



Plants for the Lake Tahoe Basin - Sugar Pine

Pinus lambertiana



Sugar pine is the largest and tallest growing western pine, reaching heights of over 200 feet. They extend from the Cascades of Oregon, to the Coast Range and the southern mountains of California and the full length of the Sierra Nevada.

Sugar Pine is native to the Lake Tahoe Basin and may be found below 7,000 feet elevation. It grows on a wide range of soils from shallow sandy loams to deeper finer textured soils. Sugar pine is found primarily in areas with an annual precipitation of 30- 50 inches per year, although they can grow with as little as 18 inches of precipitation. Sugar pine is somewhat tolerant of shade, being more tolerant than either ponderosa or Jeffery pine. It is relatively slow growing the first few years, however once established growth rates increase.

Young trees form a narrow pyramidal shape with long, spreading branches held out at right angles. Mature trees become flat-topped with an open spreading crown. Sugar pine has two to four inch long blue-green needles in bundles of five. Cones hang down from the higher branches and are the longest of any pine, 10-18 inches long, rarely to 24 inches. The reddish-brown bark becomes ridged with irregular scales with age. Both bark and wood contain a sweet resin from which the sugar pine gets its name.



Establishment and Care

Sugar pine can be grown from seed or purchased as container grown plants from local nurseries. Cones mature in two years and open September through October releasing small edible seeds while still high on the tree. Collect the ½ inch long, broad-winged seeds off the ground around the pines in the fall. Seed germination is improved if seeds are first cold stratified at 31-40 degrees Fahrenheit for 8 weeks. First, soak the seeds in water for one to two days. Then place seeds with a layer of moist sand, vermiculite, peat moss or sphagnum moss and place in a refrigerator.

In the early spring, plant seeds one to two inches deep into deep containers filled with equal amounts of sand, loamy soil and compost or peat moss, or plant into a weed-free, tilled seedbed. Plant seeds in full sun or an open shady site in moderate to well-drained loamy soil. Covering seeds with a fine layer of mulch will help prevent seeds from drying out. Or, cold stratify by planting seeds in the fall into containers or into the ground as described above.

When container grown sugar pines are ready to plant, dig a hole two to three times the diameter of the rootball and at least six inches deeper. Backfill the hole with enough native soil so the plant will sit at the same level it was growing at in the container. Water to allow the soil to settle, then add more soil if necessary before planting. Make a few one-eighth inch deep, vertical cuts in the rootball, or “tease” the roots away from the rootball with your hands to encourage roots to grow into the new soil. Set the plant into the hole, then backfill, firming the soil around the rootball with your hands. Build a watering basin just outside the rootball and water thoroughly to eliminate air spaces. Break the basin down after one or two years. New plants will require frequent water for the first 30 days. Thereafter, water deeply two to three times a month for the first few years during the growing season. Break the basin down after one or two years. New plants

will require frequent water for the first 30 days. Thereafter, water deeply 2 to 3 times a month for the first few years during the growing season. The addition of 2 to 3 inches of mulch will keep roots cool and moist while reducing the need for more frequent watering.

Uses of Sugar Pine

The soft wood of sugar pine was an important source of timber and roofing shakes for early settlers. It is still used as a source of lumber. Sugar Pine is also used for reforestation projects. The long cones are a novelty and frequently are collected for making Christmas decorations. Sweet tasting seeds are relished by birds, squirrels, and other wildlife common to the Lake Tahoe Basin.

Information provided by: Plants for the Lake Tahoe Basin, Natural Resource Conservation Service