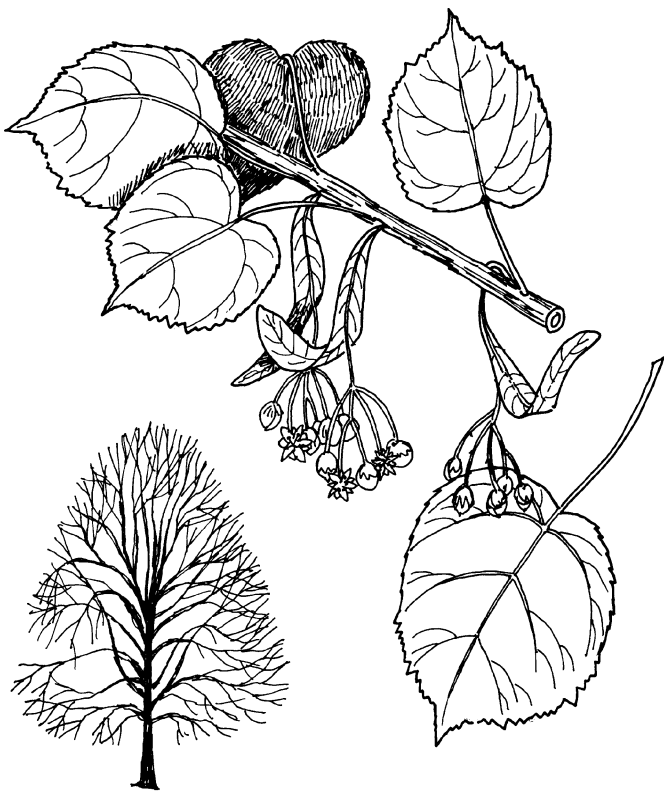
● Where to See

- Capitol Park, south side.



Linden, Silver

Botanical Name: Tilia tomentosa



Family	Tiliaceae	Fall Color	Yellow
Form	Oval/pyramidal	Seed	Nut-like, small
Size	40-60 ft. high 30-40 ft. spread	Flower	Yellow/white; fragrant. July

● Characteristics

A very attractive street or lawn tree that deserves to be planted more often. Medium-sized, dark green leaves with white, soft hair on under surface; beautiful, especially in a breeze. Trunk is grey and smooth, similar to European Beech. Native to Europe.

● Growing Conditions (Hardy in Zones 5-6)

Water: Moderate water demand.

Light: Full sun.

Soil: Well-drained, fertile soil. Alkaline soil tolerant.

● Growth Rate

Medium; a foot or more per growing season in good conditions.

● Disease and Insect Pests

See American Linden.

● Commonly Available Varieties

'Green Mountain' - rapidly growing; heat and drought tolerant.

'Sterling' - superb form; resistant to leaf-eating insects.

● Where to See

- Capitol Park, west side.

- 3009 Mountain View Drive (on private property)

Magnolia, Cucumbertree

Botanical Name: Magnolia acuminata



Family	Magnoliaceae	Fall Color	Brown
Form	Rounded	Seed	Cucumber-like
Size	40-60 ft. high 40-60 ft. spread	Flower	Greenish-yellow, 3", not showy

● Characteristics

Large, dark green leaves, and large soft, fuzzy buds distinguish this tree in the landscape. Not outstanding in flower like many Magnolias, but a very desirable tree nonetheless. Seed or fruit is about three inches long, matures in October and becomes a bright pink/red. The shape of the fruit is somewhat like a cucumber.

● Growing Conditions (Hardy in Zones 4-6)

Water: Moderate to high water demand. Not drought tolerant.

Light: Full sun/partial shade.

Soil: Well-drained, acidic soil.

● Growth Rate

Medium/fast; nearly two feet per growing season in best sites.

● Disease and Insect Pests

Mostly free of major pests.

● Commonly Available Varieties

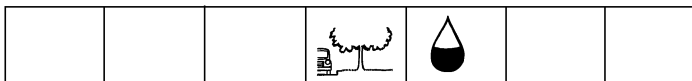
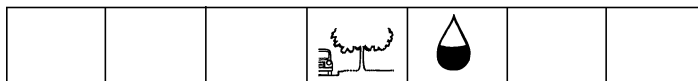
Species only.

● Where to See

- Capitol Park, west side.

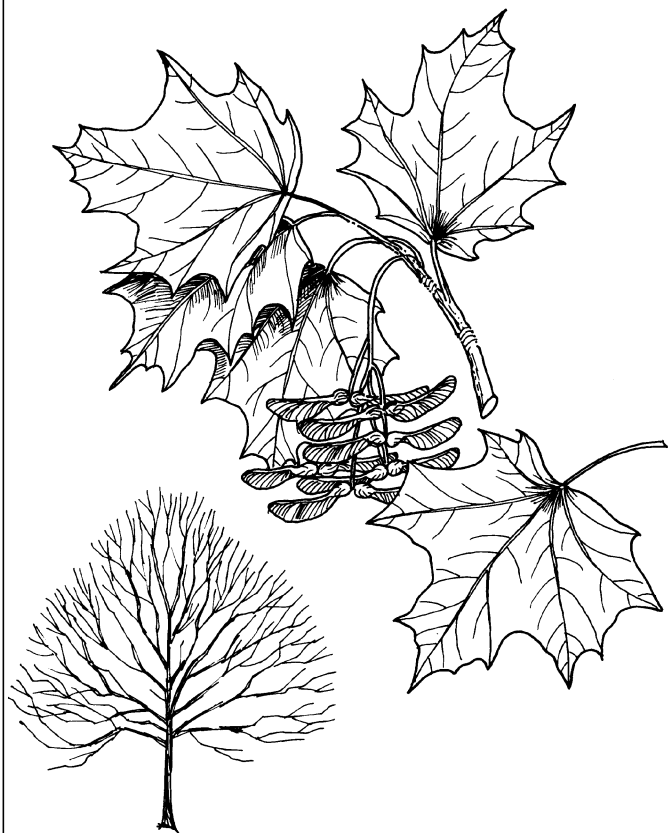
C
L
A
S
S

II



Maple, Norway

Botanical Name: Acer platanoides



Family	Aceraceae	Fall Color	Bright yellow
Form	Rounded	Seed	Winged - fall
Size	40-50 ft. high 30-40 ft. spread	Flower	Yellow, early spring bloom

● Characteristics

Dark green summer foliage, can turn brilliant yellow in autumn. A popular and well-known tree casting dense summer shade. There are a great number of varieties available, each one having different characteristics (a few are listed below). Very similar in summertime appearance to Sugar Maple; distinguished by leaf-bud appearance.

● Growing Conditions (Hardy in Zones 4-6)

Water: Moderate water demand.

Light: Partial shade.

Soil: Adaptable to many soil conditions.

● Growth Rate

Medium; one foot or more per year in good sites. Moderate life-span.

● Disease and Insect Pests

Leaf scorch, sun-scald and frost-crack are common seasonal problems associated with this species. Verticillium wilt and leaf anthracnose.

● Commonly Available Varieties

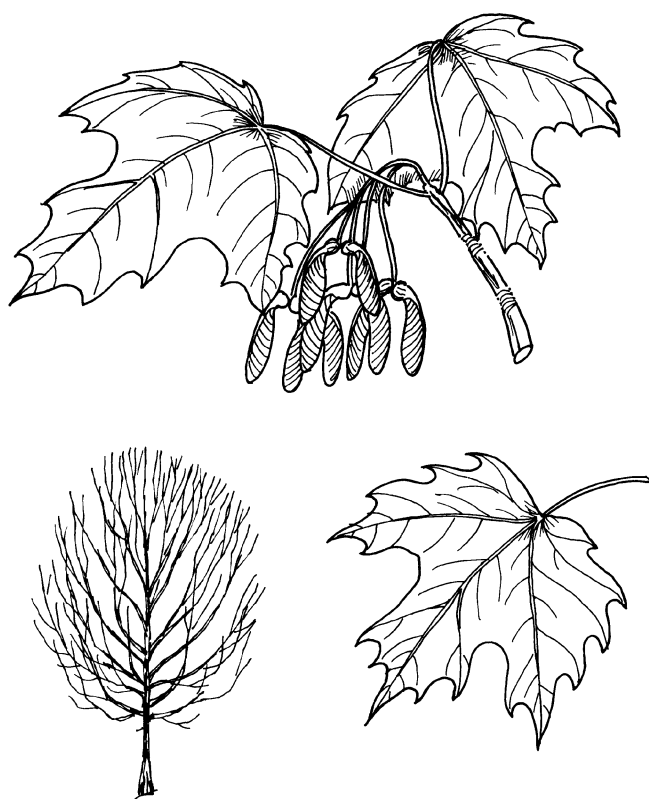
'Columnare' - narrow, columnar growth; good for tight spaces.
'Deborah' - brilliant red new growth; straight leader growth.
'Emerald Queen' - descending branches; good fall color.
'Royal Red' - purple-leaved in all seasons; no change in fall.

● Where to See

- 919 West Hays Street

Maple, Sugar

Botanical Name: Acer saccharum



Family	Aceraceae	Fall Color	Yellow/orange
Form	Rounded/oval	Seed	Winged - fall
Size	50-70 ft. high 30-60 ft. spread	Flower	Yellow, mostly inconspicuous

● Characteristics

Large street or landscape tree. Medium green leaves turning yellow/orange/red in autumn. Grows more slowly than its sister tree, the Norway Maple. A beautiful tree in the right conditions but may suffer in extreme heat and drought. All maples can be tapped for maple syrup, but the Sugar Maple supposedly has the best syrup.

● Growing Conditions (Hardy in Zones 3-6)

Water: Moderate water demand.

Light: Partial/full shade.

Soil: Well-drained; tolerant of alkalinity, but not salt.

● Growth Rate

Slow/medium; one foot or so per year in ideal sites. Moderate life-span to 150 years.

● Disease and Insect Pests

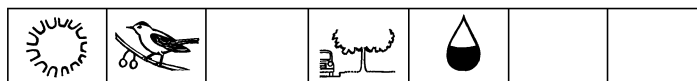
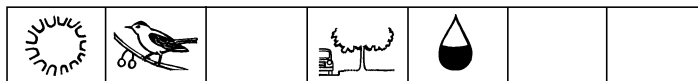
Leaf scorch (a condition caused by heat and drought) is common on this species. Verticillium wilt can also affect this tree.

● Commonly Available Varieties

'Green Mountain' - good scorch resistance; more heat tolerant.
'Legacy' - thick leaves; more drought resistant variety.

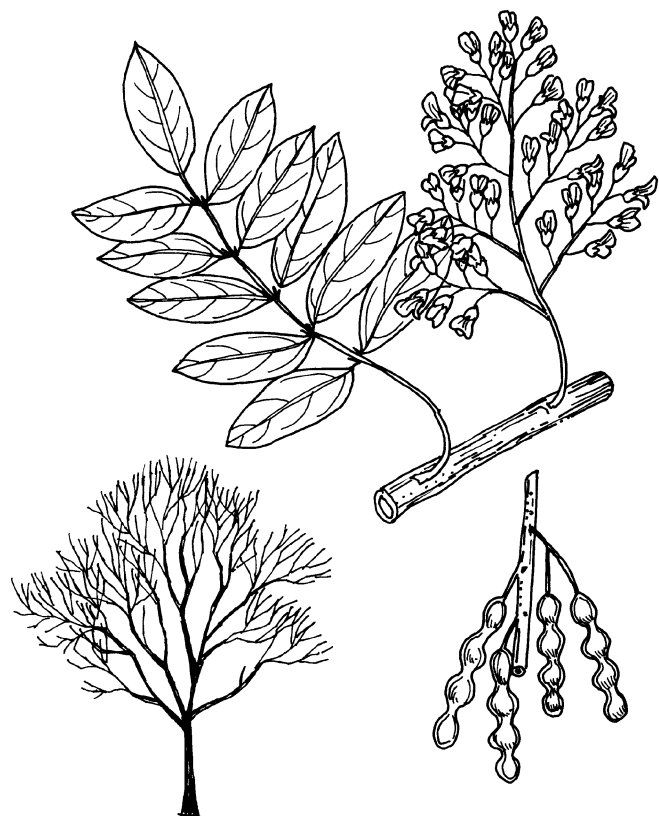
● Where to See

- 1119 N. 8th Street
- Municipal Park, southwest corner near Walnut Street



Pagodatree, Japanese

Botanical Name: *Sophora japonica*



Family	Fabaceae	Fall Color	Yellowish green
Form	Broad rounded	Seed	Bean-like pod
Size	40-60 ft. high 40-50 ft. spread	Flower	Creamy 10" long cluster in July

• Characteristics

Noted for good, clean foliage and beautiful late-summer flowers. Leaves are Honeylocust-like, casting a relatively light shade, allowing good turf growth beneath. A great, tough tree for Idaho; should be planted more. In Asia, it is planted around Buddhist temples. Yellow dye can be extracted by baking the flowers until brown and then boiling in water.

• Growing Conditions (Hardy in Zones 5-6)

Water: Quite drought and heat tolerant in maturity.

Light: Full sun.

Soil: Quite adaptable. Does well in poor soils.

• Growth Rate

Medium/fast; one to two feet per year in best conditions. Moderate life-span.

• Disease and Insect Pests

Cankers, twig blight, leaf hoppers can be a significant pest.

