

# Proper windbreak planning a must

The value of windbreaks might have crossed your mind now that our first plowing/shoveling-worthy snowfall has arrived in many parts of Wyoming.

Some may consider planting a windbreak on their property to control snow on driveways or roads, establishing habitat for wildlife, improving energy efficiency for a structure, enhancing aesthetics, and/or providing wind protection to livestock, among the many benefits.

There are some key points to consider before planting a windbreak's trees and shrubs.

The prevailing wind direction in your area is the most important consid-

eration for windbreak locations. This is the direction from which the wind blows most often. Observe how buildings and other windbreaks are situated, talk to your neighbors, or contact a local meteorologist at the National Weather Service to find out the prevailing wind direction. This information dictates the location of the tree rows. The correct placement of tree rows will run perpendicular to the prevailing winds.

#### Choosing species

The soil type is the next important piece of the puzzle. Because a tree or shrub is unable to change location, it is critical the type of trees and shrubs chosen are compatible with the soils. Soil testing can help determine your soil's physical and chemical properties.

Wyoming soils can be high in salts, low in nutrients, or have very high amounts of either sand or clay type particles that make up a soil's texture. These factors will determine which kinds of trees and shrubs will survive in the area. Test your water source as well to see if water quality will be an issue."

Finally, a soil test's nutrient analysis will provide insight for what nutrients might need to be added to maintain a healthy tree row. Your local Natural Resources Conservation Service, UW Extension Office, or conservation district office can provide information on how to sample soil. The appropriate shrub and tree species can be selected once the soil information is obtained. Check out

barnyardsandbackyards.com for more information on testing soils, establishing a living snow fence, and species adapted to Wyoming's climate.

#### **Consider other goals**

Fall is a good time to consider the primary and secondary purposes for planting tree and shrub rows. These decisions will help select the species that best fit your needs. If the primary function of the tree row is to provide snow control plus providing habitat for wildlife, the design would call for a dense row or two of evergreens and a row of fruit bearing shrubs. The dense evergreen rows will help drop more snow away from the area you are trying to protect than the deciduous shrubs, and the fruit bearing shrubs will provide more foraging opportunities for wildlife.

#### **Proper placement**

Next consider elevation changes within the landscape, affected views once plants mature, and whether there will be adverse effects to neighboring properties.

An increase in elevation running perpendicular to the area/structure to be protected and on its windward side – a hill – will increase the length and depth of the accumulated snow drift. If this is the case, I would recommend documenting seasonal snowdrift patterns to assist in the proper tree row placement. This can be done with photographs and flagging.

A windbreak may not be practical in extreme cases – for example, having

drifting problems on a driveway to your house that is on the leeward side of a hill. Relocating the driveway out away from the leeward side of the hill would be more practical. In some extreme cases there may not be any solutions to manage the snow.

Once the design is completed, look at how the rows will affect the views of the property. Consider the views from within the property protected and those from properties around the windbreak. Also consider any other effects on neighboring properties when the trees/shrubs mature. Moving a poorly placed windbreak can be quite costly in money, time, and labor. Now is the time to get it right. With proper planning a windbreak can provide many benefits and years of enjoyment.

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## to avoid later frustrations

