

Mayors of the Central Oregon Cities Organization

Welcome

We live in one of the most beautiful regions in the West. It is also one of the fastest growing areas in the country. With natural precipitation less than 5 inches during the April through October growing season, consideration of water use for our landscapes is very important. The water resources of our region are shared by all, and as such we each have a responsibility to use it wisely. The typical resident uses over 50% of the water they use annually, outside for landscaping. Landscapes add value, beauty and livability to our homes and keeping them WaterWise is a critical part of being a good steward in this incredible region. We all need to become WaterWise partners in order to protect our water resources for our grandkids.

This Xeriscape ™ guide, put together by our regional horticulture, irrigation and water conservation experts, is one tool to assist you in effective water management. By adopting the seven steps of xeriscaping, from design – to ongoing maintenance, not only can you plan a gorgeous landscape for your home or business, but you can do it in a low impact, sustainable way. Less water, less maintenance, less chemicals, less runoff, less energy use, less worry. These are just some of the benefits that can allow you more time to enjoy the many amenities of this region.

Whether landscaping a new home or business, or revisiting your existing landscape, please consider this Xeriscape guide as a place to begin your effort to turn your landscape into a WaterWise work of beauty.

Remember, when you are WaterWise, water isn't all you save!

Signed:

The 2005 Mayors of the Central Oregon Cities Organization, also known as COCO.

Bend -	Mayor Bill Friedman	Culver -	Mayor Dan Harnden
Madras -	Mayor Rick Allen	Maupin -	Mayor Dennis Ross
Metolius -	Mayor Sandy Toms	Prineville -	Mayor Mike Wendel
Redmond -	Mayor Alan Unger	Sisters -	Mayor David Elliot



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An Introduction to Xeriscaping in the High Desert And Pictorial Plant Guide for Central and Eastern Oregon

Whether you are an experienced gardener or a newcomer to the high desert, learning how to successfully garden here can be an exciting challenge. With minimal annual precipitation, a short growing season, and fluctuating temperatures, maintaining an attractive, healthy landscape can keep you on your toes. Most gardeners value the natural beauty of our native landscapes, but are interested in enhancing it with additional plants to add more color and texture. Can a more beautiful landscape be created and still be water efficient and sustainable? The answer is YES.



Xeriscaping, is a seven step method that combines innovative water conservation techniques with sound horticultural practices. Not only is it possible to have a colorful and beautiful landscape while conserving water, but it can become more sustainable while saving you time, energy, and money.

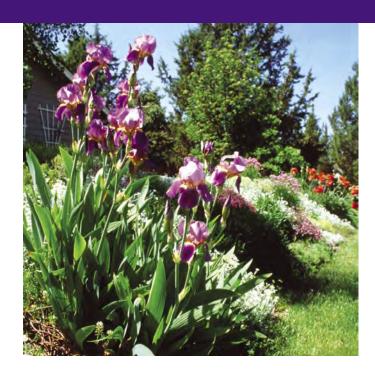
The Meaning of Xeriscape

What does xeriscaping (pronounced zeriskap-ing) mean? It's commonly referred to as water-wise or water-smart gardening. Xeros is derived from the Greek word meaning dry. However, do not let the Greek derivative conjure up images of a dry, desert-like, "blandscape." In fact, a well-planned Xeriscape can be attractive, colorful and very rewarding. Often it is thought that a Xeriscape means the use of all native or low water use plants, resulting in limited plant selection. However, Xeriscapes can incorporate hundreds of plant choices including trees, shrubs, evergreens, perennials and grasses.

Efficient Irrigation – The Heart of Xeriscaping

At the heart of xeriscaping is a focus on efficient irrigation practices and grouping plants together with the same water requirements (hydrozoning). There is also an emphasis on conserving all natural resources and proper plant selection. In this guide we will describe the seven steps for creating a successful Xeriscape and also provide an in-depth look at plant choices for your Xeriscape in the high desert. This guide is intended as an introduction to WaterWise landscaping.

For additional information refer to the resource section of this guide. (pg 32)







Seven Principles of Xeriscaping

The seven principles of xeriscaping present gardening concepts you most likely have heard before. However, the key to a successful Xeriscape is incorporating **all seven** steps with careful consideration. Eliminating any one of the steps reduces your chance of water conservation and a healthy Xeriscape.

- 1. Planning and Design
- 2. Zoning Plants
- 3. Soil
- 4. Efficient Irrigation
- 5. Turf and Turf
 Alternatives
- 6. Mulching
- 7. Maintenance



Step 1 Planning and Design

Let the fun begin! Taking the time to carefully plan your landscape will result in a beautiful landscape for many years. When beginning to plan, consider your needs and activities. A short list of considerations include:

- · How do you want to use your landscape?
- How much time and money will you want to spend to maintain your landscape?
- · Will you use a professional maintenance service?
- · What do you want your water bill to be?
- · Do you want to attract wildlife?

- · Do you want to grow vegetables or have a cutting garden?
- How will your landscape impact hardscapes, utilities and public rightof-ways?

You can design the area yourself or enlist the help of a landscape professional. For additional resources use the local extension service. nursery, library, bookstore, or the latest landscape design software. Items you need to consider when starting to design include water source availability, slopes, amount of sunlight, soil type, views, and microclimates that may exist. Begin by creating a list of ideas you would like to see in your landscape, including hardscaping (decks, patios, walkways, boulders, arbors, etc.).

Step 2 Zoning Plants

The concept behind this next step is to place plants with the same requirements for water, soil, and sunlight into the same areas or hydrozones (watering zones). Hydrozones are divided into four types including very low, low, moderate, and high. Plants are designated to a hydrozone based on their watering needs. Examples of plants placed in each hydrozone are listed in the chart below. When choosing a plant for your



Types of Hydrozones

Hydrozone	Supplemental Water Requirements	Plant type examples
Very Low	Required for plant establishment	Most natives
Low	Some required during growing season	Most perennials, some trees & shrubs
Moderate	Regular amounts required during growing season	Fruit trees, ornamental trees & shrubs
High	Regular amounts required during growing season	Turf grass, vegetable gardens

yard, consider its native environment. Then ask yourself, "Is this something I can mimic in my own yard?" If it will take a lot of resources and time to keep that plant alive, it is probably not a good choice. Choose plants that can survive with existing or minimal supplemental resources.



Step 3 Soil

Knowing what kind of soil you have and how to improve it is critical for a successful Xeriscape. Properly amended soil provides a nutrient-rich planting area, improved water holding capacity, improved aeration, and addresses drainage concerns.

There are three types of soil; sand, loam and clay. Each of these three soil types absorbs or takes in water in a different way. In sandy types, water moves quickly through the profile going straight down through the soil. In loamy soil, the water intake spreads down and out in the soil, which is ideal for plant roots to absorb water. In clay type soils, the water penetrates slowly and spreads out to the sides.

Determine what type of soil you have in your yard and amend accordingly. In Central Oregon, the soil is typically a sandy, sterile soil with lots of rock! Water tends to drain right through the soil if no amendments are added. Regardless of soil type, the general rule

of thumb is to amend your native soil with 1/3 organic matter (compost or well-aged manure work well).

When preparing a new area for plants or trees, till into the native soil 1-2 inches of organic matter to a depth of 6 or more inches, depending on the specific size and type of plant (3 cubic yards per 1000

square feet). Mix the native soil with the amendment and backfill the hole. Your soil is now ready to plant with beautiful Xeriscape plants.



A Special Note for Use of Native Plants

Native plants are adapted to our native soils and generally do not require additional soil amendment when planting.

Step 4 Efficient Irrigation

Efficient irrigation is the heart of a successful Xeriscape. You will save water, time, and money with a well-planned irrigation system. If carefully managed, both manual and automatic irrigation can be efficient. Generally, automatic irrigation is more time efficient and can save water if properly installed and managed. Unfortunately, research has shown that automatic systems can use 30% more water than



a manual (garden hose based) system because often homeowners set the timer once for the entire season, rather than adjusting their irrigation run times based on the weather or actual plant water requirements. The goal is to design the irrigation system such that plants are receiving only the water they actually need. For manual irrigation, use a sprinkler attachment that best fits the shape of your yard. Avoid using sprinklers that throw water high into the air, as much of the water is lost to evaporation, which means you will have to run your sprinkler longer to get enough water down into the soil. Sprinkler systems that keep water close to the ground are more efficient.

If you are installing a new landscape it is best to layout your automatic irrigation system at the same time. Separate your turf grass watering zones from other planting zones, dividing them into hydrozones. The best types of irrigation for turf grass areas include low pressure, lowangle sprinklers that provide head to head coverage. For trees, shrubs, and perennials use micro-sprays, drip emitters, or bubblers. Avoid the "set it and forget it" syndrome that can accompany automatic irrigation. Adjust your automatic system's controller throughout the season based on the plants watering needs (i.e. less water in the spring and fall). Install a rain shut-off device if your system does not already have one.