• Commonly Available Varieties

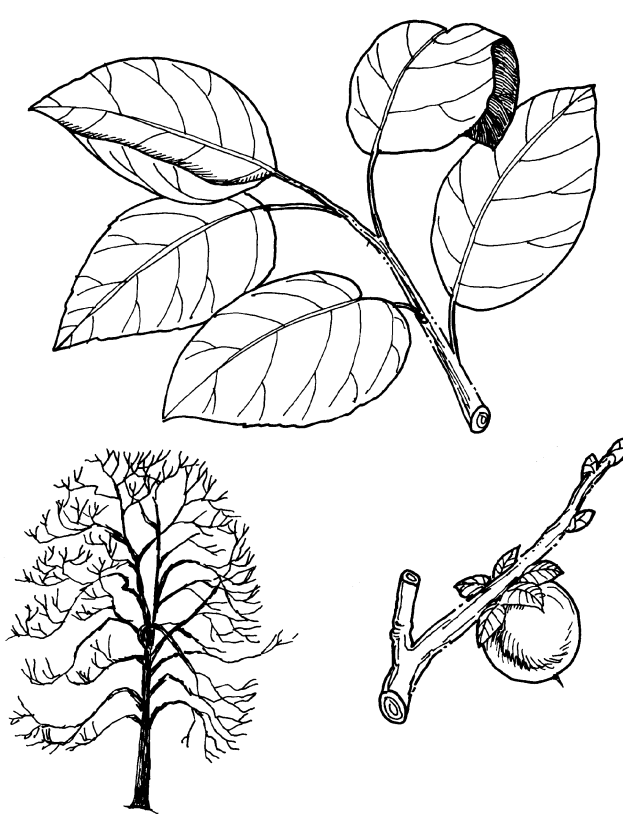
'Regent' - fast, straight growth; flowers at a young age.

• Where to See

- Community House, 519 S. 13th Street
- Along 13th Street at Camelsback Park.

Persimmon, Common

Botanical Name: *Diospyros virginiana*



Family	Ebenaceae	Fall Color	Yellow, red
Form	Oval	Seed	1" berry, edible
Size	30-50 ft. high 30-50 ft. spread	Flower	Fragrant white; bell-shaped

• Characteristics

Medium-large, dark green leaves emerging with a reddish color in spring and changing to potentially striking yellow/red in autumn. Yellow or orange fruit ripens after major frost and is sweetly edible. People are not the only ones that appreciate the flavor as birds and small mammals visit often as well. Can be messy at fruit drop.

• Growing Conditions (Hardy in Zones 5-6)

Water: Quite drought tolerant in maturity.

Light: Full sun.

Soil: Adaptable; alkaline soil tolerant.

• Growth Rate

Slow; one foot or less per growing season. Short-lived to 70 years.

• Disease and Insect Pests

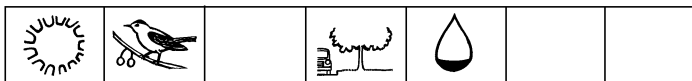
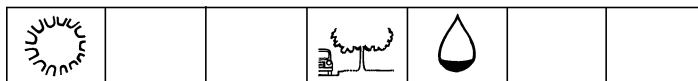
Persimmon wilt, Cercospora leaf spot. Neither is common in Idaho.

• Commonly Available Varieties

Species only.

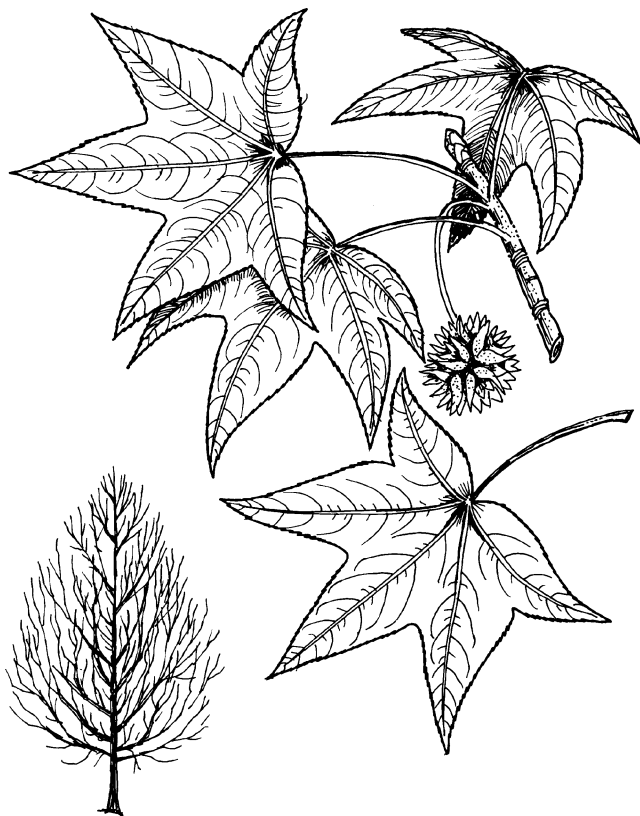
• Where to See

- 1101 W. Fort Street
- Entrance to Idaho Education Association parking lot off 6th and Franklin.



Sweetgum, American

Botanical Name: Liquidambar styraciflua



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

● Characteristics

Matchless in form and quality of foliage. The dark green leaves are distinctly star-shaped and turn various spectacular colors in the autumn. Twigs have cork-like projections that add interest to the winter appearance. Seed is one inch spiny ball that may add hazard to a barefoot stroll in the lawn. A very beautiful tree.

● Growing Conditions (Hardy in Zones 5-6)

Water: Moderate to high water demands.
Light: Full sun.
Soil: Requires acidic and well-drained soil.

● Growth Rate

Medium/fast. Two feet per growing season in ideal conditions. Medium to long life-span (from 100-300 years).

● Disease and Insect Pests

Leaf spots, caterpillars, scale. Leaf chlorosis on alkaline soils.

● Commonly Available Varieties

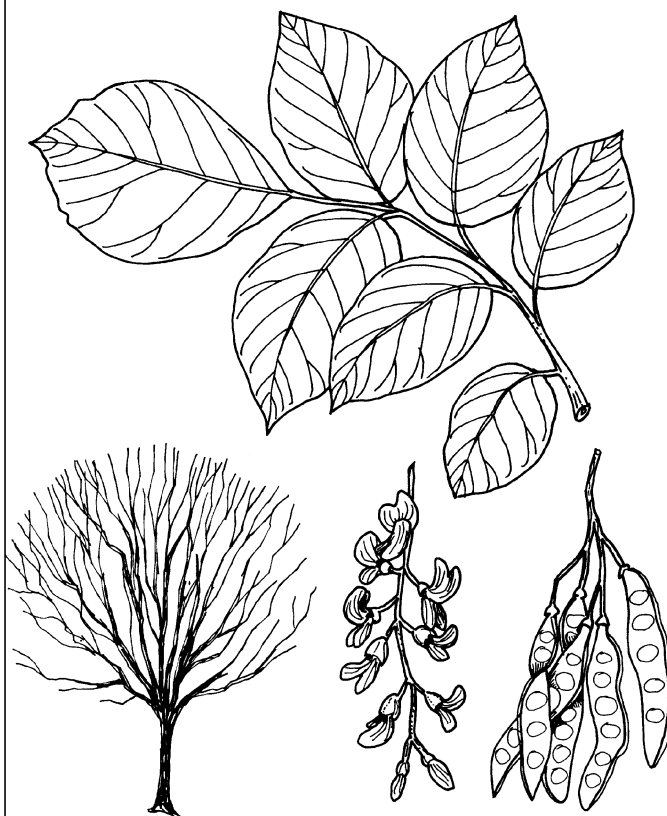
'Moraine' - only variety proven hardy in SW Idaho; fast growth with brilliant red fall color.

● Where to See

- Morrison Center on the BSU campus
- Capitol Blvd. fronting Julia Davis Park

Yellowwood, American

Botanical Name: Cladrastis kentukea



Family	Fabaceae	Fall Color	Golden yellow
Form	Rounded	Seed	Bean-like pod
Size	30-50 ft. high 30-50 ft. spread	Flower	Fragrant white clusters in May

● Characteristics

A choice shade or street tree. Supreme in flower, one source says it "drips with white rain". A favorite of bees. Leaves are 10 inches long and consist of 7 or 9 bright green leaflets that can turn dazzling yellow in autumn. A species truly deserving of more frequent planting, it should be seriously considered.

● Growing Conditions (Hardy in Zones 5-6)

Water: Not drought tolerant; moderate to high water demand.
Light: Full sun/partial shade.
Soil: Well drained, but tolerant of alkaline soil.

● Growth Rate

Medium; grows about one foot per growing season in a good site. Medium life-span to 150 years.

● Disease and Insect Pests

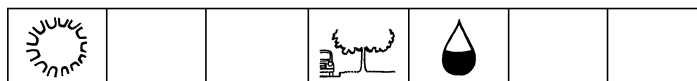
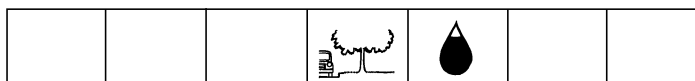
Mostly free of major pests.

● Commonly Available Varieties

Species only.

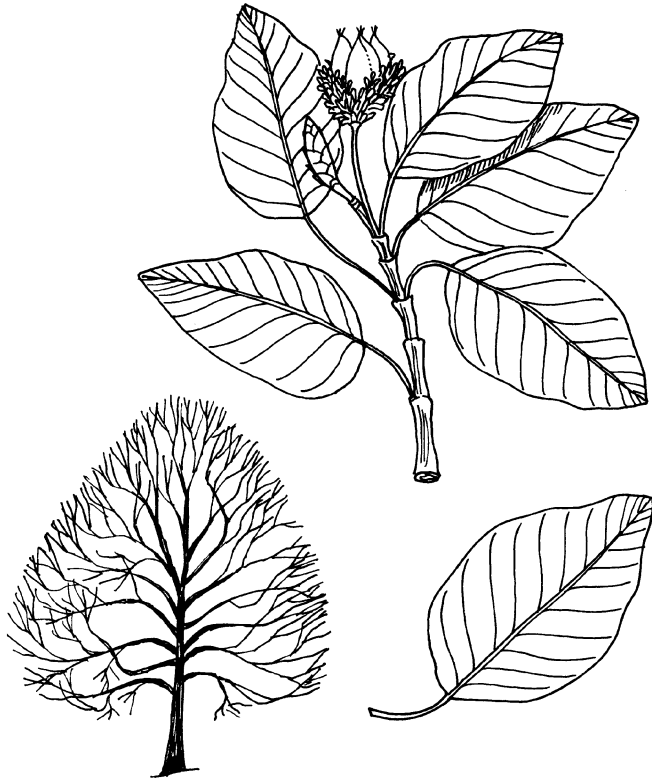
● Where to See

- 1310 University Drive (B.S.U. Campus, east side Culinary Art Building.)



Beech, European

Botanical Name: Fagus sylvatica



Family	Fagaceae	Fall Color	Golden yellow
Form	Oval/round	Seed	1" triangular nut
Size	50-70 ft. high 35-50 ft. spread	Flower	Small clusters of yellow globes

• Characteristics

Dark green to purple oval leaves emerge slowly in the spring coloring to a rich yellow/brown in autumn. The species attains majestic proportions while casting a dense, cooling shade. The smooth, grey bark of this tree is renowned for its great and unusual beauty. There are many varieties having differing leaf colors and shapes. (see list below).

• Growing Conditions (Hardy in Zones 5-6)

Water: Moderate water demand. Not drought tolerant.
Light: Full sun/partial shade.
Soil: Well-drained, acid soil. Somewhat adaptable.

• Growth Rate

Slow/medium; a foot or less per growing season. A long-lived species however.

• Disease and Insect Pests

Woolly aphid, otherwise mostly free of major pests.

• Commonly Available Varieties

'Asplenifolia' - cut-leaf variety; fern-like; gold-brown in fall.
'Riversii' - dark purple leaves; purple-bronze in fall.
'Roseo-Marginata' - leaves green, edged with pink and cream.
'Pendula' - weeping variety

• Where to See

- 1403 W. Franklin Street (2 trees; one is cutleaf).

Catalpa, Northern

Botanical Name: Catalpa speciosa



Family	Bignoniaceae	Fall Color	Yellow/brown
Form	Narrow, irregular	Seed	Bean-like pod
Size	50-70 ft. high 30-50 ft. spread	Flower	2" white, bell-shaped in June

• Characteristics

Huge medium green, heart-shaped leaves and showy spring flowers set this species apart in any landscape. Interesting seed capsules stay on the tree throughout much of the winter. Stark and dramatic form in any season. Can be considered messy as flower parts, leaves and seeds drop. Tough tree for tough sites.

• Growing Conditions (Hardy in Zones 4-6)

Water: Drought and heat tolerant in maturity.
Light: Full sun.
Soil: Adaptable; tolerant of heavy alkaline soils.

• Growth Rate

Fast; some tests have shown two feet or more per year in good sites. As is the case with most fast growing trees, Catalpa is quite short-lived (to 50 years).

• Disease and Insect Pests

Some scale and mealybug, Verticillium wilt.

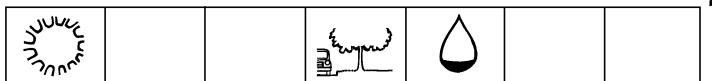
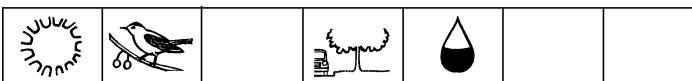
• Commonly Available Varieties

Species only.

