

# WINDBREAK 101

*Courtesy of Laramie County Conservation District*

*Planting Tree Rows* An average planting consists of at least three rows to achieve good wind protection. A typical planting consists of shrubs or shorter trees comprising the outer rows, while evergreens (the foundation of the windbreak) should make up at least one inside row. Your tallest trees should be in the inside row(s). You should not make all your tree rows the same species (i.e. three rows of juniper.) This will help protect your windbreak in the event of a disease or insect destroying all of one species. Planting different types of trees in the same row can create gaps and reduce windbreak effectiveness.

*Spacing Within and Between Rows* The District suggests the following tree spacing distances to use when planting trees and shrubs in a row. Windbreak rows should be planted 20 feet apart. Always leave enough distance between rows and around your windbreak to allow cultivating equipment passage.

Suggested Tree Spacing: Shrubs (i.e: Caragana, Lilac, Cotoneaster, Buffaloberry, Native Plum, Chokecherry) – Plant 3-6 feet apart

Smaller Evergreen Species (i.e: Rocky Mountain Juniper, Eastern Redcedar) – Plant 6-12 feet apart

Large Evergreen Species (i.e: Pine and Spruce) – Plant 10-12 feet apart

Deciduous Trees (i.e., Bur Oak, Green Ash, Hackberry, Golden Willow, Siberian Elm, Cottonwood) – Plant 10-14 feet apart

Remember the above spacing recommendations are simply guidelines, depending on how you want to utilize your planting. For example: for a windbreak, trees will be spaced closer, whereas trees in a wildlife planting are spaced a little farther apart. If you have questions, please call the District for further information.

*Preparing Your Planting Site* Proper site preparation is very important for windbreaks. Plows, disks, or rototillers can be used to achieve necessary tillage and are available at rental equipment stores and landscape companies. Fallowing the fall before planting is essential for dry land windbreaks to allow moisture to accumulate during the winter. Rows should be 8 feet wide and 6-8 inches deep.

*Weed and Moisture Management* Weed control is an extremely important factor for tree growth and survival. Weed and vegetative competition control should be provided for at least five years. Remember that weeds are better competitors than seedlings for moisture, nutrients and sunlight. They also provide fuel for fires and habitat for tree-injuring pests. Mulch, cultivation and herbicides are three basic methods for controlling weeds. The District sells fabric mulch in 300 ft. rolls. Fabric mulch has significantly improved the survival of tree plantings. Fabric mulch allows moisture to pass through to the soil but minimizes moisture loss through evaporation.

Irrigation may be needed at planting time and is often helpful throughout the first several growing seasons. Generally, the District recommends 10 gallons of water for every inch in tree diameter. Also, it is recommended that you cease watering your trees at the end of August to allow the tree to harden off. Watering beyond this time can cause die back of new growth from an early freeze.

*Winter Care* Snow cover is helpful to the young trees. A snow fence on the windward side of the windbreak the first year or two will protect plants from desiccation and add soil moisture. Protection from the wind – most evergreen species require protection from wind, especially during winter months. Sunlight reflected off snow and wind can quickly dry unprotected conifer foliage. It is recommended to install wind protection for evergreen trees the first three years of establishment or until the trees are taller than the protectors. The Conservation District sells the mesh, bi-fold tree protectors. Please note that the District has no control over inventories of these protectors, so be sure to call ahead of time to check availability. Other items that can be used for wind protection include wood shakes and bales of straw.