New Technology Update – What Are Smart Irrigation Controllers?

Traditional irrigation system controllers are really just timers. They turn the water on and off when they are told, regardless of weather conditions or actual plant water needs.

Smart irrigation controllers, on the other hand, monitor and use information about environmental conditions for a specific location and landscape. This information includes soil moisture, rain, wind, the plants'



evaporation and transpiration (ET) rates, and, in some cases, plant type and is used to determine when to water – providing exactly the right amount of water to maintain lush, healthy growing conditions.

Because smart irrigation controllers are more efficient than traditional, timer-based controllers, they also reduce overall water usage, typically by 30% or more, saving you time, money, energy and making a large, positive impact on your community's conservation efforts and water supply.

The Irrigation Association has coined the phrase Smart Watering Application Technology (SWAT) as the best way to describe these new innovations in irrigation timers (http://www.irrigation.org/swat/). This new technology uses

Changing Plant Water Requirements (ET) Bend, OR Agrimet Station 2004

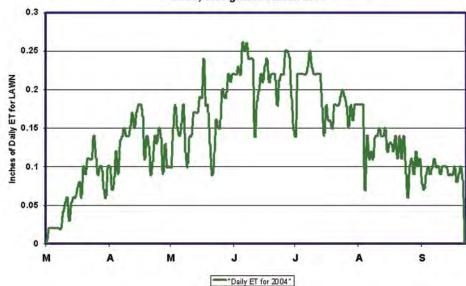


Figure 1 This graph shows how often the watering requirements change based on the weather in Bend for 2004. Today, new smart controllers adjust automatically based on weather station input.

information from regional weather stations to calculate your landscapes evapotranspiration (ET) rate, to predict real time plant watering needs. Your smart controller processes this information and automatically adjusts your irrigation run time. In addition, some manufacturer's controllers account for slope factors that may prevent wasteful irrigation runoff for your specific site. Smart controllers continue to adjust automatically throughout the entire irrigation season to use just the amount of water your plants need, no matter the weather.

During a typical growing season you would have to adjust your clock manually over 100 times to be most efficient (See Figure 1). These smart controllers are currently the most efficient way to irrigate. This technology is changing fast. For more information, contact a local irrigation professional or check the Irrigation Association Website for their section on Smart Watering Application Technology.

Other hints for efficient irrigation:

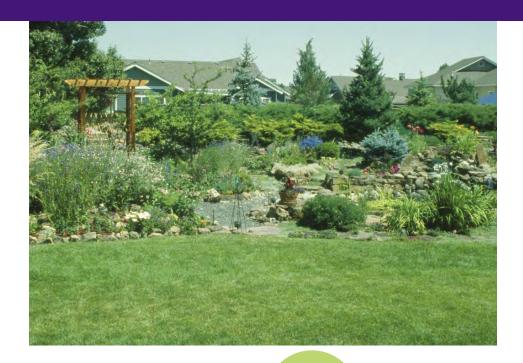
· Remember the water requirements for turf are different than those for other plants.

- Encourage deep rooted plants by watering deeply and less often.
 Proper site preparation with soil is key to building a water reservoir for your plants.
- · Be sure to maintain and repair your irrigation system throughout the growing season (See step 7).

Step 5 Turf Alternatives

Yes, you can have turf in your Xeriscape! How much and what kind you use will determine whether or not it is effective in saving water. When choosing turf, err on the side of using it only where you need it. These could include play areas, high use areas, and other places it will get used. Turf areas should be consolidated into large, relatively flat areas, with no turf along narrow paths, in median strips, along foundations, or on steep slopes. Turf is useful for slowing runoff from landscape areas and can be of practical benefit in areas like swales and as a fire resistant plant in creating a defensible space around your home.

Today, many more choices exist for turf. Low-water use types include turf-type tall fescues or a combination blend of fine fescue, perennial



ryegrass, and Kentucky bluegrass. If you already have an existing lawn, consider reducing these areas and replacing them with low water use planting beds, natural areas or incorporating hardscaping into the area with boulders or pavers. Other alternatives to turf include wildflower areas or low growing perennials.

Avoid planting trees and other plants within the lawn area; their water requirements are usually different from those of turfgrass; and mowers and string trimmers can damage trees.

Different types of grass require different amounts of water, so adjust your irrigation schedule accordingly. Proper site preparation in establishing turf is essential in maintaining a healthy, water efficient lawn. If the site is prepared properly before putting down seed or sod the soil will act as a reservoir for your turf. Properly amended soil will allow the roots from the turf to go deep.

For more information on site preparation read *Practical Lawn Establishment and Renovation* at: http://eesc.orst.edu/agcomwebfile/edmat/EC1550.pdf

Step 6Mulching

The sixth step requires the use of mulch as a top dressing for all of your trees, shrubs, and flowers. Mulch helps to reduce weeds, minimize evaporation (water loss from the soil), cools soil, and prevents soil erosion. What kind of mulch is the best to use? It really depends on your preferences. There are advantages and disadvantages with every choice as mulches are available in many shapes, sizes and colors including bark chips, post peelings, compost and stone or rock.



Wood and Organic Mulches

Wood and other organic mulches allow for oxygen to get to the root system more easily than rock or stone mulches. Wood and organic mulches will also return some nutrient components back to the soil over time as it breaks down. Course compost can also be used as a mulch, but be sure to ask for weed-free certified composts.

Rock or Stone Mulches

Rock or stone mulches can also be used selectively. Rock mulch will stay in place more effectively, especially in windy areas. Rock mulches also absorb more heat and may scorch the roots or leaves of heat sensitive plants. Like any other mulch, it must be selected to fit its place of use.



Combinations and Weed Barriers

You can do a combination of mulches by placing wood mulch around the base of the plant and by placing rock or stone in between the plants. The ideal application for a mulch layer is adding between two and five inches on top of the soil. Do not exceed five inches or you risk cutting off the oxygen supply to the plant's root system which can result in root death. Better yet, the addition of a quality landscape fabric covered by mulch in your beds will suppress weeds and minimize evaporation so you end up watering less often. Quality landscape fabric should be strong not stretchy, breathable, and allow water to flow through it.

Step 7

Maintaining your Xeriscape

All gardens, including Xeriscapes, need routine, seasonal maintenance to preserve the beauty and health of your landscape. Maintenance includes pruning, mowing, watering, weeding, fertilization and integrated pest management (IPM). In general, Xeriscapes require less maintenance than traditional landscapes, and even less as the Xeriscape matures. A healthy, maintained landscape is also more resistant to drought, heat, freezing, disease, and insects. Below are just some of the tips to help you maintain your Xeriscape. You can find more information on these tips at the websites listed on our resource page.

Maintenance Tips for:

Irrigation System Maintenance - Many people use Xeriscape principles in order to save water but fail to maintain their irrigation systems and end up using more water. Sprinkler heads can break or become misadjusted. Drip systems can be cut or get moved. Plants and turf can grow over heads or prevent systems from working as originally designed. Winters in Central and Eastern Oregon can also take their toll on irrigation systems and proper spring startup and winter shutoff procedures are vital for keeping your irrigation system as efficient as possible. Irrigation systems that are not properly maintained can waste up to 50% or more water.

Pruning - Pruning is often done for shaping, rejuvenation, to eliminate future problems, and for safety issues. In general, pruning of deciduous trees,



ornamental grasses, and perennials is done in early spring. Prune evergreens in late summer or fall.

Mowing - Make sure you are mowing at the right height for your type of grass and do not overwater or over fertilize your turfgrass area. Turftype tall fescues, Kentucky bluegrass, perennial ryegrass, and fine fescues can all be mowed at a height between 2-3 inches.

Lawn Care - Routinely de-thatch and aerate turf to mitigate compaction and remove thatch, this will assist water, nutrients and oxygen in getting to the root zone.

Watering - Winter watering is critical in a high desert environment where plant materials tend to desiccate through the winter months. Be sure to water your new plantings every 6-8 weeks when the ground is warm enough to absorb water.

Weeding - Eliminate weeds to prevent them from competing with your desirable plants for water and nutrients. Preventing weeds from going to seed is critical. Once a weed seed bank is established, seeds can stay viable for many seasons.

Fertilization - Trees, shrubs, and perennials can be fertilized once during the growing season in spring or early summer with a slow release fertilizer. Avoid late summer, early fall feedings. Apply a minimum amount of organic fertilizer to your turf to avoid additional water use and increased mowing as a result of too much nitrogen. Your light green grass will make high maintenance lawns green with envy.