• Where to See

- Fairview Ave. at Maple Grove, east side of Circle K parking lot.
- B.S.U. campus (north and west side of Technical Services Building)

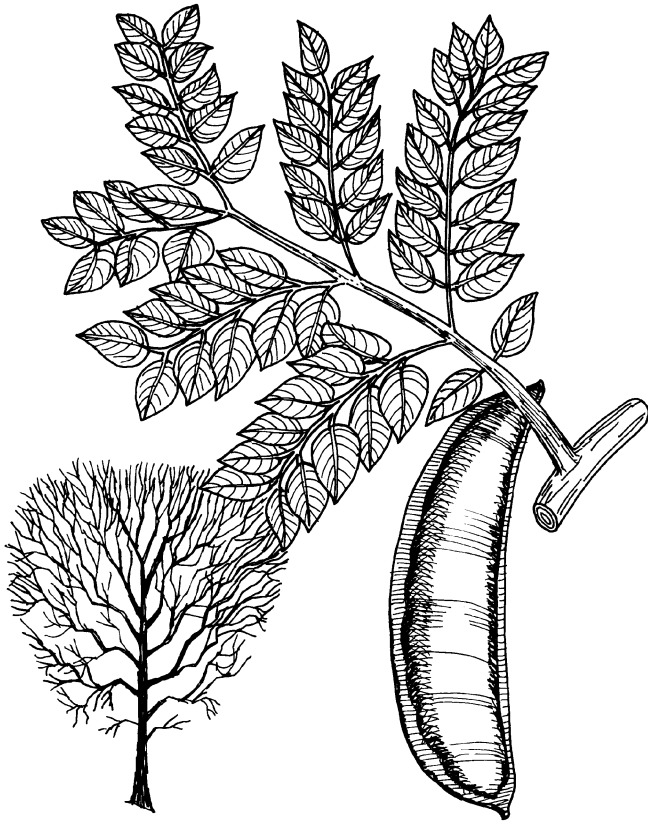
C
L
A
S
S



III

Coffeetree, Kentucky

Botanical Name: Gymnocladus dioica



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

● Characteristics

Huge, dark green, compound leaves emerge in late spring on very thick, stout branches. Flowers, though not too showy, are quite fragrant and interesting. Early settlers used the seeds within the pods as a coffee substitute. Imposing and picturesque form in the winter. Resistant to drought, heat and wind damage. A great choice for the Idaho landscape.

● Growing Conditions (Hardy in Zones 4-6)

Water: Quite heat and drought tolerant in maturity.
Light: Full sun.
Soil: Adaptable; tolerant of heavy, alkaline soil.

● Growth Rate

Slow/medium; about one foot per year. Moderate life span of 100-125 years.

● Disease and Insect Pests

Verticillium wilt.

● Commonly Available Varieties

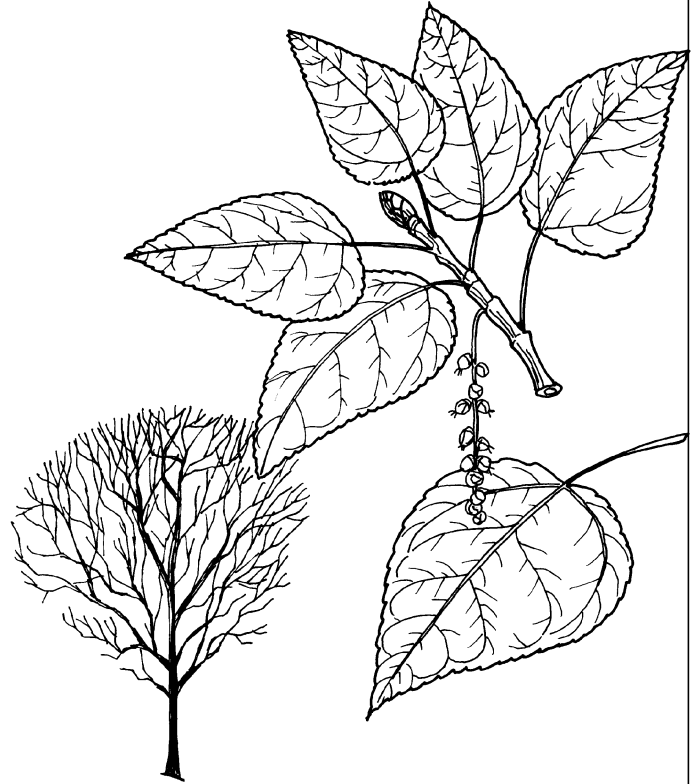
'Espresso' - mostly seedless, more vase-shaped than the species.

● Where to See

- Julia Davis Park, east of Zoo, northwest of the bandshell

Cottonwood, Black

Botanical Name: Populus trichocarpa



Family	Salicaceae	Fall Color	Yellow
Form	Vase-shaped	Seed	Cottony capsule
Size	75-100 ft. high 50-75 ft. spread	Flower	Drooping red clusters in April

● Characteristics

The largest of the North American Cottonwoods, this and the Mountain Alder are the only broadleaved species pictured in this guide that are truly native to Idaho. Generally found growing in moist bottomlands, the Cottonwood dominates the river landscape. Incredibly valuable to native wildlife such as songbirds, raptors and small mammals. A similar species (Eastern Cottonwood) is spiritually significant to Native American tribes. Best in natural areas.

● Growing Conditions (Hardy in Zones 4-6)

Water: Moderate to high water demand.
Light: Full sun.
Soil: Prefers loam; tolerates alkaline soils.

● Growth Rate

Very fast; upwards of three feet per growing season on good sites. Short-lived species, as with most fast growers.

● Disease and Insect Pests

Many cankers, galls, leaf spots, borers, caterpillars. Many others.

● Commonly Available Varieties

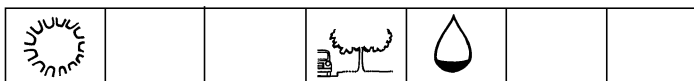
Species only.

● Where to See

- Boise River Greenbelt

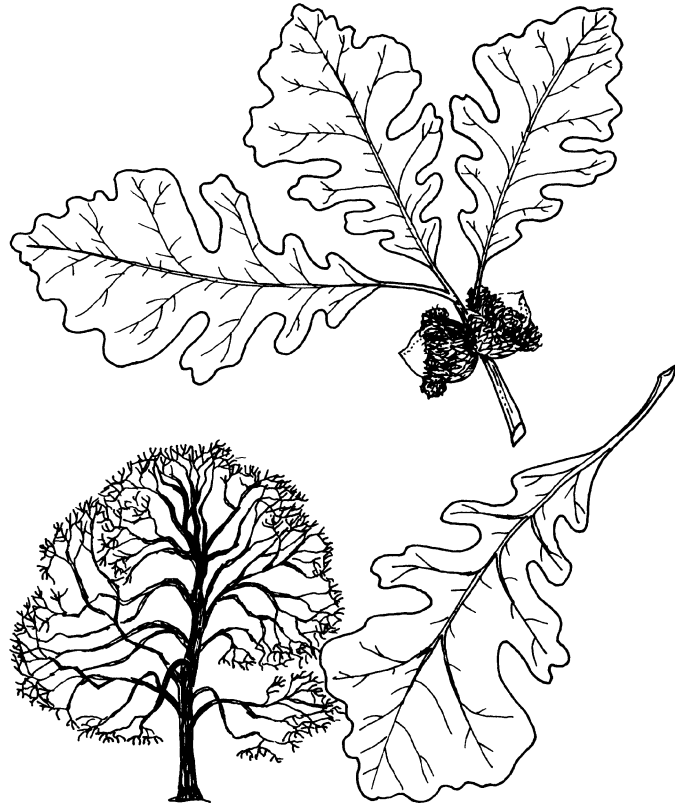
C
L
A
S
S

III



Oak, Bur

Botanical Name: Quercus macrocarpa



Family	Fagaceae	Fall Color	Yellow/brown
Form	Round, broad	Seed	"Mossy" acorn
Size	70-80 ft. high 70-80 ft. spread	Flowers	Dangling cluster; inconspicuous

● Characteristics

A grand, beautiful tree carrying dark green, lobed leaves often described as 'mitten-shaped'. Each leaf is different and no drawing can convey "the" bur oak leaf. Young twigs carry interesting, corky "wings" that add winter interest. The species is well-adapted to dry heavy soil and should be planted more in Idaho. Value to wildlife species (birds and small mammals) is inestimable as the large, heavily fringed acorns are an animal delicacy.

● Growing Conditions (Hardy in Zones 3-6)

Water: Quite tolerant of heat and drought in maturity.

Light: Full sun.

Soil: Very adaptable. Tolerates acid and alkaline soils.

● Growth Rate

Slow to medium; one foot or more per year. The slow growth contributes to the sturdy, prized wood. Long-lived to 250 years.

● Disease and Insect Pests

Leaf anthracnose, leaf spot, Oak Wilt (serious in east and south U.S.), Armillaria root rot, borers, scale, galls etc. Tree endures despite pests.

● Commonly Available Varieties

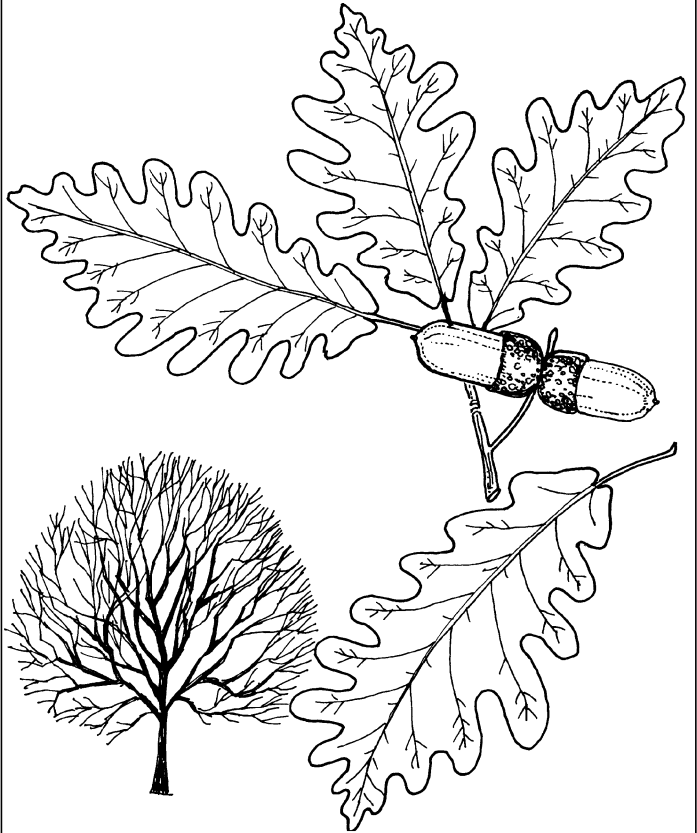
Species only.

● Where to See

- 1416 N.13th Street (private residence front yard)

Oak, English

Botanical Name: Quercus robur



Family	Fagaceae	Fall Color	Green/brown
Form	Round, spreading	Seed	Long, thin acorn
Size	50-70 ft. high 50-70 ft. spread	Flower	Dangling cluster; inconspicuous

● Characteristics

Dark green leaves similar in appearance to Bur Oak, but on average smaller. The leaves have an earlobe-like base that will distinguish it from other oaks. Massive, striking species that will do well in many Idaho environments. As with Bur Oak, the thick, dense bark is deeply furrowed and grey. Not well-known, but should be.

● Growing Conditions (Hardy in Zones 5-6)

Water: Quite drought tolerant in maturity.

Light: Full sun.

Soil: Adaptable; tolerant of alkaline soil.

● Growth Rate

Medium/fast; faster than other oaks (one to two feet per growing season). Another long-lived oak species.

● Disease and Insect Pests

Susceptible to mildew. See Bur Oak.

● Commonly Available Varieties

'Fastigiata' - upright, columnar form; 10-15 ft. spread.

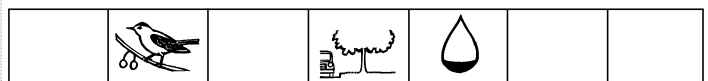
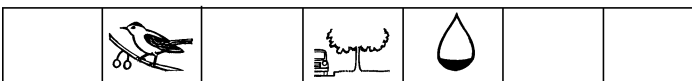
'Pyramich' - Skymaster Oak; excellent strong branch angles.

● Where to See

- 1504 Manitou (at Boise Ave.)

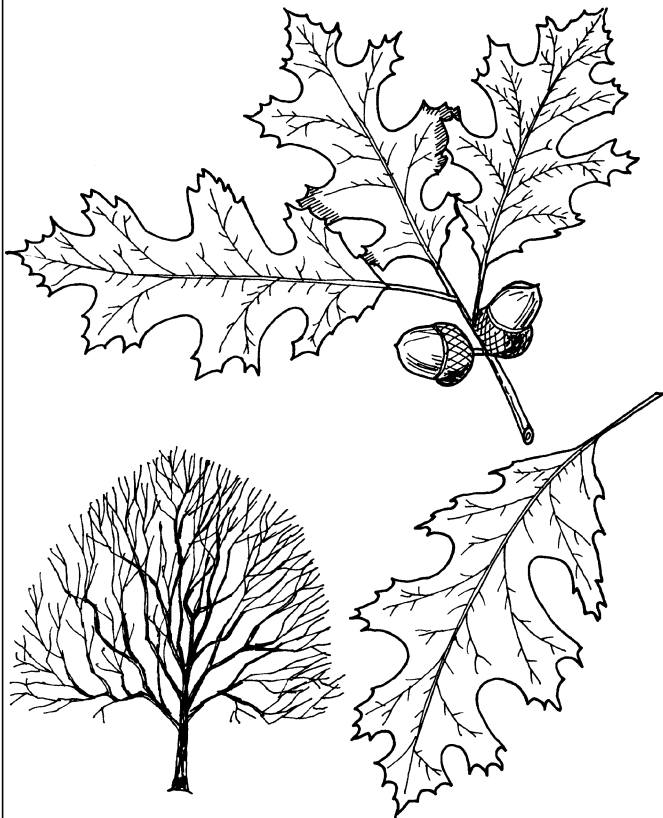
C
L
A
S
S

III



Oak, Red

Botanical Name: Quercus rubra



Family	Fagaceae	Fall Color	Bright red
Form	Round	Seed	Rounded acorn
Size	60-75 ft. high 50-60 ft. spread	Flower	See under Bur Oak

● Characteristics

Often brilliant red autumn coloring and bristle-tipped, dark green leaves distinguish this oak from other in this selection guide. Leaves are pinkish when unfolding in spring. This is a large-growing species that is a favorite of small mammals and birds. Good street and lawn tree, deserving of more extensive planting.

● Growing Conditions (Hardy in Zones 4-6)

Water: Quite drought tolerant in maturity.
Light: Full sun.
Soil: Prefers well-drained, acidic soil. Chlorosis on alkaline soil.

