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EC82-1738 Tree Planting Guide

William R. Lovett

University of Nebraska - Lincoln, wlovett1@unl.edu

Bruce E. Bolander

University of Nebraska - Lincoln, bbolander1@unl.edu

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Tree Planting Guide

*by Bill Lovett, Tree Improvement Forester
Bruce Bolander, Tree Distribution*

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SITE PREPARATION

Proper site preparation is essential to your tree planting operation, and varies with the different climates and soil types.

Chemical Control:

On sandy soils, rough terrain, or other highly erodible sites, tillage is not recommended. Chemical weed and/or grass killers may be applied to the site in the fall or before planting in the spring.

Summer Fallow:

This practice is recommended on heavy soil in western Nebraska to conserve soil moisture. This may be accomplished with the aid of occasional disking, subsurface tillage, or chemicals to control weeds.

Fall Tillage:

In the eastern areas of the state **fall** plowing is recommended for grassland sites. Cropland may need no fall tillage. All sites should then be disked before spring planting.

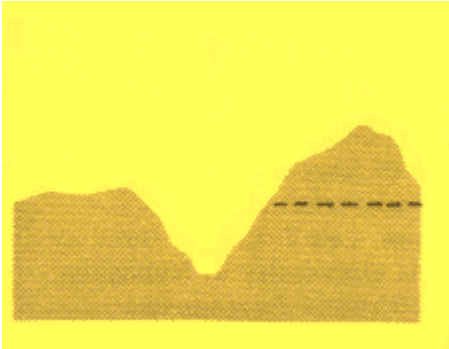
CARE OF SEEDLINGS BEFORE PLANTING

Do **not** submerge root systems in water longer than six hours as this will kill the seedlings.

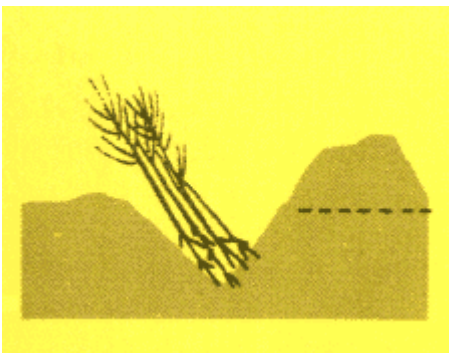
Take care of your seedlings immediately upon arrival. If possible, plant at once when you receive shipment. If weather is too cold or too wet for planting, put the box in a **cool** but frost-proof cellar and moisten packing material with ice cubes. Trees will remain in good condition for several days if properly handled.

If you will not be ready to plant for a week or more, heel your trees in the ground. Do this in a place where they will have protection from the sun and wind.

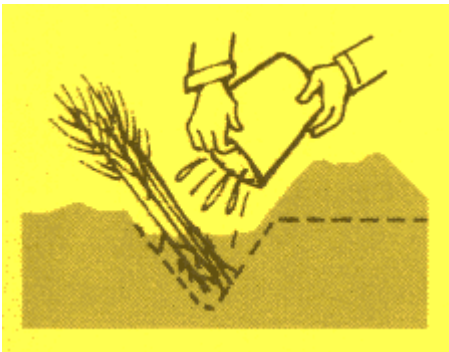
HEELING-IN STEPS



Dig a trench deep enough and wide enough to hold all the roots without crowding. Ten feet of trench will hold about 1,000 seedlings.



Cut strings on bundles, place the roots in the bottom of the trench and spread out the roots.



If the soil is dry, water it thoroughly. Keep roots moist at all times.



Cover the roots with soil and pack firmly. Air pockets will allow the roots to dry out.

HOW TO PLANT

Good planting practices will result in high survival and better tree growth. Follow these steps in the

planting operation:

1. Mark or flag the planting rows. Straight rows simplify cultivation. In some cases of Christmas tree planting, it is desirable to crosscheck the rows, that is, make the spacing between the trees in the row the same distance as between rows. This permits cross-cultivation.