Retrofitting Your Existing Landscape

If you already have a developed landscape there are several ways to adapt your landscape to a Xeriscape. You can start by adjusting or upgrading your sprinkler system to a more efficient system. Also take note of your irrigation schedule and adjust according to weather conditions. You can continue to add low water use plants to your landscape. You can also reduce the turf areas that you do not use, converting them to a hardscape or planting bed.

A Note About Hardiness Zones

When you are selecting plant material for your landscape, be sure and choose plants that are adaptable to your area and right for your hardiness zone. You may be wondering, what is a hardiness zone?

The term "hardiness" refers to the ability of a plant to withstand an

average minimum temperature. Often times when we go to purchase plants, the catalog or plant tag will indicate hardiness zone followed by a number. This number is based



upon the hardiness zones derived from a map put out by the United States Department of Agriculture (USDA). They prepared a map based on the average annual minimum temperatures recorded throughout North America from 1974-1986. Generally, there are eleven designated zones with one (1) being the hardiest (coldest) and eleven (11) being the least hardy.

Each zone has a designated approximate range of average annual minimum temperatures, for example zone 9 is (20° – 30° F). When choosing a plant, you would want to pick a plant that falls within your zone or is smaller in number. There are other climate zones or hardiness maps in existence, but these are not utilized universally as is the USDA hardiness zone map. Hardiness ratings or zones are meant to be used only as a guide, not an absolute for plant selection and survivability. Especially being the case,

here in Central and Eastern Oregon, where we have several microclimates.

There are numerous factors that contribute to whether or not a plant will survive besides just minimum temperatures. Some of these factors include soil type, rainfall, heat tolerance, and exposure to wind and sun. According to the USDA hardiness zone map, Central Oregon is placed in zone 5 (-20° to -10°F). Most other areas in Eastern Oregon are placed in hardiness zones 5 or 6 (-20° to 0°F). However, these placements are really oversimplified given our many microclimates. For example, Bend,

Redmond, and Prineville are placed in hardiness zone 5: however a more accurate placement would be zones 3 to 4 (- 40° to - 20° F). Remember to think about your own microclimates within your yard. Check with your local extension office or garden centers to find out the most accurate hardiness zone for your local area. This information will assist in buying more adaptable plant material for your landscape. See Central Oregon Climate and how it Relates to Gardening at: http://extension.oregonstate.edu/ deschutes/Horticulture/documents/ COClimate 000.pdf (case sensitive)

SPECIAL PRECAUTION!

Landscaping around utilities and public right-of-ways

The Right Plant in the Right Place

Understanding how a plant will grow and change over time is perhaps more important then how it looks when first picked out at the nursery and installed. Before you purchase a particular plant species, take



the time to learn about its growth characteristics. The time you spend doing so will decrease the amount of time that you spend in the future maintaining your outside living space, including the vegetation and hardscapes such as patios, driveways and sidewalks. For example, will the plant develop roots that grow near the surface? If yes, you can avoid future root/hardscape conflicts by providing the plant adequate rooting space. Will the plant's height exceed 30' and be planted near or under overhead power lines? If yes, select a shorter plant species for this site – or move the selected plant to another area of your site. In doing so you will avoid maintenance activities that are harmful to the plant and are an inefficient use of time for the utility companies involved. Selecting species of plants that are well matched both to the planting space and to the site conditions reduces the future maintenance activities needed to maintain healthy plants, beautiful hardscapes and safe, efficient utilities.

Who's Property Is It? Prior to designing your new landscape, make sure to locate your property lines and any public right-of-ways or easements. Chances are, if there are power lines above, or land to landscape between the sidewalk and the street, it is part of the public owned right-of-way. It is also wise to determine if there are any local restrictions that would effect how, where or what you plant, build or install. For example, your community may have restrictions on what can be planted within utility easements. Remember, it is easier to change a landscape plan yet to be installed, than to remove plants and other landscape features already in place!

Call Before You Dig It is critical that before digging for the installation of any landscape material, especially trees or irrigation systems, that you call for locations of any existing utility services. Examples would be water, sewer, telephone, cable, gas, or electrical power lines. A free service known as "one-call", exists for locating utilities. CALL BEFORE YOU DIG! The toll free number is 1-800-332-2344. You need to allow a minimum of two business days for this work to be done.

Key for symbols

Each plant description will include one or more symbols to assist you in selecting the best plants for your yard. Each symbol is defined below and designates adaptability, plant use, and other notes of interest for that plant.



Prefers full sun (6 or more hours)



Prefers full sun to part shade



Prefers full shade (6 or more hours)



Very low water use plant Performs well in dry sites



Low water use plant
Performs well with minimal
supplemental irrigation



Moderate water use plant Performs well with supplemental irrigation



Attracts Butterflies



Attracts Birds



Deer Resistant



Fire Resistant



Performs well in rock gardens



Excellent shrub border or hedge



Native to Oregon

ORNAMENTAL TREES

Aspen, Quaking

Populus tremuloides

Light bark and trembling green leaves make this a popular tree. Trees will sucker and produce groves. Ideal for larger areas. Yellow fall color. Susceptible to many diseases and insects.









Height 30-40' / Spread 12-15' Hardiness Zone 1-8

'Erecta' - Swedish aspen has an upright columnar growth habit and does not sucker. Orange-yellow fall color.



Buckeye, Ohio

Aesculus glabra

Large showy flowers in spring followed by the round, spike-like fruit. Leaves are large, green and turn yellow to red in fall.



Height 20-30' / Spread 15-20' Hardiness Zone 3-7



Chokecherry, Amur

Prunus maackii

Attractive, shiny, coppery-red peeling bark. Clusters of white flowers, followed by purplishred fruit. Yellow fall color.



Height 10-25' / Spread 18-20' Hardiness Zone 3-7



Chokecherry, Canada Red

Prunus virginiana 'Schubert'

Green leaves emerge changing to dark red in summer. Fragrant white flowers in spring followed by purplish-red fruit which can be used for jams, jellies and wines. Also sold as a large shrub.







Height 20-30' / Spread 15-20' Hardiness Zone 3-8



Crabapple, Flowering

Malus hybrids

Many varieties to choose from, these trees have beautiful spring flowers in many colors including rose, pink, red and whites. Green or purplish foliage. They also provide ornamental fruit and fall color. Some fruitless varieties available.





Height 15-20' / Spread 15-20' Hardiness Zone 4-8

'Becthel' – double pink blooms seldom bears

'Brandywine' - double rosy - pink blooms. 'Royalty' - red flowers, purplish foliage. 'Spring Snow' – white flowers, seldom bears fruit, teardrop shaped growth habit.



Hawthorn, English **Paul's Scarlet**

Crataegus laevigata 'Paul's Scarlet' Rounded, thorny tree with bright red flowers followed by red fruit.



Height 15-20' / Spread 15-20' Hardiness Zone 5-8



Hawthorn, Russian

Crataegus ambigua

A very hardy variety, displays white flowers, red fruit and finely cut leaves.





Height 15-20' / Spread 10-15' Hardiness zone 4-6



Hawthorn, Winter King

Crataegus viridis 'Winter King' Displays white flowers followed by a bright red fruit. Interesting silvery-grey bark and glossy green leaves turning red in fall. Fewer slender thorns than other hawthorns.





Height 20-30' / Spread 10-15' Hardiness zone 5-7



Lilac, Japanese Tree **Ivory Silk**

Syringa reticulata 'Ivory Silk' Bears fragrant, creamy-white flowers in early summer. This variety has a compact, oval growth habit.



Height 15-20' / Spread 10-12' Hardiness zone 4-7

(PHOTO NEXT COLUMN)



Maple, Amur

Acer ginnala

Small tree or large shrub with irregular shape and excellent red fall color. Good choice for a small area, can be used to create a hedge. A subspecies of tatarian maple.





Height 15-20' / Spread 15-20' Hardiness Zone 2-8



Maple, Rocky Mountain

Acer glabrum

Small tree or large shrub with attractive dark green foliage and red twigs. The "helicopter" seeds will turn reddish in summer. Attractive red fall color.





Height 10-15' / Spread 10-15' Hardiness Zone 3-7



Pear, Callery

Pyrus calleryana cvs.

An ornamental pear with dark, glossy green foliage. White flowers in spring followed by a small pea-sized green fruit. Can be multistemmed. Red, burgundy to orange fall color depending on variety.



Height 20-30' / Spread 15-20' Hardiness zone 4-9

'Aristocrat' – rounded pyramidal growth habit. 'Chanticleer' - uniform narrow, pyramidal growth habit.