● Growth Rate

Medium/fast; this species can grow two feet 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

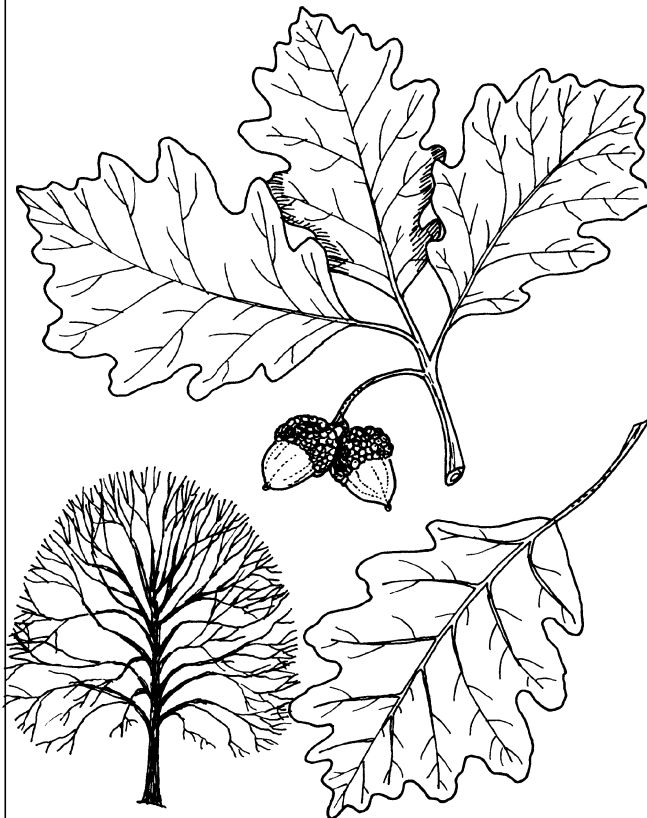
Species only.

● Where to See

- 210 Main Street, U.S. Assay grounds, just west of main building
- 1430 Manitou (at Highland Ave.)
- B.S.U. campus; lining University Drive in front of Administration Building

Oak, Swamp White

Botanical Name: Quercus bicolor



Family	Fagaceae	Fall Color	Yellow
Form	Round	Seed	Shiny, 1" acorn
Size	50-70 ft. high 50-70 ft. spread	Flower	See under Bur Oak

● Characteristics

Similar in appearance and description to Bur Oak. Leaves tend to feel more leathery and are slightly smaller on average. This species is gaining deserved popularity and should be planted more often in this area. The acorn is smaller than Bur Oaks and lacks the bush fringe. The species again is highly prized by small mammals and birds. A hardy, tough oak for Idaho.

● Growing Conditions (Hardy in Zones 4-6)

Water: Quite drought/heat tolerant in maturity. Tolerant of wet soil.
Light: Full sun/partial shade.
Soil: Adaptable. May develop chlorosis on alkaline soil.

● Growth Rate

Medium/fast; nearly two feet per growing season in good sites. Moderate life span of 125-150 years.

● Disease and Insect Pests

Mostly free of major pests.

● Commonly Available Varieties

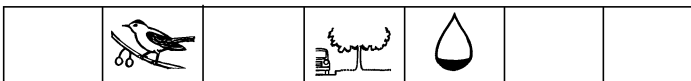
Species only.

● Where to See

- Capitol Park, east side next to 6th Street
- Julia Davis Park, east end near Broadway Ave.

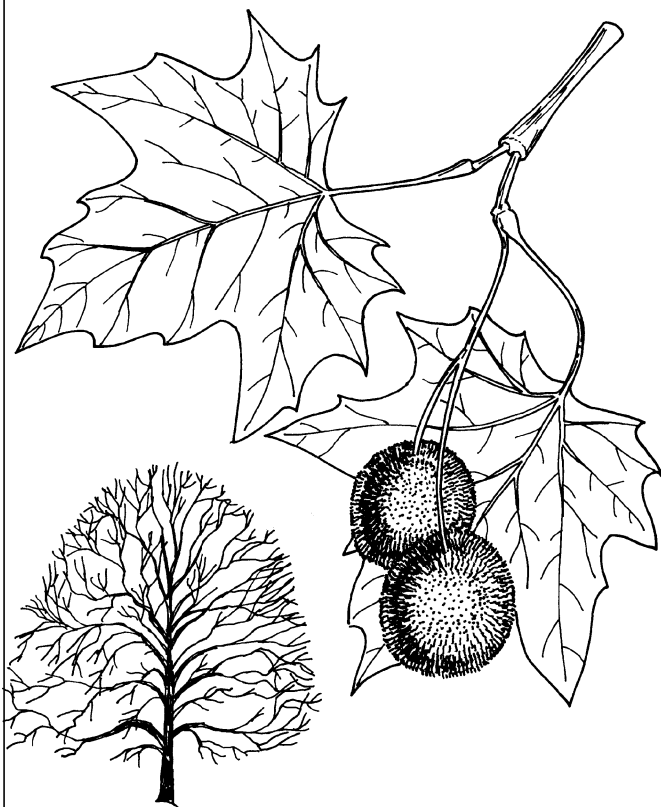
C
L
A
S
S

III



Planetree, London

Botanical Name: Platanus x acerifolia



Family	Platanaceae	Fall Color	Yellow/brown
Form	Round	Seed	1" global cluster
Size	70-100 ft. high 65-80 ft. spread	Flower	Inconspicuous

• Characteristics

A towering tree at full growth. Medium green, maple-like leaves can be huge (to 10" across) and cast a dense shade. They often remain on the tree well into December. The bark exfoliates in patches, revealing beautiful cream, olive and brown colors beneath; very handsome in winter. A superb, hardy giant of a shade tree.

• Growing Conditions (Hardy in Zones 5-6)

Water: Drought tolerant in maturity.
Light: Full sun/partial shade.
Soil: Very adaptable; tolerant of alkaline soil and pollution.

• Growth Rate

Medium/fast; nearly two feet per growing season. Can be long-lived to 300 years.

• Disease and Insect Pests

Canker stain, twig anthracnose, borers. May frost crack in winter.

• Commonly Available Varieties

'Bloodgood' - common anthracnose-resistant form. Very tolerant.

• Where to See

- 820 W. Washington Street
- Julia Davis Park, Mall Road

Tuliptree

Botanical Name: Liriodendron tulipifera



Family	Magnoliaceae	Fall Color	Golden yellow
Form	Oval/rounded	Seed	Winged
Size	70-90 ft. high 35-50 ft. spread	Flower	Tulip-like, high on tree; yellow

• Characteristics

A large, stately tree with beautiful tulip-like, yellowish-green flowers in May. The flowers are borne high in the tree and may not be seen unless sought for. Leaves are bright green and also resemble a tulip or a cat face. Seeds are carried on upright cone-like structures in the autumn and persist all winter. A native to the eastern U.S. and deserves to be planted more in this area.

• Growing Conditions (Hardy in Zones 5-6)

Water: Moderate/high water demand. Not drought tolerant.
Light: Full sun.
Soil: Tolerates alkaline soil. Needs to be well-drained.

• Growth Rate

Fast; two to three feet in a growing season in an ideal site. Again, fast growth can lead to weak wood. Moderate life-span to 125 years.

• Disease and Insect Pests

Severe leaf scorch in drought. Aphids often a problem. Verticillium wilt, cankers, scale. Weak wooded; expect some branch breakage.

• Commonly Available Varieties

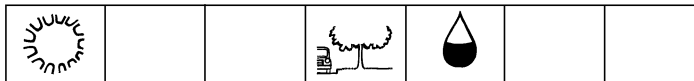
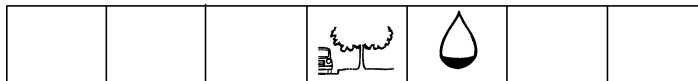
Species only.

• Where to See

- 1419 North 16th Street (16th and Ridenbaugh)
- Capitol Park, southeast corner

C
L
A
S
S

III



Arborvitae, Eastern

Botanical Name: Thuja occidentalis



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

● Characteristics

This is the parent tree to the popular evergreen shrub often seen in many home landscapes. The medium green leaves are scale-like and cling tightly to the twigs. Branches spread out into flat, horizontal sprays of foliage. There are varieties available that retain the green color through the winter months. An attractive U.S. native when planted in the "right" places in the landscape.

● Growing Conditions (Hardy in Zones 3-6)

Water: Moderate drought tolerant in maturity.
Light: Full sun.
Soil: Adaptable. Tolerant of alkaline soil.

● Growth Rate

Medium; one to two feet per growing season. Long-lived.

● Disease and Insect Pests

Spider mites, bagworm, tip blight.

● Commonly Available Varieties

Many varieties available, but most qualify as shrubs. See your local nursery.

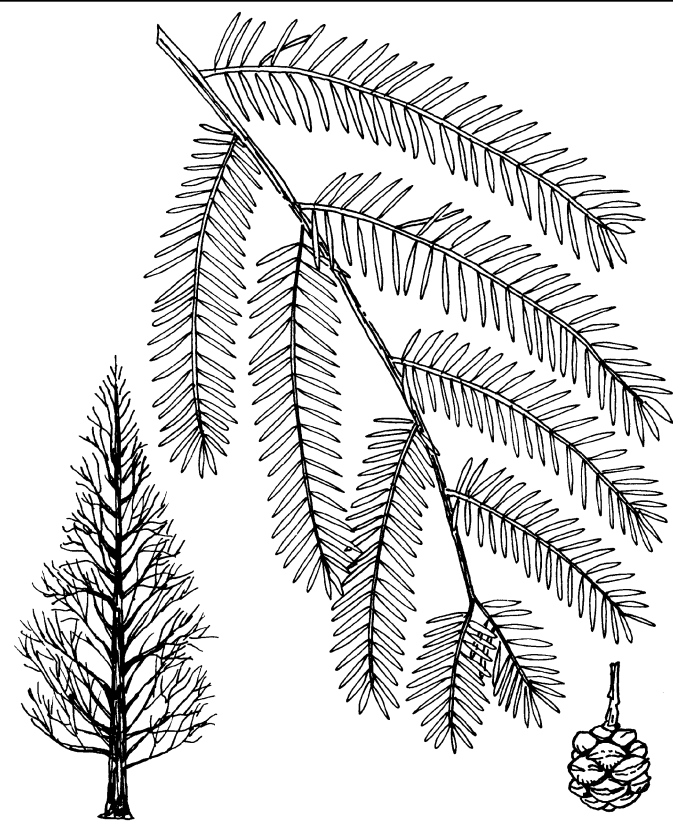
● Where to See

- Ann Morrison Park, north of Clock Tower
- Morris Hill Cemetery along Latah



Baldcypress, Common

Botanical Name: Taxodium distichum



Family	Taxodiaceae	Fall Color	Rusty orange
Form	Pyramidal	Seed	1" cone
Size	50-80 ft. high 20-30 ft. spread	Flower	Inconspicuous

● Characteristics

A lofty, dignified deciduous conifer native to the southeastern United States. The light green needles are arranged in a flat plane along the twigs giving a soft, feathery appearance to the tree. Needles color to a russet brown/orange in autumn. The root system is unique in that knobby "knees" protrude from the ground around older trees. Should be planted more often where conditions allow.

● Growing Conditions (Hardy in Zones 5-6)

Water: Moderate water demand. Does well in standing water.
Light: Full sun.
Soil: Tolerant of poorly drained, compacted soil.

● Growth Rate

Medium. One to two feet per growing season in ideal sites. Long-lived (500-700 years in natural stands).

● Disease and Insect Pests

Mostly free of major pests.

● Commonly Available Varieties

'Monarch of Illinois' - wide-spread to 50 ft. Unusual for this species.
'Shawnee Brave' - narrowly pyramidal form. Spread to 20 ft.

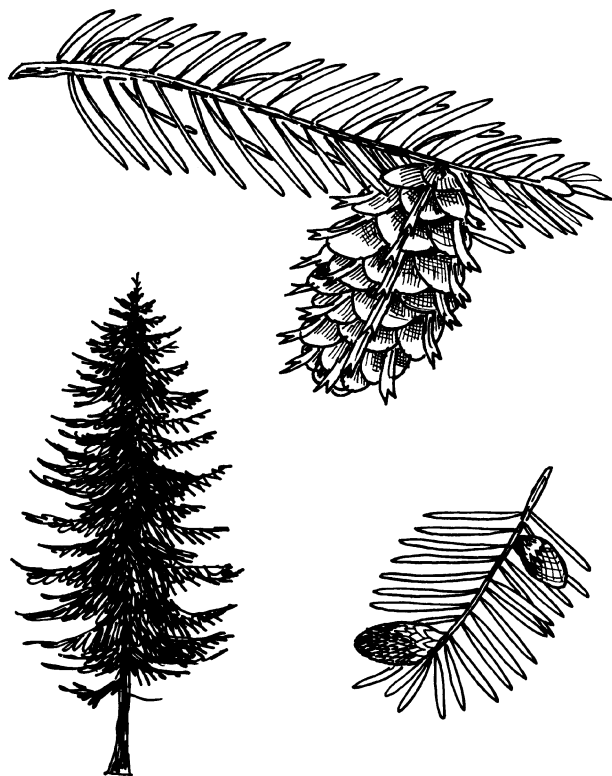
● Where to See

- Ann Morrison Park, off Americana near pond



Douglasfir

Botanical Name: Pseudotsuga menziesii



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	3" cones
Size	40-80 ft. high 15-25 ft. spread	Flower	Small, red dangling cluster

• Characteristics

The number one timber species also is well-suited to the home and community landscape. A graceful Idaho native carrying soft, dark green needles densely arranged about the twigs. The cones are an identification feature: papery "tongues" poke out around the cone. One Native American story suggests that the papery tongues are the rear legs and tail of a mouse that ran into the cone to escape a fox.

