

CDF GUIDE TO PLANTING SEEDLINGS



Are You Properly Prepared For Planting?



HANDLING THE TREES

Seedlings are living and must be handled carefully. For the highest survival rate, treat trees carefully and plant them immediately. You can either have your seedlings shipped or pick them up at the nursery. If possible, pick up the seedlings directly at the nursery to ensure freshness. Shipment of trees from the nurseries is scheduled to avoid delays due to weekends and holidays.

If planting must be delayed a few days, keep the box(es) or bags in a cold, protected place.

For container seedlings: cut the box down to the level of the container so that air can circulate between the trees. Keep the trees out of the rain and wind. To check if the trees need water, feel the planting medium at the bottom of the tube. If it isn't damp, water the trees and allow the excess water to drain. In cool, damp weather, the biggest threat to these trees is from mold.

For bareroot seedlings, ideal storage conditions are at a temperature of 33 °F and at high humidity. If available, **refrigerated storage is best.** The seedlings will be shipped in either boxes or bags. The bags should not be opened until planting. If prolonged storage is required, check the packing material around the roots to make sure it is moist. If it is drying out, wet thoroughly and be sure to allow excess water to drain off. Keep the roots moist, but not the tops. Wet tops can easily become moldy. The biggest threat to these trees is roots drying out or mold formation if the trees are allowed to heat up.

If it is necessary to delay planting longer than 3 to 4 days, call your CDF Forest Advisor to get information on how to handle the trees. Again, planting your trees immediately is one of the best ways to guarantee success.

HOW TO PLANT

Call your CDF Forest Advisor if you have any questions about planting. Ideal planting days are cool and cloudy with little or no wind. If possible, avoid planting on warm, windy days. The soil must be moist. Care in planting is more important than speed. Make sure the roots are never allowed to become dry. Planters should only carry about 50 trees at a time. Bareroot seedlings should be carried in a waterproof bag or bucket with plenty of moist material packed around the roots to keep them damp. The trees remaining in the boxes or bags should be kept protected in a cool, shady place with boxes closed.

1. Competition from weeds, grass, brush or other trees is very detrimental to survival and growth of seedlings. Choose areas free from this competition or clear at least a three-foot square bare spot before planting. Seedlings should not be planted under the crown of existing trees, or closer than 6 feet to existing brush.
2. Brush aside loose organic material such as leaves, grass, etc., from the planting spot to expose mineral soil. If organic matter gets into the planting hole, it can decompose and leave air spaces. Roots will dry out and when they grow into these spaces.

3. Open up the hole, making sure the hole is deep enough for the roots to be fully extended. If roots are curled or bunched up the tree will not be able to take up water correctly, will often weaken and die, or may blow down later due to poor root construction.
4. Take the tree out of planting bag or bucket only after the hole is ready. When exposed, the fine roots can dry out in as little as 30 seconds. Remember to remove the container before planting a container tree.
5. Hold the seedling in place in the hole, making sure the roots are straight, fully extended and that the tree is neither too shallow nor too deep in the hole.
6. Fill hole, allowing soil to fall in around roots. Tamp with hands or with your heels. Fill with more soil, if necessary, and tamp. Tamping is important. If soil is not firmly packed around the roots, and the seedlings may be weakly anchored. (Addition of fertilizer and plant vitamins at the time of planting **is not** generally necessary.)

Experienced planters can plant 350-700+ trees per day, depending on conditions. However, if this is your first planting project, it is a good idea to start with a small area the first year and then move on to larger plantings after you have gained more experience. Again, care in planting is more important than speed. With regard to spacing, it is better to pick a planting spot shaded by a stump, log or rock, than to strictly follow recommended spacings.

Close supervision of hired planters is usually necessary to maintain planting quality.

CARE OF TREES FOLLOWING PLANTING

Your new seedlings will still require attention after planting. Check periodically to be sure that brush, grass and other vegetation is kept under control by mowing, mulching, and spraying of a combination of these treatments. Always obtain the advice from a licensed pest control advisor before using chemicals. Monitoring the appearance of your trees will help you to detect signs of insects, diseases or other problems. Look for foliage turning yellow, new foliage drooping or other signs of poor health. Call your CDF Forest Advisor for assistance in diagnosing the problem. It is easier to take successful corrective action if the problem is detected early.

Overwatering is a common problem in irrigated plantations. You probably won't need to water more frequently than every 7-10 days. Give your trees a very thorough, deep soak and then let the soil dry out before the next watering. This encourages the roots to grow down in search of water. Frequent, shallow watering encourages root growth near the surface and the trees are more dependant on irrigation and less windfirm.

Animals can be a major cause of damage to young trees. Porcupines, gophers, rabbits, deer and cattle are the most frequent source of damage. Contact your CDF Forest Advisor or the County Agriculture Commissioner for advice on proper animal control.