Vary the spacing, depending upon the type of planting, species used, cultivation equipment, planting site, and area of state. Approximate spacings by type of plantings are:

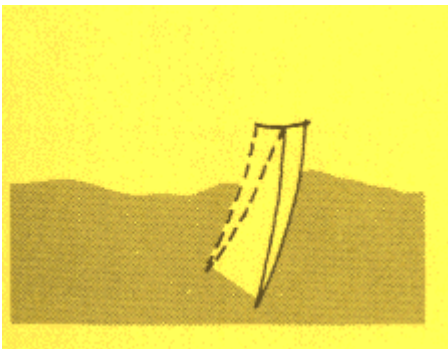
- Christmas tree - 6' x 6' or 7' x 7'
 - Erosion control - 3' x 4' or 4' x 4'
 - Woodland - approximately 10' x 15'
 - Windbreaks - Between-row spacing should be 3 to 4 feet wider than cultivation equipment.
 - Between row - 12' to 20'
 - In row-shrubs - 3' - 4'
 - Conifers - 6'- 14'
 - Hardwoods - 8' - 18'
2. Remove trees from carton, or "heeling-in" trench, and immediately place them in a bucket or similar vessel partly filled with water while planting. Do **not** leave unplanted seedlings in water over night.

KEEP ROOTS MOIST AT ALL TIMES TREES ARE LIVE, TREAT THEM WITH CARE

3. Plant by hand or by machine. With either method, follow these rules:
 - Make the hole or opening large enough to receive the entire root system without crowding or bending. A shallow hole that causes the roots to be turned up at bottom will result in the death of the tree.
 - Plant each tree the same depth it stood in the nursery bed.
 - Pack soil firmly around roots and tamp to remove all air pockets.
 - Cover planting spot with loose soil to serve as a mulch.

HAND PLANTING

Holes may be dug with a shovel or power anger or slits may be made with a tree planting bar.



Dig a hole, deep and wide enough to freely contain root

Place seedling at correct depth, packing roots with moist soil.



Fill in around seedling by scraping soil with shoe.



Pack soil firmly around seedling.

KEEP ROOTS MOIST AT ALL TIMES TREES ARE ALIVE, TREAT THEM WITH CARE

CULTIVATION AND WEED CONTROL

To make the best use of available moisture, keep the area around seedlings free of weeds and grass.

This can be accomplished by cultivation and/or chemical application. A small (6') tandem disk works well, insuring minimum drainage to the trees. Cultivate regularly, until the trees are able to shade out most of the grasses and weeds.

Preemergence herbicides are effective for weed control. They stay in the top 2" of soil, out of the tree root zone. Here they are readily taken up by roots of small weeds.

On medium to heavy soils use 4 lb/acre active ingredient, simazine, while on sandy soils 2 lb/acre active will suffice. For more information on application and sprayer calibration, see NebGuide 73-33 "Chemical Weed Control in Trees," available at your county Cooperative Extension Office.

Handle all chemicals safely. Read all label instructions and follow instructions carefully while using pesticides. Store all pesticides safely away from children, pets and livestock.

PROTECTION

Livestock and trees are not compatible. Fencing is an important part of any tree planting. Protection from rabbits, mice and moles, can be accomplished by repellents or poisons. Use only recommended treatments.

Replant all losses during first and second years to avoid future wind tunnels.

ADDITIONAL INFORMATION

The following publications are available at your county Cooperative Extension Office:

Firewood Plantations, G79-443
Wildlife Habitat Program For Private Lands, G81-553
Forestry For Wildlife Habitat Improvement, EC81-1747
How To Design A Snow, Wind Barrier, G74-102
Drip Irrigation For Windbreaks, G80-525
Chemical Weed Control In Trees, G73-33
Christmas Trees-A Management Guide EC76-1741
Establishing Black Walnut, G76-315
Guide to Clarke-McNary Trees - Conifers, G74-175
Guide to Clarke-McNary Trees Broadleaf, G75-256
Guide to Clarke-McNary Shrubs, G76-316



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