• Growing Conditions (Hardy in Zones 4-6)

Water: Somewhat drought tolerant in maturity.

Light: Full sun/partial shade.

Soil: Requires well-drained, acidic soil. Not tolerant of alkalinity.

• Growth Rate

Medium; grows one to two feet per growing season in ideal sites. Long-lived species to 200 years.

• Disease and Insect Pests

Some cankers, aphids, Douglasfir bark beetle, gypsy moth, scale.

• Commonly Available Varieties

Species only.

• Where to See

- 1021 Vermont Ave.

Falsecypress, Lawson

Botanical Name: Chamaecyparis lawsoniana



Family	Cupressaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	Half-inch cones
Size	40-60 ft. high 15-20 ft. spread	Flower	Inconspicuous

• Characteristics

Feathering sprays of scaly, dark or bluish green leaves give this handsome species an appearance somewhat like the Eastern Arborvitae. The species is relatively rare even in its west coast native range. The strong, spicy odor of the wood contributes to its appeal in the landscape. Also commonly known as the Port-Orford Cedar.

• Growing Conditions (Hardy in Zones 5-6)

Water: Moderate to high water demands. Not drought tolerant.

Light: Full sun/partial shade.

Soil: Well-drained, acidic soil. Not particularly adaptable.

• Growth Rate

Medium; one to two feet per growing season. Very long-lived to 500 years.

• Disease and Insect Pests

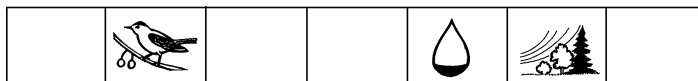
Phytophthora root rot, scale.

• Commonly Available Varieties

'Allumii' - blue-green foliage; narrow compact form to 30 feet
'Stewartii' - new growth yellow maturing to green; 30-40 ft. high.

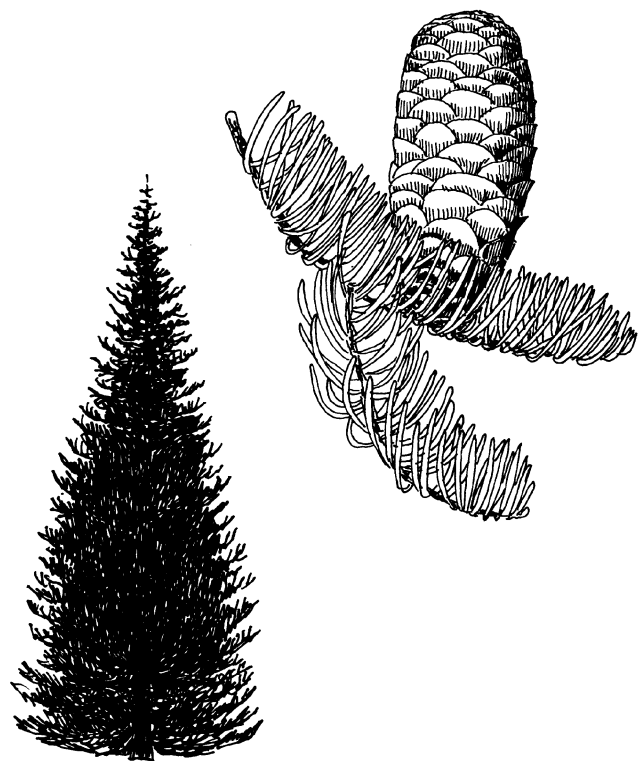
• Where to See

- Ann Morrison Park near the tennis courts



Fir, White

Botanical Name: Abies concolor



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	5" cone, upright
Size	50-70 ft. high 20-30 ft. spread	Flower	Inconspicuous

● Characteristics

A native to some areas of southeastern Idaho, the White Fir is gaining acceptance in the home landscape. The flat, two inch needles are bluish or silvery green and are not sharp to the touch. The species is quite similar in appearance to the blue Colorado Spruce varieties but with an overall softer effect. A beautiful, hardy tree for Idaho.

● Growing Conditions (Hardy in Zones 4-6)

Water: Quite drought tolerant in maturity.
Light: Full sun/partial shade.
Soil: Well-drained soil, does poorly in clay.

● Growth Rate

Slow/medium; about a foot per growing season. A long-lived species (250-300 years).

● Disease and Insect Pests

Mostly free of major pests.

● Commonly Available Varieties

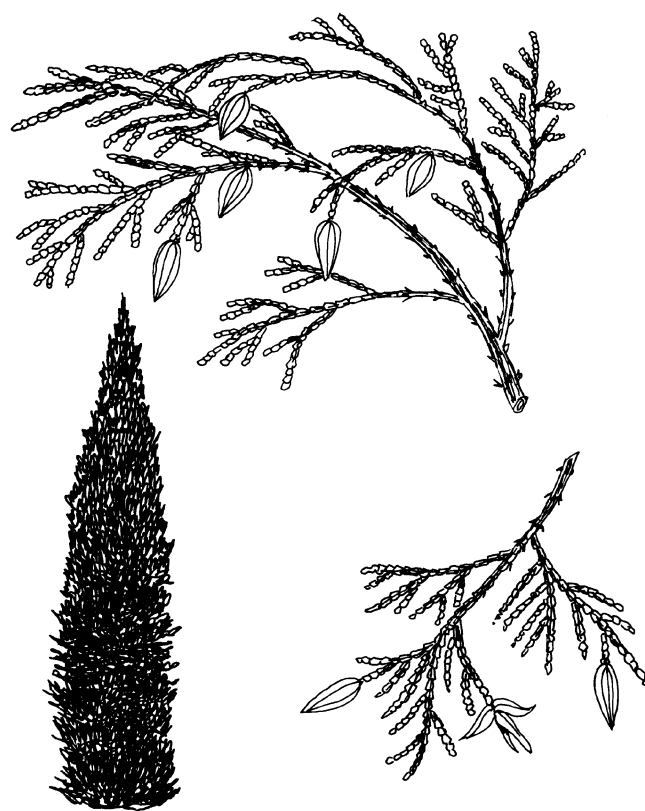
'Violacea' - carries silvery blue needles; quite attractive.

● Where to See

- 515 Williams Street

Incensecedar, California

Botanical Name: Calocedrus decurrens



Family	Cupressaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	1" cones
Size	50-70 ft. high 10-15 ft. spread	Flower	Inconspicuous

● Characteristics

A lofty, beautiful tree with flat, dark green sprays of closely overlapped scaly leaves. The thick, fibrous bark of this evergreen is a rich cinnamon color, but is usually hidden by branches that extend all the way to the ground. The spicy fragrance of both the foliage and the wood give the species its common name. An excellent windbreak tree. Wood commonly used to make pencils.

● Growing Conditions (Hardy in Zones 5-6)

Water: Moderate water demand.
Light: Full sun/partial shade.
Soil: Quite adaptable, prefers well-drained fertile soil.

● Growth Rate

Slow/medium; rate increases once established. Long-lived to 1000 years in natural stands; somewhat less in the community landscape.

● Disease and Insect Pests

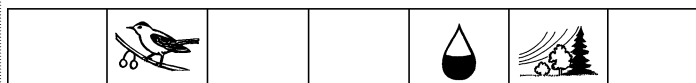
Some heart rot fungi, leafy mistletoe

● Commonly Available Varieties

Species only.

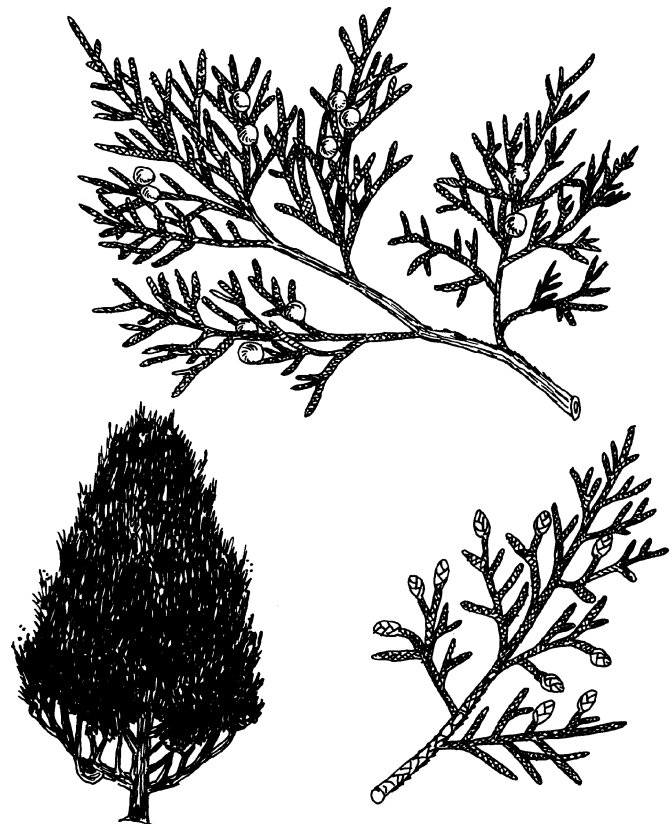
● Where to See

- 1503 Sunrise Rim Road



Juniper, Rocky Mountain

Botanical Name: Juniperus scopulorum



Family	Cupressaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	Small cones
Size	30-50 ft. high 5-15 ft. spread	Flower	Inconspicuous

• Characteristics

A drought/heat tolerant species with a short trunk that divides close to the ground into several upright main limbs. Bluish-green leaves are scale-like and held close to the twigs. The species is valued mainly for its use as a screen or high hedge. A reliable, tough evergreen that withstands the 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; a foot or less per growing season.

• Disease and Insect Pests

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

• Commonly Available Varieties

Many available, but the majority are shrubs. See your local nursery.

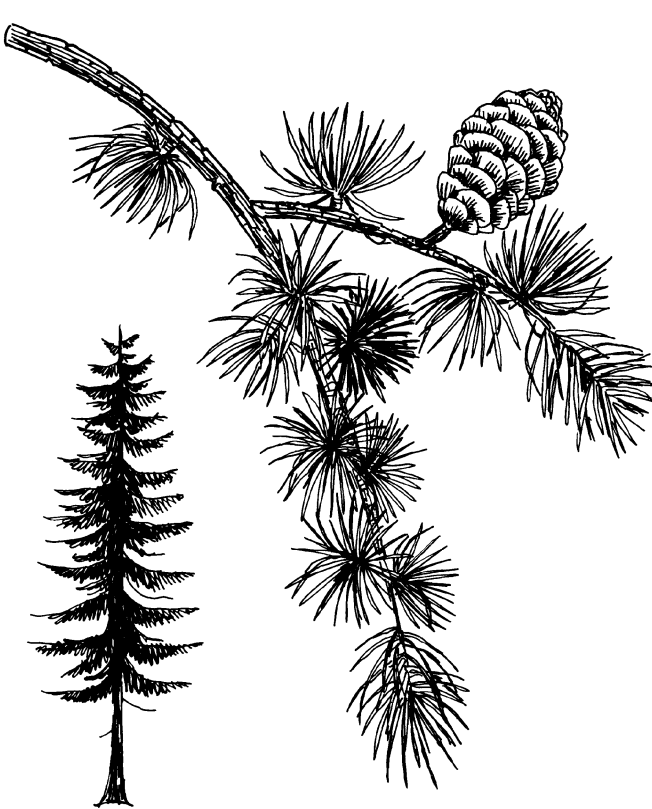
• Where to See

- B.S.U. campus; east side of Mechanical Technology Building

- Ann Morrison Park north of softball fields

Larch, European

Botanical Name: Larix decidua



Family	Pinaceae	Fall Color	Bright yellow
Form	Pyramidal	Seed	1" cones
Size	50-70 ft. high 25-30 ft. spread	Flower	Red or yellow; egg-shaped

• Characteristics

The larches (or tamaracks) are one of the few needle-bearing species that lose their leaves in the autumn, but not before a spectacular display of yellow/orange color. Feathery soft tufts of needles emerge a bright green in spring and turn a deeper green in summertime. In the autumn the tree looks magnificent against an evergreen background. Very graceful in the landscape.

• Growing Conditions (Hardy in Zones 3-6)

Water: Moderate to high water demand.

Light: Full sun.

Soil: Best in well-drained soil; withstands boggy conditions.

• Growth Rate

Medium/fast; nearing two feet per growing season in an ideal site. Moderate life-span of 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

'Pendula' - form with pendulous, sweeping branches.

• Where to See

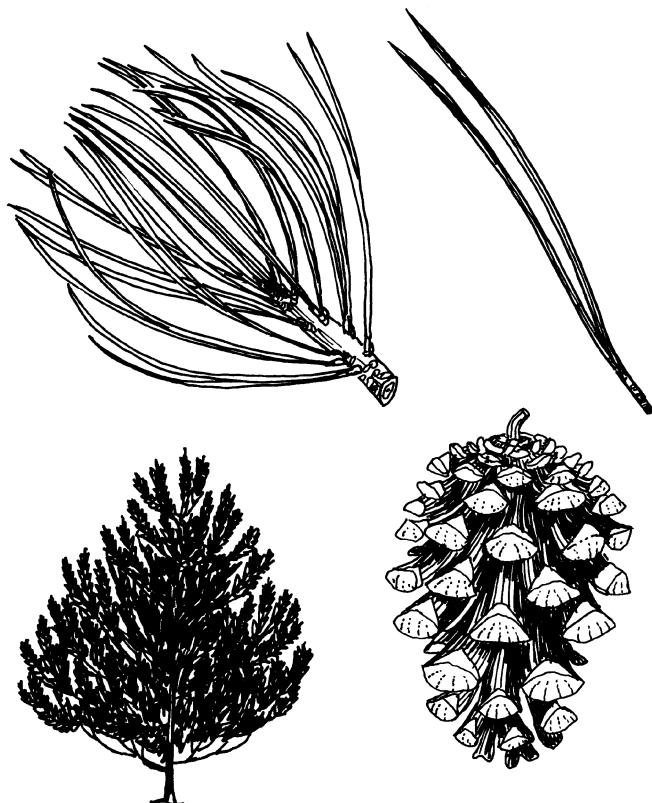
- 4821 W. Franklin, Wright Community Church grounds

- 3510 Mountainview Drive



Pine, Austrian

Botanical Name: Pinus nigra



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal/broad	Seed	3" cones
Size	50-60 ft. high 30-40 ft. spread	Flower	Small, yellowish cluster

● Characteristics

Long, stiff, dark green needles mark this evergreen species. The Austrian pine is a hardy, tolerant tree that will adapt to many growing conditions. In old age, the tree can develop a lot of character with full branching and attractive bark. Makes a good screen or windbreak species.

