

Designing an effective windbreak with trees and shrubs is important to meet the goals and purpose of the landowner.

Trees are around for a long time so a person wants them to function as intended, said Dennis Adams, forester with the University of Nebraska-Lincoln Institute of Agriculture and Natural Resources.

The design, types of trees and shrubs, length of the rows, number of tree rows, spacing of the trees in each row are all factors to consider, depending on the purpose of the windbreak, said Adams.

A single row of trees planted on cropland for soil erosion control, or to capture snowfall, may be adequate if that is the purpose. If livestock protection, home headquarters shelter and wildlife habitat are the purpose, the design may involve multiple rows of trees or shrubs, said Adams.

Windbreak planning assistance is available through any Natural Resources District (NRD) or USDA Natural Resources Conservation Service office. Local staff or foresters are available to offer free recommendations to landowners on how many trees or shrubs, numbers of rows, distance to plant from a home or feedlot, or whatever the purpose.

Trees may yet be available from NRDs, and most NRDs offer tree planting services for a fee.

Time spent early in planning, site preparation, and maintenance is repaid during the lifetime of a windbreak, according to Adams.

Windbreak establishment does not end at planting. The first three years are critical for getting a windbreak established.

Reducing weeds that take moisture, keeping livestock out of trees and controlling wildlife damage from rodents, rabbits or deer, and disease can impact the success of a windbreak, said Adams. Replacing dead seedlings the first three years will allow replanted trees to grow and not leave gaps in the windbreak he added.

Fabric mulch or "weed barrier" is popular in drier climates and can significantly increase the survival rate of trees. But as the trees grow, the landowner may need to slice a larger opening around the tree to keep the mulch from girdling the tree.

Designing, planting and maintenance all sound like work, and it is work, said Adams. But it's worth it as those trees get three to four feet tall and then mature into a beautiful, effective windbreak, he added.