Serviceberry

Amelanchier species

A multi-stemmed shrub or tree that bears white flowers in spring followed by edible purplishblack fruit. Excellent fall colors of red-orange.







Height 20-25' / Spread 10-15' Hardiness zone 4-5



SHADE TREES

These larger trees provide shade as they mature, cooling your home in summer and can provide excellent fall color in the landscape.

Ash, Green

Fraxinus pennsylvanica

Large upright shade tree with rounded growth habit and nice yellow fall color. Good alternative to maples and oaks. All varieties are male and fruitless.





Height 40-60' / Spread 20-40' Hardiness zone 3-9

'Marshall's Seedless' - rounded habit with dark green leaves.

'Patmore' - rounded habit, very cold hardy. 'Summit' - more upright and narrow than the other varieties.



Ash, Autumn Purple

Fraxinus americana 'Autumn Purple' Similar to green ash, dense rounded shade tree with beautiful red fall color. Requires more water than green ash. Seedless.





Height 40-60' / Spread 20-40' Hardiness zone 3-9



Honeylocust, Thornless

Gleditsia triacanthos inermis

These trees provide a filtered shade environment with their fine leaves. There are many thornless and seedless cultivars available in various sizes and growth habits. Potential for midge pod gall.







Height 35-40' / Spread 30-50' Hardiness zone 3-9

'Shademaster' - a more dense, larger variety with yellow fall color.

'Skyline'- growth habit is more pyramidal and upright.

'Sunburst' - this variety has golden/yellow leaves on the new growth eventually changing



Linden, Littleleaf **Greenspire**

Tilia cordata 'Greenspire'

A very attractive tree with a distinct pyramidal growth habit. Dark, glossy green leaves, smaller than those on American linden. Yellow fall color.





Height 30-40' / Spread 20-30' Hardiness zone 3-7



Maple, Autumn Blaze

Acer x fremanii 'Autumn Blaze' A tree that is a cross between a red maple and silver maple. Excellent red fall color.



Height 30-50' / Spread 20-30' Hardiness zone 3-8



Maple, Norway

Acer platanoides

Large, attractive, stately tree with dense foliage. One of the hardier types of maple. Many cultivars available with various shapes and sizes. Summer leaf color can vary from green, maroon, or variegated. Usually yellow fall color.







Height 40-60' / Spread 30-50' Hardiness zone 3-7

'Crimson King' - maroon leaf color during the growing season.

'Emerald Queen' – fast growing, dark, glossy green leaves changing to yellow in the fall.





Oak, Bur or Mossycup

Quercus macrocarpa

A handsome tree with an irregular growth habit and interesting moss-like covered acorns. Dark green leaves. Very adaptable in tough environments and long-lived.





Height 50-70' / Spread 40-60' Hardiness zone 3-8



EVERGREEN TREES & SHRUBS

Evergreens will keep their needles throughout the year providing winter color in your landscape. They also provide for an excellent windbreak if planted on western or northern exposures.

Juniper

Juniperus species

Junipers are a large group of evergreens available for the home landscape in a broad range of sizes, shapes, and colors. These fast growing, cold hardy plants can be utilized for windbreaks, groundcovers, or hedges. There are low growing species and upright tree forms. The foliage on juniper comes in shades of silver, blue, green, and gold. Fruit is typically round and blue. Most species of juniper are drought tolerant, however winter watering is recommended.



Hardiness zone 3-9

Juniper, Chinese

Juniperus chinensis

A spreading or upright type of juniper available in all shades of gray, green, blue, and gold.

'Old Gold' – golden foliage all season. Height 3-4' / Spread 4-6' 'Pfitzeriana' – green to gray foliage, fast growing. Height 8-12' / Spread 10-12'

(PHOTO NEXT COLUMN)



Juniper, Creeping

Juniperus horizontalis

A low growing, creeping shrub with trailing branches. Good selection to cover a bank and for erosion control. Foliage is usually blue during the summer changing to a purple during the winter months.

'Prince of Wales' – green foliage, purplish in winter. Height 8-10" / Spread 6-8' 'Wiltonii' or 'Blue Rug' – silvery-blue foliage Height 4-6" / Spread 5-6'



Juniper, Savin

Juniperus sabina

A spreading type of juniper with peeling reddish-brown bark and blue-black fruit. The foliage is typically all scale type needles giving these junipers a softer look.

'Buffalo' – feathery, bright green foliage. Hardy. Height 12-18" / Spread 6-8' 'Tamariscifolia' or 'Tammy' – blue-green foliage, taller form. Height 4-6' / Spread 6-8'



Pine, Austrian

Pinus nigra

Evergreen with a dense oval growth habit, similar to Ponderosa Pine when young. Needles are dark green in color, from 3-5" long.



Height 40-50' / Spread 15-20' hardiness zone 4-7



Pine, Bristlecone

Pinus aristata

Evergreen with an irregular, dense growth habit. Very slow growing, the branches produce "bottlebrush" type needles covered with resin dots. One of the smaller pines for a landscape.



Height 10-30' / Spread 15-20' Hardiness zone 4-7





EVERGREEN TREES & SHRUBS

Pine, Limber

Pinus flexilis

Very flexible branches on this evergreen, hence the name. Needles in groups of five are bluishgreen. Attractive silver bark and large cones.



Height 30-40' / Spread 12-15' Hardiness zone 4-7

'Vanderwolf's Pyramid' – an attractive, upright form.



Pine, Ponderosa or Western Yellow

Pinus ponderosa

Beautiful native pine tree with long green needles in groups of two or three. Growth habit becomes more open with age. Interesting bark texture with cinnamon-brown color.







Height 50-60' / Spread 20-25' Hardiness zone 3-6



Pine, Lodgepole

Pinus contorta latifolia

Needles emerge in groups of two on this evergreen. Open, tall, narrow growth habit. Prefers additional moisture.





Height 50-70' / Spread 20-30' Hardiness zone 4-7



Pine, Mugo

Pinus mugo

Shrub-like evegreen with variable shapes and sizes. Green needles come out in groups of two. Several dwarf cultivars available.



Height 2-20' / Spread 3-20' Hardiness zone 2-7

'Slowmound' – dwarf variety. Height 4' / Spread 5' 'Whitebud' – dwarf variety. Height 2' / Spread 4'



Colorado Blue Spruce

Picea pungens var. glauca
Evergreen with strong, pyramidal growth.
Several cultivars with various colors and growth habits, from pendulous to round.
Several dwarf cultivars also available.



Height 50-70' / Spread 30-35' Hardiness zone 2-8

'Fat Albert' – a more dense growth habit. Height 30-40' / Spread 15-20' 'Glauca globosa' – a round, compact bush. Height 3-5' / Spread 5-6' 'Hoopsii' – extremely blue/silver variety with a dense, irregular growth habit.





BROADLEAF EVERGREENS

Broadleaf Evergreens

This group of plants will retain their leaves throughout the winter months. Their foliage may take on a winter color and then green up again in spring. Winter watering recommended.

Grape Holly, Oregon

Mahonia aquifolium

Native upright evergreen with shiny dark green leaves in summer changing to purplish-red in the fall. Yellow flowers in the spring followed by bluish-black berries.







Height 5-6' / Spread 5-6' Hardiness zone 3-9





Holly, Creeping

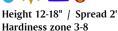
Mahonia repens

Similar to Oregon grapeholly, but smaller in size. Speading green leaves turning purplishred in fall. Yellow flowers followed by bluishblack berries.











Kinnickinnick

Arctostaphylos uvar-ursi

A native, mat-forming shrub with glossy green leaves, a pinkish-white flower in spring, followed by a red berry in the fall. A reddish fall color.





Height 4-8" / Spread 10-15" Hardiness zone 2-6



Manzanita, Greenleaf

Arctostaphylos patula

Oval, somewhat spreading shrub with flattened, shiny, bright green leaves. Very distinct smooth reddish-brown bark which provides interesting winter texture. Pinkish-white flowers in spring. May be difficult to transplant.





Height 4-6' / Spread 4-6' Hardiness zone 4-9



Mountain Mahogany, Curl-leaf

Cercocarpus ledifolius

Upright, course-textured shrub with small dark green leaves emerging from slender gray stems. Seeds are interesting with a silky corkscrew shaped tail.



Height 10-15' / Spread 10-15' Hardiness zone 4-9



Yucca

Yucca species

Recognized by their sword-like leaves in various shade of green, gray-green, or variegated green and yellow. Produce stalks of white flowers during the growing season.







Height 2-4' / Spread 2-4' Hardiness zone 4-10



VINES

Vines can create privacy in your landscape covering a fence, at the same time providing beautiful flowers and foliage.