● Growing Conditions (Hardy in Zones 4-6)

Water: Quite drought tolerant in maturity.

Light: Full sun.

Soil: Adaptable. Tolerant of clay, alkaline soils.

● Growth Rate

Medium; one foot or slightly more per growing season in a good site.

● Disease and Insect Pests

Sphaeropsis shoot blight can kill new branch growth.

● Commonly Available Varieties

Species only.

● Where to See

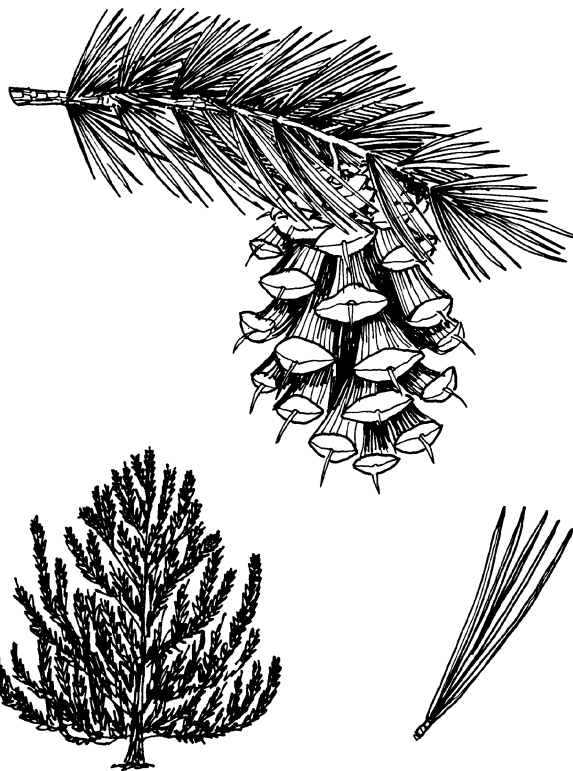
- B.S.U. campus; Greenbelt Amphitheater

- B.S.U. campus; tennis bubbles

- Ada County Extension Office; 5880 Glenwood

Pine, Bristlecone

Botanical Name: Pinus aristata



Family	Pinaceae	Fall Color	Evergreen
Form	Irregular/shrubby	Seed	3" Cone
Size	8-20 ft. high 8-20 ft. spread	Flower	Inconspicuous

● Characteristics

This small, extremely slow growing pine has as its native home the wind-blasted and snowbound heights of the Rocky Mountains. It bears an extremely picturesque growth form and is very well-suited to many landscapes. Needles, carried in bundles of 5, are blue-green and slightly curved. This tree retains needles for many years and has a bushy appearance; sometimes incorrectly called Foxtail Pine.

● Growing Conditions (Hardy in Zones 4-6)

Water: Drought tolerant in maturity.

Light: Full sun.

Soil: Adaptable. Succeeds in poor alkaline soils.

● Growth Rate

Very slow; half a foot per growing season at best. Very long-lived; several trees discovered between 4000 and 5000 years old.

● Disease and Insect Pests

Root rot (especially in constantly wet soils), tip blight, cankers, aphids, scale, borers and others. None too serious.

● Commonly Available Varieties

Species only.

● Where to See

- 1630 Londoner Road



Pine, Limber

Botanical Name: Pinus flexilis



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	5" Oblong cone
Size	30-50 ft. high 15-35 ft. spread	Flower	Inconspicuous

● Characteristics

This five-needled Idaho native pine typically finds its natural home in the high country above 4000 feet. Needless to say, this is a hardy, tough tree that can withstand the harshest weather conditions. As the name implies, this tree can bend; the twigs may even be tied into knots! Needles are about 5" long and seem to be crowded at the end of the branch. Should be planted much more frequently.

● Growing Conditions (Hardy in Zones 3-6)

Water: Quite drought tolerant in maturity.

Light: Full sun/partial shade.

Soil: Adaptable. As with most pines, likes well-drained soils.

● Growth Rate

Slow; less than a foot per year. Long lived species.

● Disease and Insect Pests

Root rot, needle blight, aphids, scale, caterpillars, bark beetles and others.

● Commonly Available Varieties

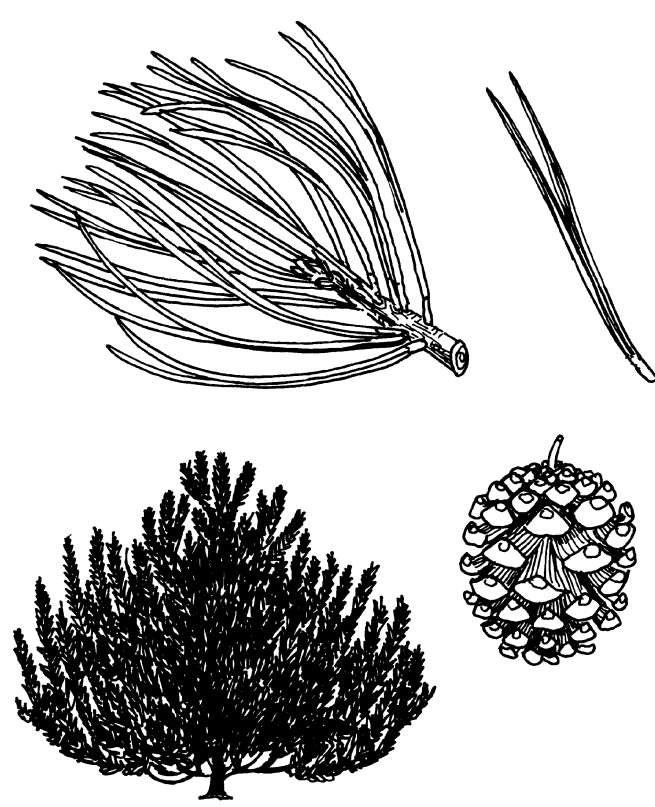
Check with local nurseries.

● Where to See

- 2709 Inverness Way

Pine, Mugo

Botanical Name: Pinus mugo



Family	Pinaceae	Fall Color	Evergreen
Form	Variable	Seed	2" Cone
Size	15-25 ft. high 15-25 ft. spread	Flower	Inconspicuous

● Characteristics

Generally found in the landscape as a bushy, many branched pine. Needles in pairs, 2 inches long and dark green. Often described as a low-growing pine, this plant can reach 15-25 ft. in height with an equal spread. Excellent when used in groups and as an evergreen backdrop. Cultivated varieties are more commonly found than the 'pure' species.

● Growing Conditions (Hardy in Zones 3-6)

Water: Quite drought tolerant in maturity.

Light: Full sun.

Soil: Well-drained; tolerant of alkaline soil.

● Growth Rate

Slow; a foot or less per year.

● Disease and Insect Pests

Scale can be very serious; canker, Phytophthora, borers, sawflies

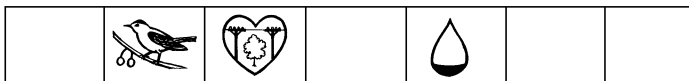
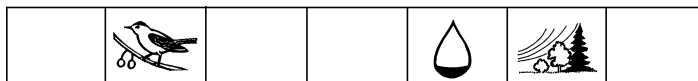
● Commonly Available Varieties

'Compacta' - Very dense dwarf to 5 ft. high.

● Where to See

- B.S.U. Campus (Engineering/Technology Building)

- Platt Gardens at the Morrison-Knudsen Depot



Pine, Ponderosa

Botanical Name: Pinus ponderosa



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal/broad	Seed	4-6" cones
Size	60-100 ft. high 25-35 ft. spread	Flower	Yellow clusters

● Characteristics

"Discovered" by the Lewis and Clark expedition, this majestic native pine boasts 5-10 in long, dark green needles carried in bundles of three (sometimes two). Bark of mature trees is broken into long, orange or russet plates made up of thin scales. Twigs are orange-brown, and when broken, smell of orange-rind. A favorite with wildlife, the species also serves well to block icy wind and snow.

● Growing Conditions (Hardy in Zones 4-6)

Water: Drought tolerant in maturity.

Light: Full sun.

Soil: Adaptable. Tolerant of alkaline and salty soils.

● Growth Rate

Medium; one to two feet per growing season. Long-lived to 350 years.

● Disease and Insect Pests

Blister rust, needle blight, dwarf mistletoe. Many insect pests. Consult with local extension office if tree suffers severe damage.

● Commonly Available Varieties

Species only.

● Where to See

- B.S.U. campus; west side of football stadium

Pine, Scotch

Botanical Name: Pinus sylvestris



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal/irregular	Seed	3" cones
Size	50-70 ft. high 30-40 ft. spread	Flower	Inconspicuous

● Characteristics

Picturesque form and attractive grey and orange peeling bark join with site adaptability to make this species a fine addition to many sites. Two inch green or blue-green needles are retained in bundles of two year-round on the tree. The bark on the upper portion of the tree flakes off to reveal a brilliant orange skin. An excellent species for most areas of Idaho.

● Growing Conditions (Hardy in Zones 3-6)

Water: Quite drought tolerant in maturity.

Light: Full sun.

Soil: Must be well-drained; tolerates poor soils.

● Growth Rate

Medium in youth, slowing with age.

● Disease and Insect Pests

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

● Commonly Available Varieties

Species only.

● Where to See

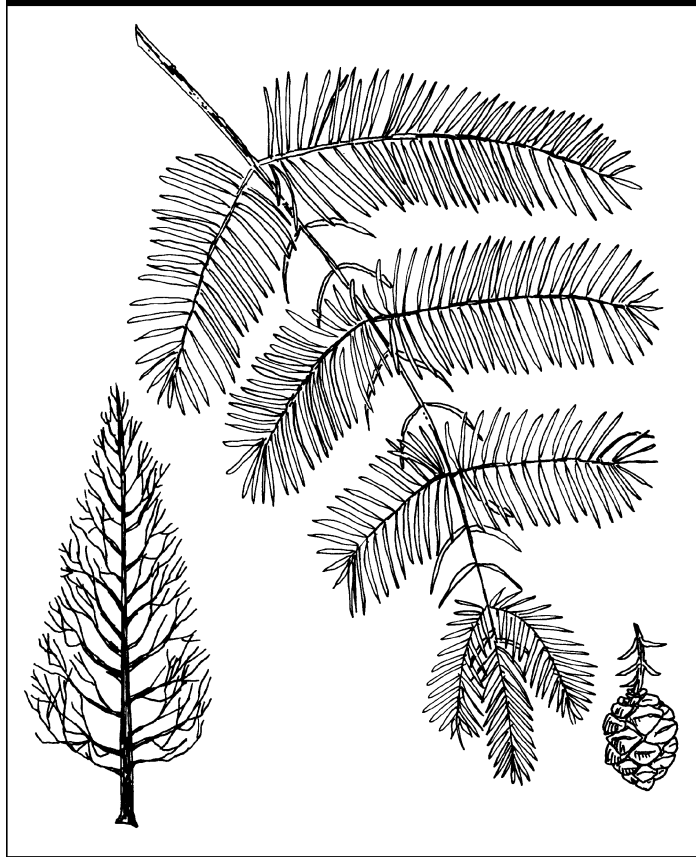
- B.S.U. campus; north side of football stadium

- Morris Hill Cemetery, E. of Mausoleum



Redwood, Dawn

Botanical Name: Metasequoia glyptostroboides



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

• Characteristics

Another deciduous, needle-bearing conifer that has a fascinating history. The tree was discovered and named in 1941 from fossils discovered in Japan. Later that year, several isolated stands of living trees were found in China. In leaf similar to Baldcypress or Coast Redwood. A beautiful species deserving of more frequent planting.

• Growing Conditions (Hardy in Zones 5-6)

Water: Moderate water demand.

Light: Full sun.

Soil: Requires well-drained, slightly acidic soil.

• Growth Rate

Fast; the species will add two feet or more per growing season on good sites. Life-span under cultivation not known yet.

• Disease and Insect Pests

Some cankers, nothing else too serious.

• Commonly Available Varieties

Species only.

• Where to See

- 4105 Mountain View Drive, east of Cole
(private residence side yard)

- B.S.U. campus; Science Education Building

Sequoia, Giant

Botanical Name: Sequoiadendron giganteum



Family	Taxodiaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	2" cones
Size	50-70 ft. high 20-30 ft. spread	Flower	Inconspicuous

• Characteristics

Also known as Big Tree, this famous species has not attained the towering heights (200-300 ft.) of its wild siblings. Still, the tree is very worthy of planting in the Idaho landscape. Bluish-green needles are very short (less than half an inch) and held close to the twig. In older age, lower branches will drop, exposing the craggy, red-brown bark. The oldest specimen known is 3200 years. Should be planted more often.

• Growing Conditions (Hardy in Zones 5-6)

Water: Moderate water demand.

Light: Full sun.

Soil: Well-drained, slightly acidic soil.

• Growth Rate

Medium; a foot or more per growing season. Very long-lived in natural stands to at least 3000 years, may be less in cultivation.

• Disease and Insect Pests

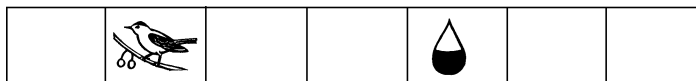
Phytophthora root rot in poorly-drained soils.

• Commonly Available Varieties

Check with local nurseries.

