

Tree Planting and Maintenance

Tree establishment is a long-term commitment. As owner/operator, you are responsible for the success of the tree planting to ensure it continues to serve the purpose for which it was established (i.e., windbreak, shelterbelt, wildlife). Periodic inspection enables proper maintenance and operation. The basic challenges to successful tree/shrub establishment are: weed and sod competition, dry conditions, animal damage, and disease. These guidelines have been developed to ensure a successful tree planting. *State Cost-Share participants; if, upon a site inspection the tree planting is deemed inadequate and these guidelines have not been followed, you may be required to return State-Cost Share funds.*

Pre-planning

- Measure site
- Choose trees/shrubs to meet objectives, and match soil, moisture and light requirements
- Plan spacing between trees within the row and distance between rows

Site preparation

- Mechanical – tillage; start previous fall and again right before planting
- Chemical – both pre-emergent herbicide and post-emergent herbicides may be needed*

Planting

- Keep roots moist and protect from sunlight and wind
- Soak roots for 1-2 hours just prior to planting
- Make sure roots are facing straight down; roots turned upward will significantly increase mortality
- Don't plant in extremely hot, dry or windy conditions
- Water immediately after planting
- Mulching – fabric matting or wood chips
 - Matting - protect at least 3-4 feet around the seedling; make "X" slit around seedling to dissipate heat and allow for growth; matting must remain anchored – for mat rolls, the edges need to be covered with soil, for individual mats anchor with mat staples
 - Wood chips - apply to depth of 4"

Post-planting

- Weed control is required 3-4 feet around seedling. Weeds/sod compete with seedlings for moisture and nutrients.
 - Use herbicides for weed control that can be applied 'over-the-top' of the seedling*
 - Tillage/cultivation should take place no closer than 3 feet to the tree
- Water 1-2 times per week during dry times – equivalent to 1" per week
- Minimize wildlife damage through the use of:
 - Tree tubes, fencing, animal repellents, animal population management, and habitat manipulation (i.e., remove thick vegetation, junk piles, and rock piles)
- Protect from livestock
- Establish short grassy cover between the rows
- Protect from manure run-off and chemical run-off/drift

Long-term Maintenance

- Replace trees as necessary to maintain 100% survival. Holes in a windbreak can greatly reduce effectiveness.
- Prune to maintain health and promote growth. Prune to prevent double-leaders, encourage growth, and remove damage and decay. In general, pruning should be conducted during the dormant season.
- Protect from insects and disease (consult MN DNR Forestry or University of MN Extension if you have questions or concerns)
- Thinning as necessary to maintain adequate wind/snow protection
- Inspect regularly, especially during first few growing seasons and following extreme weather events

* Consult with your local Co-op to select appropriate weed control chemicals (*always follow label directions*)