Clematis

Clematis species

One of the most ornamental vines available. Known for its beautiful flowers, both large and small in a rainbow of colors. Several varieties to choose from for the high desert. Some species are more drought tolerant than others. This vine will need support. Requires full sun on the top growth and cool, shaded roots. Planting in spring to aid in establishment is recommended. Prune down to one foot the first couple of season. Can grow several feet in one season.



Hardiness zone 4-9

'Jackmanii' - large dark purple flowers. 'Nelly Moser' - large light pink flowers with a dark pink stripe.

'Ramona' - very large pale blue flowers.



Yellow lantern clematis

Clematis tangutica

Produces small, lantern-shaped golden flowers in summer followed by wispy seeds, more drought tolerant than the large flowering clematis.



Hardiness zone 4-9



Silver Lace Vine

Polygonum aubertii

A fast growing vine with green heart-shaped leaves. Produces big clusters of small, white flowers in late summer. Easy to establish, provides a screen for metal fences. No known disease or insect problems. Can potentially grow 8-12' per growing season. Adaptable to most environments. Can be cut back to control growth.



Hardiness zone 4-7



Trumpet Vine

Campsis radicans

A shrub-like vine with green foliage. Produces beautiful orange, tubular, trumpet-shaped flowers in summer. May be difficult to establish. Very fast growing reaching a maximum of 20-30 feet during its life span.







Hardiness zone 4-9



Virginia Creeper

Pathenocissus quinquefolia

Strong, vigorous vine that will cover walls, fences, and boulders. Dark green, lobed leaves which present excellent fall colors of red to orange. Flower is not showy. Purple berry fruit. Very fast growth rate reaching a maximum of 40-50 feet during its life span.



Hardiness zone 3-9





FRUITS AND BERRIES

Fruit trees and berries are ornamental providing attractive, fragrant spring flowers and fresh fruit later in the season. Listed below are some of the more hardy fruit trees and berries that can be used effectively in a Xeriscape. Check with your local professional to find varieties adaptable to your area and pollinators for specific varieties.

Apple

Malus spp.

Small ornamental trees, apples are the most reliable (for fruit) and hardiest of fruit trees for the high desert. There are several hybrids available. Be sure and have the required pollinator for your tree.





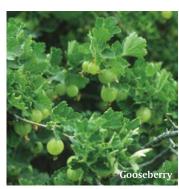


Currant and Gooseberries

Currants or gooseberries are attractive shrubs that provide edible berries used in making jams or jellies. Typically very drought tolerant, but require additional irrigation if grown for fruit.







Pear

Pvrus communis

Ornamental trees that have glossy, green leaves and attractive white spring blooms. Pear trees prefer well-drained soils. Some varieties are self-fertile and some require pollinators.



Plum

Prunus cvs

Ornamental trees that produce sweet to sour plums depending on variety. Some varieties are self-fertile but yield better fruit with a pollinator, others require a pollinator.



Raspberry

Rubrus cvs.

Thorny, multi-stem shrubs bearing edible red, black or yellow fruits used fresh or in jams or jellies. There are both summer-bearing and everbearing cultivars available.





Strawberry

Fragaria ananassa cvs.

A low growing groundcover that produces edible sweet berries used fresh or in jams or jellies. There are junebearing and day-neutrals (bears fruit several months) available.





SMALL SHRUBS

Small shrubs are typically between one and five feet in height.

Coralberry, Indian Currant

Symphoricarpos orbiculatus

Dense, rounded shrub with green leaves changing to yellow in fall. Produces whitishpink flowers followed by a bright coral colored fruit which persists into winter.



Height 3-5' / Spread 3-5' Hardiness zone 2-6



Cotoneaster, Cranberry

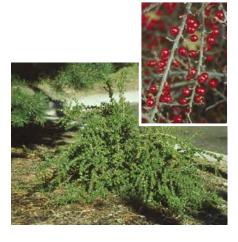
Cotoneaster apiculatus

A semi-broadleaved evergreen. Dark shiny green leaves changing to burgundy in the fall. Interesting mounding type of growth habit. Produces tiny pink flowers followed by a red cranberry-like fruit persisting into winter. East side exposure is best.





Height 3' / Spread 3-6' Hardiness zone 4-7



Currant Alpine

Ribes alpinum

Small shrub, good in mass plantings to create a shrub border. Dense with bright green foliage and bland yellow fall color.



Height 3-5' / Spread 4-5' Hardiness zone 2-7



Fernbush

Chamaebatiaria millefollium

Semi-evergreen shrub with fuzzy, scented, fernlike green leaves. Produces white flowers in summer. Irregular, unkept looking growth habit.



Height 3-6' / Spread 3-6' Hardiness zone 4-10



Potentilla or Cinquefoil

Potentilla fruticosa

Hardy, bushy shrub with small grayish-green leaves. Produces flowers all summer long in shades of yellow, gold, white, pink, red, and orange. Many varieties available in different sizes. Works well as a shrub border. Performs best with additional moisture.





Height 2-4' / Spread 2-4' Hardiness zone 2-7

'Abbotswood' - white flowers. 'Gold Drop' - bright yellow flowers. 'Red Ace' - red flowers.



Rabbitbrush, Gray

Chrvsothamnus nauseosus

Late blooming, irregular shaped shrub. Produces yellow flowers which attract bees and butterflies. Bluish-green needle-like foliage. Can be pruned each season in spring. Reseeds easily. Green Rabbitbrush is similar to gray rabbitbrush but has more compact green leaves.







Height 2-6' / Spread 2-4' Hardiness zone 4-6



Sage, Russian

Perovskia atriplicifolia

Fine, feathery textured shrub that performs more like a perennial. Silvery-gray, finely dissected leaves with a sage-like aroma. May die back in winter and can be cut back in late fall or early spring. Produces beautiful lavender-blue flowers in late summer. Do not overwater.



Height 3-5' / Spread 3-4' Hardiness zone 4-8



Spirea, Blue Mist or Bluebeard

Caryopteris x clandonensis

Dense, rounded shrub with grayish-green leaves. Produces lavender-blue flowers in late summer. Foliage has a sage-like scent. Nice color for late season. Attracts bees. Can die back in winter, then be cut back like a perennial in early spring.





Height 3-5' / Spread 3-5' Hardiness zone 5-10

'Dark Knight' - deep blue flowers with silverygray foliage.



Spirea

Spiraea species

Popular, clump-forming shrub which produces bowl-shaped flowers in shades of white or pink. Leaves are generally green but can be tinted in shades of red or yellow. Many varieties available.





Height 2-4' / Spread 2-4' Hardiness zone 4-8

'Froebelii' - deep pink flowers, green foliage. 'Goldflame' - bright pink flowers and bronzered young leaves.

'Limemound' - pink flowers with bright limegreen foliage.

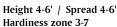


Snowberry

Symphoricarpos albus

Upright, arching shrub with bluish-green leaves. Pink flowers in summer changing to white rounded fruit which persists through the winter. Attracts birds.







Sumac, Gro-Low

Rhus aromatica

Mounding shrub with dark green leaves. Fall color is orange to red to purple. Tiny yellow flowers changing to fuzzy red fruit. Prefers additional moisture.



Height 2-5' / Spread 5-7' Hardiness zone 4-9



MEDIUM SHRUBS

Medium shrubs are typically between three and six feet in height.

Apache Plume

Fallugia paradoxa

Excellent shrub for a hot, dry environment. Tiny leaves give this shrub a fine-textured appearance with an open mounding habit. Produces white flowers throughout the summer followed by an interesting wispy red seed head. Does not like to be overwatered.



Height 3-5' / Spread 3-5' Hardiness zone 3-10



Barberry

Berberis species

Commonly used small or medium sized shrub with a dense, rounded growth habit. Branches have spines and small leaves in various foliage colors. Produces small yellow flowers followed by ornamental red fruit that persists into winter. Prefers additional moisture.



Height 4-6' / Spread 4-6' Hardiness zone 4-8

'Crimson Pygmy' - dwarf variety with purplishred foliage. Height 1-2' Spread 2-3' Mentor barberry – green leaf variety. Red Leaf barberry - purplish-red foliage. 'Rose Glow' - rose foliage mottled with purplish-red splotches.





Bitterbrush

Purshia tridentata

A native semi-evergreen shrub with grayishgreen leaves. Produces creamy-yellow flowers in spring followed by reddish berries. Very drought tolerant.





Height 5-8' Spread 4-8' Hardiness zone 4-9



Burning Bush, Dwarf

Euonymus alatus 'Compactus'
Rounded shrub with green leaves and "winged"
bark. Excellent scarlet fall color. Creates a
nice shrub border. Does best with east side
exposure.



