

 UI Extension Forestry Information Series

When to Plant?

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Most tree planting in Idaho is done in the spring. While recent research has shown that fall planting can be an acceptable alternative with some advantages, the risks are great and most landowners are better off sticking with spring planting.

When is the planting site ready for planting? Let's assume that the decisions about matching species, topography, planting method, site preparation, and spacing have already been made, and the seedlings remain in storage under cool, moist conditions. The most important considerations that remain are soil temperature and soil moisture.

We all want to get our seedlings off to the best start possible. We want them to have an advantage over competing vegetation and to have the longest growing season possible. This means we want to get them planted as soon as we can in the spring to take advantage of spring moisture before the usual summer drought. However, there is little to gain and much to lose by planting in cold, excessively wet soil. So, how can you know when soil conditions are at their best? All you need is a thermometer and a shovel!

Place a thermometer with the recording end about four inches below the soil surface. The temperature should reach at least 40 degrees (45 degrees is even better) for several days. Roots do not grow at temperatures cooler than this, but at 40-45 degrees will begin growing and establishing a firm contact with the surrounding soil so that when the foliage begins to grow at even warmer temperatures, the roots are ready to provide water, nutrients, and anchorage.

Excessively wet soil has all of its air space saturated with water. While many plants can survive this condi-

tion for varying lengths of time after they are established, seedlings cannot tolerate this condition. Even more important is the fact that it is nearly impossible to plant in wet soil without compacting the soil and removing and remaining air space. Planting when wet leaves a glazed, heavy soil that repels roots, air, and moisture, and results in poorly growing or dead seedlings. There is a simple, foolproof technique for avoiding all of these problems related to excessively wet soils that normally drain during the growing season.

Dig a hole about a foot wide and a foot deep. Fill it back in. If there is not enough soil to refill the hole, the soil is too wet – it has been compacted and air space has been lost. When you can dig such a hole, and have enough soil to refill it with just a little left over, conditions are just right. The seedling will be planted in loosened, moist soil and will have their best chance for survival and good growth. Remember that soil types and drainage can vary across the planting site, so check at several locations. Sandy soils may be planted as soon as the snow is gone or the day after a heavy rain, but heavy clay soils may take weeks to drain sufficiently. Don't forget that acceptable soil temperatures must coincide with correct soil drainage.

For more information, contact your local Cooperative Extension System office, or the UI Research Nursery. Ask for Extension the publication titled *How to Plant Your Containerized Grown Seedlings Right*.

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