

RED BUTTE GARDEN

UTAH'S BOTANICAL GARDEN

Garden Plant Collections

Conifers



Conifers are trees or shrubs that produce seeds within cones, and have needle-like or scale-like leaves. They can be evergreen like Pines, Spruces, and Junipers, or deciduous like Larch, Cypress, and the Dawn Redwood.

Conifers have adapted to thrive in the boreal forests of Siberia, to the tropics of southern Florida, and can be found in nearly every part of the world. They provide year-round interest with exceptional ornamental characteristics and provide food and shelter for wildlife. With the diversity of sizes, forms, colors, and textures available, conifers can be used to enhance a landscape in a wide variety of ways.

DESIGNING WITH AND SELECTING CONIFERS

Conifers are not limited to large trees. They vary in size and form and may be mounded, prostrate, globose, upright, columnar, or weeping. They can be a complement to a wide variety of landscapes and can be used as the backbone or backdrop of a design, a focal point or specimen, or in mass plantings. Newer selections include a diverse range of options for a variety of landscape designs. Columnar forms are a good choice for smaller spaces or for creating a screen, while dwarf and miniature conifers can be used in containers, smaller landscapes, or in landscapes focused on diminutive plants.

When choosing conifers be mindful of your site

and carefully consider the conifer's growth potential. The American Conifer Society has established four size categories to aid in size determination. These refer to growth in any direction and may vary due to cultural, climatic and geographical region. Growth per year equals:

Miniature	< 1"
Dwarf	> 1" to 6"
Intermediate	> 6" to 12"
Large	> 12"

Using this information can help minimize the possibility that your conifer will outgrow its site. Keep in mind that many conifer sources list mature size at 10 years of age but conifers continue to grow throughout their life, making it important to consider the growth rate and potential life expectancy of each conifer.

Conifers also vary in their requirements, including: hardiness zones, soils, water needs, and exposures. Utah's hot, dry climate, intense sun, and cold winters are important factors to consider. Because there are such a wide variety of conifer species and their subsequent cultural needs, be sure to research individual requirements before making a final selection.

CARE AND MAINTENANCE

Newly planted conifers should be carefully monitored for water needs until they are established. Establishment takes approximately two years, but

can vary depending on species and environmental conditions. Because most conifers retain their foliage during winter, they may require supplemental watering if natural precipitation is inadequate. Conifers can benefit from mulching to suppress weeds, provide nutrients, improve soil conditions, and conserve moisture.

Pruning conifers is often not necessary but can be done if desired. Be thoughtful about why you are pruning your conifer because they generally do not replace growth like broad-leaf trees and shrubs. Controlling size, creating special effects, and shaping can all be achieved with pruning. Candle pruning is a technique in which new growth, called a candle, is shortened to encourage branching. When pruning large conifers, basic principles apply for removing dead or diseased branches. A good resource for pruning conifers is:

<http://www.mortonarb.org/trees-plants/tree-and-plant-advice/horticulture-care/pruning-evergreens>

Conifers are susceptible to some fungal diseases and insects, which can afflict some species differently than others. Conifer problems may result from environmental stresses such as: improper watering, poor soils, heat or cold, and poor site selection. The best approach to maintain healthy conifers is to keep them as stress free as possible.

Some general tips for care:

- *Deep watering, especially during hot conditions and drought*
- *Winter wrapping of some conifers to protect from snow loads and/or winter burn*
- *Soil preparation to provide good drainage*

DID YOU KNOW

Conifers are valued for their ethnobotanical significance. Historically, their seeds, sap, resin, bark, needles, and branches were used for food, beverage, construction materials, scents, and cleaning agents, as well as medicine for a variety of ailments. Conifers are also important in religious symbolism and spiritual traditions. In Native American lore conifers represent hope for a returning spring. The winter gods could not force them to drop their leaves thus spring was not defeated. Evergreen boughs are used widely for holiday decorations.

Many conifers are known for their longevity, resilience and ability to adapt:

- *The tallest known conifer is a Coastal Redwood (*Sequoia sempervirens*) at approximately 380 feet.*
- *The oldest known conifer is a Bristlecone Pine (*Pinus longaeva*) that is approximately 5,062 years old.*
- *The largest cone comes from the Coulter Pine (*Pinus coulteri*) measuring approximately 16 inches and weighing up to 10 pounds.*
- *Limber Pines (*Pinus flexilis*) are often found in harsh, windswept elevations of 11,000 feet. Their long taproot anchors to the rocky outcrop and the sculpted branches remain flexible in severe winds.*

WHERE TO SEE THIS COLLECTION

Conifers are located throughout every garden within Red Butte Garden, and can be seen used as specimens, backdrops, mass plantings, hedges and cascading over walls. Visit the garden during any season to enjoy the benefits that conifers bring to the landscape throughout the year.

