

Preparing your site

Site preparation often is necessary prior to planting. Its purposes usually are to expose mineral soil and set back competing vegetation. While site preparation can be done with hand tools, this method usually is expensive and vegetation that is cut down may resprout. There are herbicides available for site preparation that may be very effective and economical in some situations. You also can use mechanical methods such as disking, scalping, or trenching. If you use mechanical methods, be careful not to destroy the nutrient-rich organic layer near the soil surface. Often a combination of mechanical and chemical methods is most effective. In some circumstances controlled burning can be used to remove debris from sites and temporarily reduce vegetative competition.

Handling seedlings

The Minnesota Department of Natural Resources packages its nursery trees in a plastic bag inside a wax-lined cardboard box. It recommends the following handling procedures:

1. Protect the box of seedlings from direct sunlight and heat.
2. Plant the seedlings as soon as possible. Seedlings should not be stored for more than three to five days and then only at temperatures of 35° to 45 F.
3. Once you open the package, plant the seedlings immediately. Exposure of tree roots to hot sunlight and drying winds for three to five minutes may be fatal.
4. While planting, keep the seedling roots moist, but do not immerse them in water for more than an hour.
5. If you need to postpone planting for more than three to five days after receiving the trees, remove the seedlings from the container and heel them in a trench.

Heeling in seedlings for temporary storage

To heel-in trees, dig a V-shaped trench in a cool, shady location, deep enough so the earth will cover the entire root system and part of the lower stem. Open the boxes, spread the trees along the sloping side of the trench in two or three layers, pack soil around the roots, and water as necessary to keep the roots moist. Store trees in this manner only as long as they remain dormant.

An even better storage method is to place the seedlings in a refrigerator set at 40 F or slightly cooler. It is absolutely essential that seedlings be planted before new growth starts to emerge. The sooner you plant the trees after they arrive from the nursery, the better the survival will be.

Planting your seedling

The best time to plant is in the spring as soon as the frost is out of the ground. At this time the soil is moist, the climate is somewhat mild, and normally there is ample rainfall. If necessary, container-grown seedlings can be planted later in the growing season. Fall planting usually is less successful because frost heaving may occur, especially on fine-textured or wet soils, and growth regulators in the tree may become imbalanced, leading to top dieback.

Be sure to take good care of seedlings before you plant them. They should be dormant when you receive them (i.e., the buds should not be elongating or flushed). Do not let the roots dry out or freeze. This will likely kill the trees, but since the crown will appear alive (conifers will remain green) for a period of time, you may not realize it. To minimize risk of tree roots drying during shipment, ask nurseries to ship by the swiftest transportation available. If you transport the trees yourself, protect them from wind and sun during transit.