• Where to See

- Ann Morrison Park, west of the tennis courts.



Spruce, Colorado

Botanical Name: Picea pungens



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	Oblong 4" cones
Size	50-80 ft. high 20-35 ft. spread	Flower	Inconspicuous

● Characteristics

A very successful home landscape tree having a very formal, rigid appearance. The needle color ranges from dark green to a very silvery blue depending on the variety selected. One inch needles covering twigs are sharp, stiff and four-sided. Overplanted in many locations, but understandably so; it is steady growing and tolerant of adverse conditions.

● Growing Conditions (Hardy in Zones 3-6)

Water: Moderate water demand.
Light: Full sun.
Soil: Quite adaptable to most soil conditions.

● Growth Rate

Medium; one to two feet per year in a good site.

● Disease and Insect Pests

Many; spruce bud scale, spider mites, aphids; cytospora canker can kill lower branches.

● Commonly Available Varieties

glauca - variety with very silvery-blue foliage.
'Hoopsii' - dense, more blue-colored than most forms.
'Moerheimii' - compact form retaining blue color in winter.

● Where to See

- 5205 Cassia in residence front yard

Spruce, Norway

Botanical Name: Picea abies



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	5" oblong cones
Size	50-70 ft. high 25-30 ft. spread	Flower	Pendulous, rosy red when young

● Characteristics

Fast growth and attractive pendulous branch growth distinguish this species from other spruces. Dark green needles approach one inch in length and surround the twigs. The dangling growth habit of the branches lends a graceful air to this species. Norway Spruce is very hardy and wind resistant and as such it makes a fine windbreak.

● Growing Conditions (Hardy in Zones 4-6)

Water: Moderate water demand.
Light: Full sun.
Soil: Somewhat adaptable. Prefers well-drained, acidic soil.

● Growth Rate

Fast; this spruce approaches two feet per growing season in good conditions.

● Disease and Insect Pests

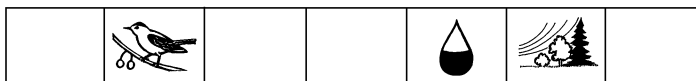
Spruce bud scale is very common. Others include: aphids, borers, spider mites, Cytospora canker and needle casts.

● Commonly Available Varieties

Species only in tree size; other varieties are dwarf form ('Nidiformis').

● Where to See

- 1516 Vermont (just south of Boise Ave.)



Spruce, Serbian

Botanical Name: Picea omorika



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	2" Cone
Size	50-60 ft. high 20-25 ft. spread	Flower	Inconspicuous

● Characteristics

Touted as one of the best evergreen trees for urban environments, this spruce is finding a place in many landscapes. The gracefully drooping branches lend an appearance of softness to the entire tree. The inch-long needles are dark green with a silvery underside; very attractive. Tends to grow more narrowly than most spruces, thus is better suited to smaller areas. Deserves wide-spread planting.

● Growing Conditions (Hardy in Zones 4-6)

Water: Somewhat drought tolerant in maturity.

Light: Full sun/partial shade.

Soil: Quite adaptable. Tolerates alkaline soil.

● Growth Rate

Slow/medium; a foot or slightly more in a year.

● Disease and Insect Pests

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

● Commonly Available Varieties

Species only.

● Where to See

- Lake Harbor development; Harbor Lane on W. State Street

Spruce, White

Botanical Name: Picea glauca



Family	Pinaceae	Fall Color	Evergreen
Form	Pyramidal	Seed	2" Cone
Size	40-50 ft. high 15-25 ft. spread	Flower	Inconspicuous

● Characteristics

Pale green, short needles are crowded on the upper sides of twigs on this evergreen species. This species does very well in most Idaho landscapes. Needles not as long as other spruce and not as stiff. An excellent, attractive windbreak species that is native to Canada, Alaska and the upper midwestern United States.

● Growing Conditions (Hardy in Zones 3-6)

Water: Quite heat and drought tolerant in maturity.

Light: Full sun/partial shade.

Soil: Adaptable to heavy alkaline soils.

● Growth Rate

Medium; a foot to two feet per year. Long-lived to 250 years.

● Disease and Insect Pests

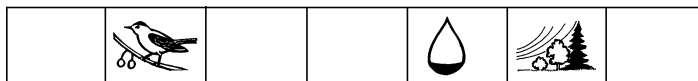
Root rot, cankers, needle miners, sawfly, bagworms.

● Commonly Available Varieties

'Densata' - Black Hills Spruce; denser and more ornamental than the species.

● Where to See

- Ann Morrison Park, south of clock tower



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 in the Landscape Uses section of this guide or at a local nursery.

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

Tree	Zone	Characteristics
Cherry, Higan <u>Prunus subhirtella</u>	5-6	Another pink flowering species marketed in upright to weeping varieties. 'Pendula' is probably the most noteworthy weeping variety. Fast growth rate.
Cherry, Oriental <u>Prunus serrulata</u> varieties	5-6	Best known for profusion of pink flowers in late April. Vase-shaped, columnar and weeping varieties may be found at local nurseries.
Cherry, Yoshino <u>Prunus x yedoensis</u>	5-6	Boasts fragrant, white to pink flowers depending on variety selected. Fast growth to 30 feet with graceful, curving branches. Spectacular flowering.
Chokecherry, Common <u>Prunus virginiana</u>	3-6	Attractive white flower bloom and edible red fruit. 'Canada Red' is a variety having leaves that turn from green to dark purple in the summer.
Dogwood, Kousa <u>Cornus kousa</u>	5-6	An unusual but beautiful tree. Appears to be hardier, more drought and disease tolerant than Flowering Dogwood (<u>C. florida</u>). Magnificent white spring flowers.
Hawthorn, Douglas <u>Crataegus douglasii</u>	4-6	Native western tree that produces shiny, black fruit attractive to birds and small mammals. Pleasant white flowers appear in spring.
Hawthorn, English <u>Crataegus laevigata</u>	5-6	Showy red or white flowers (depending on variety), scarlet fruit is usually sparse on the tree. Several varieties available, see your local nursery.
Hawthorn, Green <u>Crataegus viridis</u>	5-6	Attractive small tree with silvery bark that contrasts nicely with the dark green, glossy leaves. Usually available under the variety name 'Winter King'.
Hawthorn, Lavalley <u>Crataegus x lavalleyi</u>	5-6	Small oval crowned tree having lustrous dark green leaves turning bronze/red in autumn. White spring flowers give way to red-orange fruit in the fall.
Hawthorn, Singleseed <u>Crataegus monogyna</u>	5-6	Features rich green leaves, white flowers and small red fruit. Susceptible to fireblight and mites. Variety 'Stricta' is an excellent columnar selection.
Magnolia, Star <u>Magnolia stellata</u>	4-6	Single specimen or accent plant. Multi-stemmed tree with 4 inch fragrant white flowers in March. Several varieties are grown.
Maple, Bigtooth <u>Acer grandidentatum</u>	4-6	This slow growing tree is native to the Rocky Mountains. Similar to Sugar Maple (<u>A. saccharum</u>), but smaller in stature. Good red/orange fall leaf color.
Maple, Rocky Mountain <u>Acer glabrum</u>	3-6	Native to the mountain regions of the northwest United States. The red color of the winged seed and new twigs contrast beautifully with the green leaves.
Mountain Ash, European <u>Sorbus aucuparia</u>	4-6	An upright to oval tree having white flowers and clumps of bright red fruit which are eaten by birds. Not a true Ash, but a member of the Rose family.
Plum, Purpleleaf <u>Prunus cerasifera</u>	5-6	Attractive, dark purple foliage and light pink spring flowers distinguish this small tree from others. Certain varieties are not cold-hardy in Idaho.
Serviceberry, Saskatoon <u>Amelanchier alnifolia</u>	5-6	Features white flowers, orange-yellow fall color and dark purple berries. An excellent landscape and wildlife/natural choice. Native to the Great Plains.
Smoketree, Common <u>Cotinus coggygria</u>	5-6	Spreading, multi-stem habit. Usually used as a showcase plant but better suited for mass planting. Interesting and attractive 'smoke-like' flower structure.

Additional Recommended Tree Selections

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

Tree	Zone	Characteristics
Birch, Water <u>Betula occidentalis</u>	4-6	Very cold hardy, clump form tree native to the west. Coppery brown bark is unique among birches. Slender branches droop, giving a graceful appearance.
Buckeye, Yellow <u>Aesculus octandra</u>	4-6	Upright to oval crowned tree with leaf and flower characteristics similar to the horsechestnut. Large, fruit bears no prickly spines.
Ironwood <u>Ostrya virginiana</u>	3-6	Very graceful pyramidal tree developing a more rounded crown in maturity. Leaf similar in appearance to American Elm. Few insect or disease problems.
Maple, Black <u>Acer nigrum</u>	4-6	Very similar in appearance to Sugar Maple, except that leaf tips tend to droop. Reported to be more heat and drought tolerant than Sugar Maple.
Maple, Sycamore <u>Acer pseudoplatanus</u>	5-6	Oval to round-headed tree, similar to Norway Maple in overall form. Reported to be very salt tolerant. Species is adaptable to many environmental conditions.
Oak, Sawtooth <u>Quercus acutissima</u>	5-6	This oak becomes established quite easily; supposedly adaptable to hot climates. Medium growth rate with an oval form. Good yellow fall color.
Walnut, English <u>Juglans regia</u>	6	Medium-sized nut-producing tree. Fairly tolerant of poor soils. Limited cold hardiness. Nuts are edible. Tree may be toxic to other nearby plants.

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

Tree	Zone	Characteristics
Hickory, Shagbark <u>Carya ovata</u>	4-6	Best known as the wood used to smoke meats. Compound leaves carry 5 dark green leaflets. Sweet nut is edible. Bark strips off, giving a shaggy appearance.
Oak, Shumard <u>Quercus shumardii</u>	5-6	Very similar to northern red oak. Fast growing, but requires well-drained, acidic soil; has a drought tolerant reputation. Good red autumn leaf color.

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

Tree	Zone	Characteristics
Cedar, Alaska <u>Chamaecyparis nootkatensis</u>	5-6	Blue-green scale-like leaves arranged in flat sprays from drooping branchlets. 'Pendula' is an attractive variety hardy in zone 6. Needs consistent moisture.
Cedar, Eastern Red <u>Juniperus virginiana</u>	3-6	Small, pyramidal shaped evergreen having soft, yellowish-green foliage. 'Cupressifolia' is among the better varieties available.
Cedar, Western Red <u>Thuja plicata</u>	5-6	Large tree with drooping sprays of bright green, scale-like leaves turning bronze in winter. Traditionally used by some Native Americans for totem poles.
Juniper, Chinese <u>Juniperus chinensis</u>	4-6	'Hollywood' features slightly twisted branches. Leaves are scale-like and green to blue-green. Drought, heat and salt tolerant.
Pine, Eastern White <u>Pinus strobus</u>	3-6	Tall, fast-growing tree native to northeastern U.S. Soft textured medium green needles in bundles of five. A very beautiful evergreen tree.
Pine, Himalayan <u>Pinus wallichiana</u>	5-6	Beautiful large tree with gracefully drooping, blue-green needles in bundles of five. Broad-headed with age, it also retains bottom branches.

Additional Recommended Tree Selections

Tree	Zone	Characteristics
Pine, Japanese Black <u><i>Pinus thunbergiana</i></u>	5-6	Excellent heat and drought tolerance and good salt-spray tolerance make this a tough pine for areas of Idaho. Known as a bonsai plant in Japan. Irregular form.
Pine, Japanese White <u><i>Pinus parviflora</i></u>	5-6	Graceful, fine-textured evergreen whose small stature makes it a choice tree for small places. Adaptable to most soils and quite salt tolerant.
Pine, Lodgepole <u><i>Pinus contorta</i></u>	3-6	Dark green, twisted needles in bundles of two. Long, straight trunk led to frequent use by Native Americans for building tepees, hence 'Lodgepole' pine.
Pine, Pinyon <u><i>Pinus edulis</i></u>	5-6	Small, bushy evergreen pine with upright, spreading branches. Two-inch long needles held in bundles of two. Cones produce large, edible fruit.
Pine, Western White <u><i>Pinus monticola</i></u>	3-6	This evergreen tree has soft textured needles and reaches 60-100 feet at maturity. This is Idaho's state tree.
Spruce, Engelmann <u><i>Picea engelmannii</i></u>	3-6	Densely branched, spire-like growth to 100 feet. Best growth on moist, deep soil. A hardy Rocky Mountain native.

Nature

by Quinn Rogers

I like nature, It's been good to me.
From the lowest moss, To the tallest tree.

I hope to see its continued health,
Give us beauty and leafy wealth.

I've never been bit by a jungle vine,
And I haven't been abused by a forest pine.

In my opinion a briar,
Doesn't purposely snare.

Violets aren't known,
For their vicious glare.

Cool green grass doesn't burn my feet,
Nothing's intimidating about rolling fields
of wheat.

No crime has been committed,
By a mountain brook.



Walk in its frosty waters,
And take a closer look.

We continue to destroy,
Our massive eco-system.

In so many harmful ways,
I can't begin to list them.

Let's make a helpful change,
In destructful everyday ways.

Notice how nature's grateful,
And invariably repays.

Is the air we breathe,
And the water we consume.

Not meager enough a payment,
To merely give them room?

Uncommon But Promising Landscape Trees

The trees in the following list are species that may have potential for street and/or landscape uses in some parts of Idaho. These trees have not been widely planted, therefore their cold hardiness and pest resistance in Idaho has not been determined. Literature and current data, suggest that they may be hardy in certain areas of the state. Boise's Urban Forestry Unit will on occasion purchase trees from among these species to plant in Boise parks. Given good performance over a number of years, and the results of tests by area nurseries, they may become more readily available in the future. If you are an adventurous sort, you may seek out some of these trees to try in your own landscape. You are also encouraged to call Boise Urban Forestry to report experiences you may already have with any of these species. Boise Urban Forestry, however, makes no guarantee as to their hardiness, pest resistance or quality of growth.

