How to grow an oak tree from an acorn

Oak trees are beautiful, drought tolerant native trees with many benefits for wildlife and people. Valley oaks dominate the floor of the Central Valley and give way to blue oaks and interior live oaks in the foothills of the Sierra Nevada and the interior Coast Range. Oak trees can be planted from acorns with great success if proper steps are taken.

There are four steps to planting an oak tree from seed: collecting the acorns, processing the acorns, planting the acorns and irrigating the acorns.

Collection

It is best to collect native acorns in early- to mid-fall, before they have fallen to the ground. Scope out some good trees for collecting during the late summer so you are ready when they are. Acorns are ready when they can be removed from their caps without tearing them. Valley oaks are usually ready to collect first, followed by live oaks. Blue oaks are ready later in the season.

Processing

Once the acorns are collected, float test them. Any that float or are soft are bad. A diluted solution of bleach and water can be used to clean them so no mold grows on them during storage. Store them in a refrigerator in a sealed container with something to hold some moisture such as a potting additive (vermiculite works best). The vermiculite should be moist, but not too wet.

Planting

For the best success, acorns should be planted in December or January, after the rainy season has started.

One of the major causes of oak seedling death is predation by small rodents, therefore protecting your seedlings is important. Plant acorns in a milk container with the top and bottom cut off or in a commercially available tree protector.

This will also allow you to keep track of where the acorns are planted and protect them from rodents. To improve success, plant two acorns in each container, so if one does not grow the other will. Push them into the soil on their sides and bury them under half an inch of soil so they do not dry out. A stake can be used to mark the planting site and to keep the tree protector in place.

Planted acorns spend their first few months sending down a long tap root, so don’t expect to see any above-ground growth until March or later.

Irrigation

Summer irrigation will improve the likelihood of your oak tree’s survival and help it grow faster. Irrigation is important to foster a robust root system. A long, deep irrigation of ten gallons of water through a drip irrigation system every week to two weeks is ideal. Irrigate for at least 2 years, lessening the frequency of irrigation as the plants get older.