Height 4-6' / Spread 4-6' Hardiness zone 4-8





Currant, Golden

Ribes aureum

A native shrub with pale green leaves. Produces yellow flowers followed by edible purple fruits. Fall color can be red to yellow.







Height 4-6' / Spread 4-6' Hardiness zone 4-8



Plum, Cistena or Purpleleaf Sand Cherry

Prunus x cistena

Fast growing medium sized shrub with purple foliage during the summer. Produces pinkish-white flowers in spring. Will send up suckers from the ground.



Height 4-6' / Spread 4-6' Hardiness zone 4-8



Rose, Hardy Shrub

Rosa species

A group of roses that are low maintenance compared to regular roses. Usually have green foliage, masses of flowers in various colors, and an arching type of growth habit. May bloom continuously or once during the season. Some display excellent fall color and ornamental rose hips in late fall. Below are just a few of the many shrub roses that will work in a Xeriscape.



Height 2-6' / Spread 2-6' Hardiness zone 2-9

Meidland series – this series is known for hardiness, profuse flowers, and vigor. Blooms in shades of red, pink, white and coral.

'William Baffin' – hardy climbing rose with double-pink blooms, slightly fragrant.







Wood's Rose – A native wild rose in Central Oregon, has a spreading growth habit. Produces single pink flowers in summer followed by ornamental red hips. Height 3-6' / Spread 3-6'



Sandcherry, Western

Prunus bessevi

Open, irregular growth habit. Produces fragrant white flowers in spring, followed by an edible, red changing to black fruit. Leaves are a grayish-green changing to a coppery-red in fall. Can sucker if overwatered. Prefers additional moisture.



Height 4-6' / Spread 4-6' Hardiness zone 3-7



Spirea, Vanhoutte

Spiraea x vanhouttei

A larger spirea producing clusters of white flowers which cover the entire branch in spring. Very ornamental with a vase-like growth habit and arching branches. Green leaves in summer changing to purple in fall. Can be used as a hedge.



Height 4-8' / Spread 4-8' Hardiness zone 3-7



Viburnum, Compact American Cranberrybush

Viburnum trilobum 'Compactum'
An excellent compact, rounded shrub. Green, maple-like foliage in summer changing orange to red in fall. Produces white flowers followed by minimal red fruit. East side exposure is best. Compact European Cranberrybush is very similar.



Height 4-6' / Spread 4-6' Hardiness zone 2-7



LARGE SHRUBS

Large shrubs are generally six feet or taller.

Buckthorn, Columnar or Tallhedge

Rhamnus frangula 'Columnaris'

Dense, upright shrub ideal for a hedge or shrub border. Glossy green leaves.



Height 8-12' / Spread 3-4' Hardiness zone 2-7



Buckthorn, Fernleaf

Rhamnus frangula 'Asplenifolia' A fine-leaved buckthorn provides a feathery textured shrub. Dark green, long narrow leaves.



Height 10-12' / Spread 6-10' Hardiness zone 2-7



Forsythia

Forsythia cultivars

Known for its abundance of yellow flowers down the entire branch in early spring. Large shrub with a vase-shaped growth habit which can be used as a shrub border. Flowers may get nipped with spring frost.



-

Height 6-8' / Spread 6-8' Hardiness Zone 4-8



Honeysuckle, Arnold Red

Lonicera tatarica 'Arnold Red'

Upright, multi-stemmed shrub with bluishgreen leaves. Beautiful dark red flowers in summer followed by a red fruit set. Prefers additional moisture.



Height 8-10' / Spread 8-10' Hardiness zone 3-8



Lilac, Common

Syringa vulgaris

Large shrubs known for their beautiful, fragrant blooms in spring. Available in many varieties with flowers in shades of white, lavender, purple, and pink. Can be used for a hedge.



Height 8-12' / Spread 6-12' Hardiness zone 3-7

'Charles Joly' – double, magenta blooms.
'Ellen Willmott' – double, white blooms.
'President Lincoln' – single, blue blooms.
'Sensation' – single, purple flowers with white edges.



Ninebark

Physocarpus species

Shrubby type plant with dense, green foliage. Produces white flowers in summer. Distinct peeling bark. Can be used as a hedge. Prefers additional moisture.





Height 6-8' / Spread 6-8' Hardiness zone 3-7

'Monlo' (Diablo®) – dark purple foliage. 'Dart's Gold' – gold summer foliage.



Peashrub, Siberian

Caragana arborescens

Course-textured, spiny, upright shrub or small tree. Produces beautiful yellow pea-like flowers in summer. Can be used to create a hedge.



leight 10-15' / S

Height 10-15' / Spread 6-8' Hardiness zone 2-8



Privet, European

Ligustrum vulgare

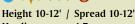
Tall semi-evergreen shrub with glossy green leaves. Excellent choice for a sheared hedge, produces white flowers followed by black fruit if not sheared.













Sagebrush

Artemesia tridentata

Woody-based shrub with soft, aromatic, silvery-gray foliage. White to yellowish feathery flowers in spring. Can be pruned to be kept tidy.



Height 6-8' / Spread 6-8' Hardiness zone 3-9



Serviceberry, Saskatoon

Amelanchier alnifolia

An upright, less dense, native shrub with green leaves. White flowers in spring followed by and edible bluish-purple berries good for jams or jellies. Excellent fall color of yellows, orange and reds.









Height 8-12' / Spread 15-20' Hardiness zone 4-5

'Regent' – a compact species of serviceberry with white flowers and abundant fruit set.



Sumac, Staghorn

Rhus typhina

Similar to smooth sumac but branches are covered in fine hairs to produce a velvety touch. Will sucker to produce a grove. Excellent fall colors of red, yellow, and orange. Red fuzzy fruit on female plants that persists providing winter interest.



Height 8-15' / Spread 10-15' Hardiness zone 3-8



Viburnum, Nannyberry

Viburnum lentago

Large ornamental shrub with glossy green leaves. Produces large clusters of white flowers in late spring followed by fruit that emerges green and changes from red to purple to black throughout the season. Also available in tree form. Excellent fall color in red and purple.



Height 15-18' / Spread 6-10' Hardiness zone 2-8



Viburnum, Wayfaring Tree

Viburnum lantana

Large ornamental shrub with fuzzy, leathery, green leaves. Used as a hedge or specimen plant. Produces large clusters of white flowers in late spring followed by fruit that begins greenish-yellow to red to blue to black during the season. Excellent purplish red fall color.



Height 10-15' / Spread 10-15' Hardiness zone 4-8

'Mohican' – a more compact, hardy variety Height 6-8' / Spread 6-9'.



ORNAMENTAL GRASSES

Increasingly more popular, ornamental grasses can be used effectively as specimen plants, to add texture, create movement, and provide winter interest to any landscape. Grasses can be kept up through the winter months and cut back down to the ground in early spring.

Avena Grass, Blue or Blue Oat Grass

Helictotrichon sempervirens

Dense, rounded clump grass. Bluish-green blades that becomes graceful, arching with maturity. Produces brown oat like seed heads. Overwatering effects leaf color.



Height 2-4' / Spread 2-3' Hardiness zone 4-9

(PHOTO NEXT COLUMN)



Feather Reed Grass, Karl Foerster

Calamagrostis acutiflora

Beautiful upright, narrow growing ornamental grass. Used as a single specimen or in stands. Green blades with a feathery, purplish plume blooming in summer. The flower changes to a tan seed head in late summer. Provides excellent winter texture. Can be cut back to the ground in early spring. Sterile and will not reseed. Prefers additional moisture.



Height 3-6' / Spread 1-2' Hardiness zone 4-10





ORNAMENTAL GRASSES

Fescue, Blue

Festuca ovina glauca

Attractive clump-forming grass. Silvery-blue blades are a nice contrast in the landscape. Produces a light tan flower in summer. Can provide winter texture.



Height 10-12" / Spread 10-12" Hardiness zone 4-9

'Elijah's Blue' a compact, very blue variety



Fountain Grass

Pennisetum alopecuroides

An arching, rounded ornamental grass. Attractive bronze "foxtail" flowers are produced in summer. Also available in some annual varieties.



Height 2-3' / Spread 2-3' Hardiness zone 4-9

'Hameln' – dwarf, hardy variety. Height 1-2' / Spread 1-1.5'



Indian Grass

Sorghastrum nutans

Upright, arching green leaved grass. Tan plumes bloom in summer.



Height 3-6' / Spread 1-2' Hardiness zone 4-8 Photo Not Shown

Indian Ricegrass

Oryzopsis hymenoides

Upright clump forming grass with airy seed heads. Great for a dry, rocky location.