Alder, Italian	(<u>Alnus cordata</u>)	Maackia, Amur	(<u>Maackia amurensis</u>)
Arborvitae, False	(<u>Thuja occidentalis</u>)	Maple, Paperbark	(<u>Acer griseum</u>)
Beech, American	(<u>Fagus grandifolia</u>)	Maple, Shantung	(<u>Acer truncatum</u>)
Cedar, Blue Atlas	(<u>Cedrus atlantica</u>)	Oak, Shingle	(<u>Quercus imbricaria</u>)
Cedar, Lebanon	(<u>Cedrus libani</u>)	Pawpaw, Common	(<u>Asimina triloba</u>)
Empress Tree	(<u>Paulownia tomentosa</u>)	Pine, Japanese Red	(<u>Pinus densiflora</u>)
Evodia, Korean	(<u>Evodia daniellii</u>)	Pine, Lacebark	(<u>Pinus bungeana</u>)
Falsecypress, Hinoki	(<u>Chamaecyparis obtusa</u>)	Pine, Swiss Stone	(<u>Pinus cembra</u>)
Falsecypress, Japanese	(<u>Chamaecyparis pisifera</u>)	Rubbertree, Hardy	(<u>Eucommia ulmoides</u>)
Hemlock, Canadian	(<u>Tsuga canadensis</u>)	Spruce, Oriental	(<u>Picea orientalis</u>)
Katsuratree	(<u>Cercidiphyllum japonicum</u>)	Wingnut, Caucasian	(<u>Pterocarya fraxinifolia</u>)
Larch, Western	(<u>Larix occidentalis</u>)		

The following species are **not** to be planted on any public rights-of-way in Boise. These trees exhibit characteristics including but not limited to: extreme insect or disease susceptibility, soft or brittle wood and/or limited cold or heat hardiness. Such problems often lead to excessive maintenance costs, hazard to other trees and potential public safety hazards.

Ash, European	(<u>Fraxinus excelsior</u> 'Kimberly Blue')	Prone to disease and die-back.
Birch, Paper	(<u>Betula papyrifera</u>)	Not heat tolerant; prone to Bronze Birch Borer attack.
Birch, Weeping	(<u>Betula pendula</u>)	Not heat tolerant; prone to Bronze Birch Borer attack.
Boxelder	(<u>Acer negundo</u>)	Soft wood subject to decay. Box-elder bug is a nuisance.
Cottonwood, Aspen & Poplars	(<u>Populus</u> species)	Soft wood subject to decay. Shallow roots. Aphids.
Elm	(<u>Ulmus</u> species)	Dutch Elm Disease. Defoliation annually by elm leaf beetles.
Honeylocust, Thorned	(<u>Gleditsia triacanthos</u>)	Hazardous thorny branches. Messy seed pods. 'Sunburst' thornless variety is subject to many pests.
Locust, Black	(<u>Robinia pseudoacacia</u>)	Extremely susceptible to locust borer. Brittle wood.
Maple, Red	(<u>Acer rubrum</u>)	Soft wood subject to decay. Not heat tolerant.
Walnut, Black	(<u>Juglans nigra</u>)	Heavy aphid infestations. Messy seeds. Toxic to other plants.
Willows	(<u>Salix</u> species)	Soft wood subject to decay. Shallow roots. Aphids.

Conifers and shrubs which exceed a height of three or more feet at maturity.

TREES FOR IDAHO

The trees below are conducive to growing in the following areas of Idaho. Please refer to the map to match the area you live in for good tree selection in your area.

COEUR D' ALENE AREA

Ash, Green
Ash, White
Beech, Columnar
Beech, European
Birch, River
Cherry, Flowering
Crabapple, Flowering
Dogwood, Flowering
Filbert, Turkish
Ginkgo
Goldenrain Tree
Hackberry
Hawthorne
Honeylocust, Thornless
Hophornbeam, American
Hornbeam, Columnar
Katsuratree
Linden, American
Linden, Crimean
Linden, Littleleaf
Linden, Silver
Maple, Amur
Maple, Hedge
Maple, Red
Maple, Sugar
Oak, Bur
Oak, Northern Red
Oak, Pin
Oak, Scarlet
Oak, White
Pagodatree, Japanese
Planetree, London
Plum, Purple-leaved Flowering
Redbud, Eastern
Sweetgum
Zelkova, Japanese

SUN VALLEY AREA

Ash, Green
Ash, White
Beech, American
Beech, European
Birch, River
Catalpa, Northern
Cedar of Lebanon
Filbert, Turkish
Fir, White
Honeylocust, Common
Horsechestnut, Common
Juniper
Maple, Amur
Maple, Norway
Serviceberry, Saskatoon

REXBURG AREA

Alder, Gray
Alder, Mountain
Arborvitae, Eastern
Ash, Blue
Ash, European
Ash, Green
Ash, White
Birch, European White
Birch, Paper
Birdcherry, European
Boxelder
Buckeye, Ohio
Catalpa, Northern

Chokecherry
Chokecherry, Common
Cottonwood, Black
Crabapple, flowering
Douglasfir
Elm, Camperdown
Filbert, European
Fir, Rocky Mountain
Fir, White
Hackberry, Common
Hawthorne, English
Honeylocust, Common
Horsechestnut, Common
Juniper
Larch, Eastern
Larch, European
Lilac, Japanese Tree
Linden, American
Linden, Littleleaf
Maple, Amur
Maple, Bigtooth

Maple, Norway
Maple, Rocky Mtn
Maple, Silver
Mountainash, European
Oak, Bur
Oak, English
Oak, Swamp White
Pine, Austrian
Pine, Bristlecone
Pine, Eastern White
Pine, Japanese Black
Pine, Limber
Pine, Lodgepole
Pine, Mugo
Pine, Ponderosa
Pine, Scots
Pine, Swiss Stone
Plum, Cherry
Russian-olive
Serviceberry, Saskatoon
Serviceberry, Shadblow
Spruce, Colorado
Spruce, Engelmann
Spruce, Norway
Spruce, Serbian
Spruce, White
Sumac, Smooth
Sumac, Staghorn
Walnut, Black

LEWISTON AREA

Arborvitae, Eastern
Ash, Green
Ash, Raywood

Ash, White
Baldcypress, Common
Beech, American
Beech, European
Birch, River
Catalpa, Northern
Cedar of Lebanon
Cherry, Higan
Cherry, Kwanzan
Cherry, Oriental
Cherry, Yoshino
Chokecherry, Common
Coffee tree, Kentucky
Corktree, Amur
Cottonwood, Black
Crabapple, Flowering
Dogwood, Flowering
Dogwood, Kousa
Douglasfir
Empress Tree
Falsecypress, Lawson
Filbert, Turkish
Fir, White
Ginkgo
Goldenrain Tree
Hackberry, Common
Hawthorne, Douglas
Hawthorne, English
Hawthorne, Green
Hawthorne, Laval
Hawthorne, Singleseed
Hawthorne, Washington
Honeylocust, Thornless
Hornbeam, European
Horsechestnut, Common
Incense cedar, California
Juniper
Larch, European
Linden, American
Linden, Littleleaf
Linden, Silver
Magnolia, Cucumbertree
Magnolia, Saucer
Magnolia, Star
Maple, Amur

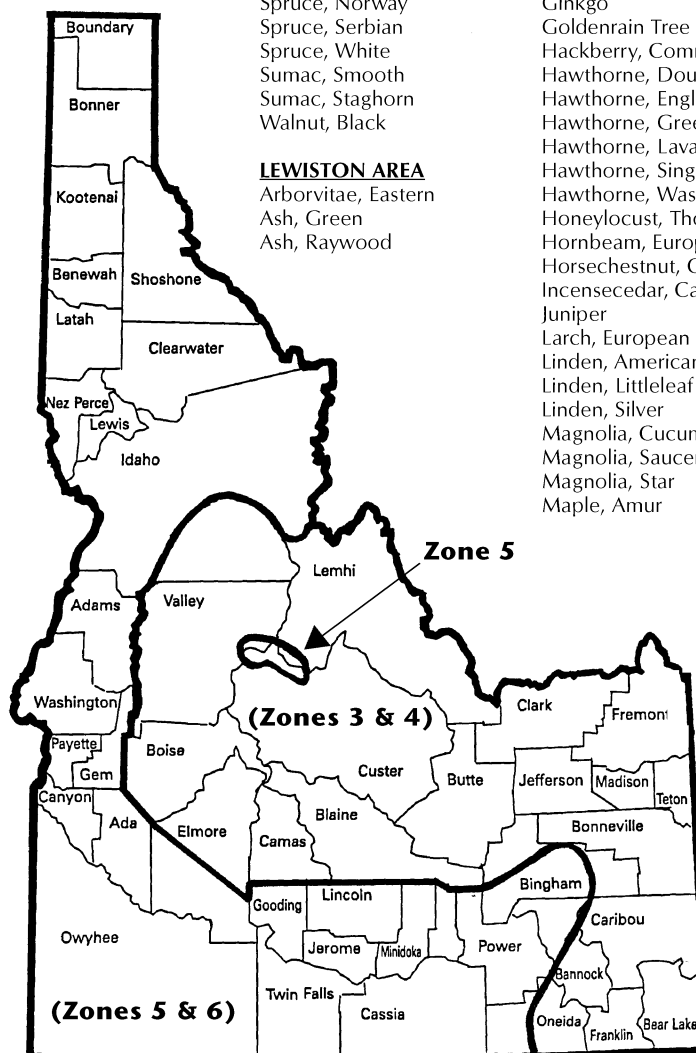
Maple, Bigtooth
Maple, Hedge
Maple, Norway
Maple, Rocky Mtn.
Maple, Sugar
Mountainash, European
Oak, Bur
Oak, English
Oak, Pin
Oak, Red
Oak, Scarlet
Oak, Swamp White
Pagodatree, Japanese
Pear, Callery
Pine, Austrian
Pine, Japanese Ponderosa
Pine, Japanese White
Pine, Lacebark
Pine, Scots
Planetree, London
Plum, Blireiana
Plum, Purpleleaf
Redbud, Eastern
Redwood, Dawn
Sequoia, Giant
Serviceberry, Saskatoon
Smoketree, Common
Spruce, White
Spruce, Colorado
Spruce, Norway
Spruce, Oriental
Spruce, Serbian
Sumac, Smooth
Sumac, Staghorn
Sweetgum, American
Tuliptree
Yellowwood, American

POCATELLO AREA

Ash, Blue
Ash, Green
Ash, White
Buckeye, Ohio
Coffee tree, Kentucky
Filbert, Turkish
Ginkgo
Hackberry, Common
Honeylocust, Thornless
Horsechestnut, Common
Linden, American
Linden, Littleleaf
Linden, Silver
Maple, Black
Maple, Freeman
Maple, Norway
Maple, Red
Maple, Silver
Maple, Sugar
Oak, Bur

BOISE AREA

SEE THIS GUIDE



USDA Zones 3 & 4
USDA Zones 5 & 6

RESOURCES AND PUBLICATIONS

- Ash, C. 1993. Verticillium Wilt of Trees and Shrubs. Minnesota Extension Service, Univ. of Minn. St. Paul, Minnesota.
- Crockett, J.U. 1971. Landscape Gardening. Time-Life Books, New York.
- Dirr, M.A. 1990. Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses. Stipes Publishing Co. Champaign, IL. Fourth edition.
- Editors of Sunset Magazine 1969. Sunset Western Garden Book. Lane Book Co. Menlo Park, California.
- Gerhold H.D., Wandell W.N., Lacasse N.L. 1993. Street Tree Factsheets. Penn State College of Agricultural Sciences. University Park, Pennsylvania.
- Hightshoe, G.L. 1978. Native Trees for Urban and Rural America. Iowa State Univ. Research Found, Ames, Iowa.
- Hutton, K. 1994. Plants of the Wild Native Plant List. Plants of the Wild. Tekoa, Washington.
- Kollin, C. and Pappas, J. 1994. Selecting Trees: A guide to purchasing quality trees as a wise investment. American Assoc. of Nurserymen and American Forests, Washington, D.C.
- Osborne, R. 1975. Garden Trees. Sunset Books-Lane Publishing, Menlo Park, California
- Peattie, D.C. 1953. A Natural History of Western Trees. Bonanza Books, New York.
- Prag, R. 1993. Forest Farm Catalog. Forest Farm, Williams, Oregon.
- Schmidt, J. Frank. 1993. J. Frank Schmidt & Son Co. Catalog. Boring, Oregon.
- The National Arbor Day Foundation 1994. What Tree Is That? A guide to the more common trees found in the Western and Eastern U.S. The National Arbor Day Foundation, Nebraska City, Nebraska.

AREA TREES:

Coeur d'Alene Area	Chris Schnepf, UI-Kootenai County Extension Office, Coeur d'Alene, ID	208-667-6426
Lewiston Area	Mike Bowman, Lewiston Parks & Recreation, Lewiston, ID	208-746-3671
Pocatello Area	Mark Duntelman, Natural Path, Missoula, MT	406-721-3263
Rexburg Area	Kim Black, Ricks College, Rexburg, ID	208-356-2018
Sun Valley Area	UI - Blaine County Extension Office, Hailey, ID,	208-788-5585

CONTRIBUTING SPONSORS



"PLANT-A-TREE WISELY"
Please Plan **BEFORE** You Plant



J. FRANK
SCHMIDT
& SON CO.



Canopi, Communities and Neighbors Organized to Plant Idaho, is a non-profit organization dedicated to promoting statewide public awareness about the needs and benefits of planting trees. For information call (208) 384-4085.

ORDERING INSTRUCTIONS

Additional copies of this Tree Selection Guide are available for \$6.50 (includes tax) per copy.
Make checks payable to City of Boise and send your request to:
Boise Parks & Recreation Department — Urban Forestry Unit
Tree Selection Guide
1104 Royal Blvd. • Boise, Idaho 83706

