



# THE LANDSCAPE CENTER

## Creating a wind break with trees

In general, when designing a windbreak, the denser the shrubs and trees are, the better windbreak they make. Dense shrub choices include peashrub, cotoneaster, lilac, sumac, buffaloberry, mountain mahogany, privet and willow. Dense tree choices for the foothills include Colorado blue spruce, Eastern red cedar, Pinyon pine and Rocky Mountain juniper.

Design your windbreak as part of the landscape with rows perpendicular to prevailing winds -- the rows do not need to necessarily be placed on a straight directional axis. The wind-protected area extends to a distance of approximately ten times the height of the tallest trees. Wind eddies can form around the ends of a windbreak, so plantings should extend 100 feet beyond the protected area. Gaps within the row will funnel and accelerate wind, reducing the windbreak's effectiveness, so it's better to plant the *same type* tree within the *same row*.

Ideally, windbreaks consist of at least three rows. Diversity of tree or shrub choice will yield not only a more visually pleasing outcome, but will increase the disease and insect resistance and enhance the windbreak as a wildlife habitat. The row closest to the wind should be shrubs and the row closest to what you are screening should be trees. To determine spacing between the rows, refer to the plant's mature size. At maturity, the sides of each plant should slightly overlap or "touch."

In general, shrubs need spacing of four to six feet; junipers and cedars need six to eight feet; pines and spruce need ten to 14 feet. The distance between rows should be a minimum of eight feet, with a maximum of 15 feet, dependent upon available space. If windbreaks are planted too close to driveways or roads, the windbreak can actually cause snow to pile up and drift. It's best not to plant trees any closer than 60 to 70 feet from the desired protected area -- snow can drift a distance of three times the height of the windbreak.