Height 1-2' / Spread 2-3' Hardiness zone 3-7



Miscanthus Grass or Maiden Hair Grass

Miscanthus sinensis

One of the most beautiful of ornamental grasses. Graceful, arching type of growth habit. Green to dark green blades. Produces airy plumes of white to russet in late summer depending on variety.



Height 5-8' / Spread 3-5' Hardiness zone 4-7

'Gracillimus' – more drought tolerant variety. 'Morning Lights' – bronze plumes.



Ribbon Grass

Phalaris arundinacea

Erect, ornamental grass with wide, white striped green leaf. Potential to be invasive, can plant it in the ground in the container to keep it from spreading.



Height 2-3' / Spread 3'+ Hardiness zone 4-9



Switch Grass, 'Heavy Metal'

Panicum virgatum 'Heavy Metal' Narrow, upright, clump forming grass. Metallic blue blades of grass changing to yellow in fall. Produces airy purple flowers.



Height 3-4' / Spread 3-4' Hardiness zone 4-9 Photo Not Shown

GROUNDCOVERS

Ground covers are low growing perennials which often provide excellent coverage in banks, aide in erosion control, provide interesting foliage and beautiful flowers. The plants listed in this section are generally 12" or smaller.

Candytuft

Iberis sempervirens

Spreading, mounding growth habit with dark green foliage. Produces a profusion of white flowers in early spring.



Height 6-12" / Spread 10-24" Flower: white

Bloom time: May-June



Dianthus, Garden Carnation or Pinks

Dianthus species

Green or grayish-green foliage covered with blooms. Clump-forming growth habit. Some varieties are fragrant.





Height 2-12" / Spread 6-16" Flower: pink, white, red or yellow

Bloom Time: May-August





Hardy Cactus

Cactaceae family

A large group of succulent plants in many shapes and sizes, often covered with spines. Winter hardy cactus.







Height 3-48" / Spread 3-48" Flower: purple, pink, red, yellow, white Bloom time: May-July



Hens and Chicks

Sempervivum species

A unique groundcover with green succulent rosette shaped foliage. The parent plant produces flowers and smaller plants or "chicks". Excellent in rock walls.





Height 2-6" / Spread 6-10" Flower: pink, star-shaped rise up on a stalk from the "hen"

Bloom time: June-August



Iceplant, Purple

Delosperma cooperi

Groundcover with succulent green foliage that changes to purplish red in winter. Does not tolerate foot traffic.







Height 1-4" / Spread 24-30" Flower: purple, daisy-like Bloom time: June



Iceplant, Yellow

Delosperma nubigenum

Very low growing groundcover with succulent green foliage that changes to reddish bronze in winter. Not suitable for areas with snow cover. More cold-hardy than purple iceplant.







Height 1-3" / Spread 24-30" Flower: yellow, daisy-like Bloom time: June



Mount Atlas Daisy or Mat Daisy

Anacyclus depressus

Feathery, silvery-green foliage. Will self-seed and fill in an area.







Height 1-2" / Spread 10-12" Flower: small white, daisy-like with crimson on the underside of the petals

Bloom time: May-June



Penstemon, Pineleaf

Penstemon pinifolius Bright green, needle-like foliage. Long blooming (6-8 weeks) perennial.



Height 6-12" / Spread 15-24" Flower: yellow, orange, peach tubular shaped Bloom time: July-September



Periwinkle

Vinca major varieties

Popular groundcover with glossy green or variegated leaves. Also used in hanging baskets as a trailing plant.



Height 8-24" / Spread 2-4' Flower: purplish-blue or white Bloom time: May-June



Phlox, Creeping or Moss

Phlox subulata

A very popular spring bloomer. Linear, green leaves form a low growing mat.







Height 4-6" / Spread 18-24" Flower: white, blue, pink, striped Bloom time: April-June

(PHOTO NEXT COLUMN)



Poppy Mallow

Callirhoe involucrata

Fine, green leaved foliage, with trailing stems blooms for several months.





Height 6-8" / Spread 2-3' Flower: magenta, cup like flowers Bloom time: June-August



Primrose, Mexican Evening

Oenothera berlandieri 'Siskiyou'

Large blooms during the summer, work well in hot dry areas. Does not tolerate excessive winter moisture.





Height 6-8" / Spread 18-24" Flower: large, 2" pink, cup-like blossom Bloom time: July-September



Pussytoes or Cat's Ears

Antennaria species

A mat-forming perennial with silvery-white, hairy foliage. Works well in rock walls and between pavers.



Height 2-12" / Spread 8-10" Flower: pink or white Bloom time: May-July



Rock Cress

Aubrieta deltoidea

Mat forming, spreading perennial with grayish green foliage. Attractive masses of flowers in spring.





Height 3-8" / Spread 10-15" Flower: purple, pink Bloom time: May-June



Sea Thrift

Armeria maritima

Clump forming perennial with grass like foliage. Flowers rise up above the mound with pink or white pom-pom type flowers.







Height 6-10" / Spread 8-12" Flower: bright pink, white Bloom time: May-June



Snow-in-Summer

Cerastium tomentosum

Fast growing, covers a large area quickly. Provides a nice contrast with silvery-gray, woolly foliage.





Height 6-12" / Spread 2-3' Flower: white

Bloom time: June-July





Speedwell

Veronica species

Low growing groundcover with glossy green leaves or fuzzy leaves. Very showy in full bloom.



Height 1-6" / Spread 12-18" Flower: blue, pink or white

Bloom time: May-June



Stonecrop

Sedum species

Groundcover with succulent foliage in shades of green to blue. Many drought resistant varieties. Great for rock gardens.







Height 2-12" / Spread 6-24" Flower: white or yellow or pinkish-red Bloom time: May-September



Sun Rose

Helianthemum species

This plant has a mound-like growth habit with gray-green foliage. It prefers dry, more alkaline soils.







Height 8-12" / Spread 12-16" Flower: red, pink, yellow, orange, multi Bloom time: June-August





Thyme

Thymus species

Low growing groundcover with fragrant leaves in shades of light to dark green, yellow or variegated. Attractive in mass plantings when blooming. Work well between pavers and in rock walls.







Height 1-4" / Spread 6-18" Flower: pink, white, or purple Bloom time: May-August



Thyme, Woolly

Thymus pseudolanuginosus

Very low growing, mat-forming ground cover. Sage-green, woolly leaves which change to a purplish color in winter. Tolerates light foot traffic. Used between flagstones, pavers, and in rock walls.







Height 1/2 -1" / Spread 12-18" Flower: pinkish-purple **Bloom time: May-July**



PERENNIALS

Perennials survive two or more years in your landscape, often dying back in the winter, only to emerge again in spring. They provide a variety of colors, textures, shapes and sizes. There are literally hundreds of perennials that are low water use and work well in a Xeriscape. Listed below is just a sampling of these plants.

Artemesia or Wormwood

Artemesia species

Perennial grown for its interesting texture, attractive foliage and ability to fill in a border. Leaves in shades of green, grayish-green, or silver. Leaf textures are fine, lacy, or feathery depending on variety.



Height 2-3' / Spread 2-3'+ Flower: white or green, small and insignificant Bloom time: July-September

'Silvermound' – soft, silky silvery-green leaves. 'Powis Castle' – feathery silver leaves.



Balloon Flower

Platycodon grandiflora

Clump forming perennial with bluish green leaves. Unique balloon shaped buds opening into a bell shaped flower.



Height 18-24" / Spread 12-18" Flower: deep blue, white or pink Bloom time: June-August



Basket-of-Gold

Aurinia saxatile

Gray-green foliage. Provide spring color with blooms in shades of gold to light yellow. Pruning is suggested after flowering to maintain shape. Excellent in rock gardens or in mass.







Height 8-18" / Spread 6-12" Flower: gold to yellow, tiny flowers in clusters

Bloom time: April-May



Beliflower

Campanula species

Group of perennials in many shapes and sizes. Flowers range in color. Adaptable to many environments.



Height 6"-4' / Spread 8-18" Flower: blue, purple, or white blooms, bellshaped or in clusters Bloom time: June-September



Black-eyed Susan

Rudbeckia species

Late-blooming perennial that looks excellent in mass. Bright golden daisy-like flowers with black-yellow centers. Good as a cut or dried flower.



Height 1-4' / Spread 1-2'

Flower: golden yellow, orange with a black, brown, green, or yellow center. Bloom time: August-September



Blanket Flower

Gaillardia varieties

Grayish-green foliage and daisy-like flowers in various colors. Very drought tolerant. May be short-lived. Fuzzy, round seed head follows flowering, keep deadheaded for continuous bloom. Long blooming perennial.





Height 8-36" / Spread 12-24" Flower: red petals tipped in gold, all gold, or burgundy with reddish-brown centers Bloom time: June-September



Columbine

Aquilegia species

Native and ornamental varieties. A dainty perennial with a unique shaped flower in multicolored blooms. Foliage is grayish-green with shamrock-like foliage. Deadhead to encourage prolonged blooming. Partial shade for improved drought tolerance. Short-lived but will reseed.



Height 10-36" / Spread 10-12" Flower: pink, white, yellow, red, blue, orange, purple, spurred, trumpet shaped, single or double blooms

Bloom time: May-July



Coneflower

Echinacea purpurea

A perennial herb with large daisy-like flowers in various colors. Late blooming. Makes a good cut or dried flower.







Height 2-3' / Spread 1.5-2' Flower: purple, pinkish, or white Bloom time: July-September



Coralbells

Heuchera sanguinea

Attractive dark green or maroon foliage with scalloped edges. Flower stalks rise up above the foliage and produce delicate blooms. Performs best in light shade.



Height 12-20" / Spread 12-15" Flower: red, white, or pink Bloom time: June-September



Coreopsis or Tickseed

Coreopsis species

Either a short-lived or long-lived perennial depending upon variety. Produce single and double daisy-like flowers in various colors. Green foliage and wiry stems.



Height 10-24" / Spread 12-18" Flower: golden yellow, light yellow, or pink Bloom time: July-September

'Moonbeam' - light yellow flowers, moundforming perennial.

'Sunburst' - double, golden yellow flowers 'Zagreb' golden yellow flowers.



Cranesbill

Geranium varieties

Known as the perennial geranium. Mounding type of growth habit with green foliage.



Height 1-2' / Spread 1-2' Flower: pinks, white, blues Bloom time: June-July



Daisy, Painted

Tanacetum coccineum

Beautiful flowers arise from green, fernlike foliage. Work well in a perennial border.



Height 18-30" / Spread 14-18" Flower: daisy-like with deep pink, pink, red, or white petals and yellow centers **Bloom time: June-August**



PERENNIALS

Daisy, Shasta

Leucanthemum x superbum Old-fashioned perennial with green foliage in various heights.



Height 2- 4' / Spread 12-24" Flower: white with a yellow center Bloom time: June-September

'Aglaia' - produces fringed flowerheads 'Alaska' - grows to 24" 'Miss Muffet' - grows to 12" 'Snow Lady' - fast growing to 16"



Daylily

Hemerocallis species

Very popular perennial that works well in a border or in mass plantings. Long, wide, grass-like green foliage with a mounding type of growth habit. Large flowers bloom for only one day, die and are replaced by new blooms the following day. Many flower colors available. Better flower presentation with additional moisture. Blossoms are edible.







Height 1-4' / Spread 1-3' Flower: white, yellow, pink, red, gold, mixed colors; lily shaped bloom Bloom time: July-August

'Stella de Oro' – gold flowers, one of the longest blooming daylilies.



Delphinium

Delphinium varieties

Extremely popular for their tall upright growth habit and beautiful spike flowers in various shades. Work well in a border.



Height 1-7' / Spread 1-3' Flowers: blues, purples, whites, pinks Bloom time: June-September



Flax, Blue

Linum perenne

A native, self-sowing wildflower with delicate leaves and stems. Excellent in mass plantings or meadows. Deadhead to promote longer blooming, prevent reseeding, and keep tidy.



Height 12-20" / Spread 12-14" Flower: light blue or white Bloom time: May-June



Globe Thistle

Echinops ritro

Tall perennials that work well in a border. Gray to green, prickly foliage and unique rounded flowerheads.



Height 2-3' / Spread 2-3' Flowers: pale purplish, blue, globe-shaped Bloom time: July-August



Hummingbird Mint or Hyssop

Agastache species

A tall border perennial with grayish-green, mint-scented leaves. Produces beautiful, fragrant, tubular flowers.







Height 2-3" / Spread 1.5-2" Flower: shades of orange, pink, rose Bloom time: June-August



Hosta Lily

Hosta species

A shade perennial with attractive foliage in various shades of green to blue. A flower stalk rises up from the leaves with a fragrant, bell-shaped flower.



Height 6-36" / Spread 20-24" Flower: purple, lavender, or white flowers hang from a spike

Bloom time: July-August



Iris, Tall Bearded

Iris hybrids

Bluish green, sword like leaves. Large, sophisticated flowers in every shade and often bicolor and fragrant. Lift and divide clumps every few years (3-4) to keep maintained. Make a nice cut flower.



Height 16-30" / Spread 14-24" Flower: purple, blue, black, white, cream, yellow, orange

Bloom time: May-June



Knautia

Knautia macedonia

One of the few perennials that will continue to bloom throughout summer. Stiff, wiry green foliage with pincushion type flowers. Deadhead for continued bloom.





Height 24-36" / Spread 18-24" Flower: deep burgundy Bloom time: May-frost



Lupine

Lupinus varieties

A taller border perennial with dark green foliage and very showy flowers. This plant may need staking.





Height 18"-4' / Spread 24-26"

Flower: multiple colors including blue, yellow,

pink

Bloom time: May-July



Pasque Flower

Pulsatilla species

A mounded, compact growth habit with feathery leaves, a cup-shaped flower and silky seed head.



Height 4-8" / Spread 8" Flower: pink, purple, white Bloom time: May-July



Penstemon or Beardtongue

Penstemon species

Excellent perennial for a dry garden in several varieties and flower colors. Great specimen plant.





Height 4-48" / Spread 6-36" Flower: pink, purple, blue, red, white Bloom time: June-August



PERENNIALS

Pincushion Flower

Scabiosa species

A mounding perennial with silvery-gray foliage. One of the few perennials that will continue to bloom throughout the summer if deadheaded. Fringed flowers arise from wiry stems.



Height 18-30" / Spread 12-18" Flower: pink, lavender-blue, or white Bloom time: June-October



Poppy, Oriental

Papaver orientale

Very ornamental perennial with large, papery, cup-shaped flowers. Interesting, capsule type seed pods follow flowering.



Height 2-3' / Spread 1-2'

Flower: orange, white, red, pink or purple

with dark centers Bloom time: June-July



Prairie Coneflower or Mexican Hat

Ratibida columnifera

Tall, upright flowers with lacy, green foliage. Petals grow downward away from the tall center flower disk. Biennial.



Height 18-24" / Spread 12-24" Flower: yellow or red with distinct tall center Bloom time: July-October



Salvia or Sage

Salvia species

Perennial herb with a shrub like growth habit and grayish-green or multi-colored foliage. Formal, spike-like flowers in various colors. Attracts bees. Deadhead to encourage a second bloom.



Height 18-28" / Spread 24-34" Flower: purple, rose, blue spikes Bloom time: June-September



Torch Lily or Red-hot Poker

Kniphofia uvaria

Stiff, bluish-green, tufted, grass-like foliage. Unique flower clusters arise on spikes above the foliage.



Height 1-4' / Spread 2-3' Flower: orange, yellow, white, green, or multi Bloom time: June-August



Yarrow

Achillea species

Fern-like foliage in shades of green to gray. Long blooming and very drought tolerant. Make nice cut or dried flowers.



Height 6"-4' / Spread 12-24" Flower: white, red, yellow or pink Bloom time: May-September

'Coronation Gold' – golden yellow blooms. 'Summer Pastels' – several colors on one plant; pink, yellow, white.





References & Resources

Here are recommended links to more resources on Xeriscaping, water efficient landscaping, irrigation and other related topics.

City of Bend www.waterwisetips.org www.ci.bend.or.us

Oregon State University Extension Service in Central Oregon http://extension.oregonstate.edu/deschutes/index.php

Oregon State University Extension Service Horticulture Program in Central Oregon http://extension.oregonstate.edu/deschutes/Horticulture/index.php

OSU Water Conservation Publications http://eesc.oregonstate.edu/waterwise/

Oregon Landscape Contractors Association http://www.oregonlandscape.org

Water Saving Resources – Portland Regional Water Providers Consortium http://www.conserveh2o.org/resources.html

Irrigation Association – training and more information http://www.irrigation.org

Oregon Landscape Contractors Board – List of licensed professionals and more information

http://www.oregon.gov/LCB/index.shtml

Bend's Agrimet Station – current weather data and plant water information http://www.usbr.gov/pn/agrimet/agrimetmap/bewoda.html

Irrigation Association – Smart Controller Site – Frequently asked Questions http://www.irrigation.org/swat/homeowners/faq.asp

Denver Water Bureau – Busting Xeriscape Myths http://www.water.denver.co.gov/xeriscapeinfo/xeriscapeframe.html

Denver Water – Additional Water Conservation Tips http://www.water.denver.co.gov/xeriscapeinfo/xeriscapeframe.html

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