

# Shrub Row Repair for Windbreaks



## SOUTH DAKOTA DEPARTMENT OF AGRICULTURE RESOURCE CONSERVATION & FORESTRY DIVISION



The only weak spot in many South Dakota windbreaks (shelterbelts) is a thin or missing shrub row(s). This is not a problem you can ignore just because the trees look good.

Weak shrub rows cause snowdrifts on the leeward side instead of in the windbreak. These inside drifts are needed to provide moisture for the trees, lack of snow storage will eventually kill a windbreak.

Every windbreak should have at least two shrub rows, one on the windward side and one on the leeward side.

### Inspect the shrub row

1. Small shrubs (such as rose and current) should be spaced about 3 feet apart.
2. Shrubs should have branches and foliage at ground level and at the top.
3. At least 90% of each plant should be living.
4. There should be very little vegetative growth beneath the plant.

### What to do if...

**...all shrubs are present, but sparsely foliated and some dead branches show.**

#### Remedy

Shear off the shrubs to a 6 to 12 inch height. Hollow or small stemmed plants can be sheared with a power sickle mower. Larger stemmed shrubs species will require a powered circular saw.

**... Some shrubs are gone, the live ones show some dead branches. They are open at the bottom with vegetation on the ground surface.**

#### Remedy

Shear shrubs in poor condition to a 6 to 12 inch height. Hand plant new shrubs in vacant planting sites spacing them 2 feet apart. Next fall apply chemicals labeled for use in windbreaks in a 3 to 4 foot wide band on the entire renovated row.



A healthy shrub row.



Shrubs are present, but sparsely foliated and have some dead branches.

... long stretches of the shrub row are missing.

**Remedy**

If space allows plant a new shrub row (two would be better) at least 20 feet from the nearest tree row. Fallow the area for one year before planting; use snow fence or some other method to trap snow on the tilled area (this gives your new shrubs some moisture to start with).

... shrub row was not planted originally or died out many years ago.

**Remedy**

There are two things you can do. Plant one or two new shrub rows, or, if the planting has 7 to 10 **complete** rows of tall trees like Siberian elm or medium trees like, Russian olive, apricot or Ussurian pear, cut back the two windward rows. The stumps will resprout and function as a shrub row.

... shrub row is overtopped and suppressed by adjacent tree rows.

**Remedy**

If space allows plant one or two new shrubs outside the influence of the tree rows, or cut down the offending trees and treat stumps to stop suckering.



Shrub row was not planted or died out many years ago.

<b>Replacement plants</b>	
<b>Trees and shrubs for moist to wet sites:</b>	
<b>Shrubs</b>	<b>Trees</b>
1. Dogwood	1. Willows
2. Elder	2. Poplars
3. Cranberry	3. Basswood
<b>Trees and shrubs for shady locations:</b>	
<b>Shrubs</b>	<b>Trees</b>
1. Chokecherry	1. Basswood
2. Current	2. Larch
3. Dogwood	3. Eastern redcedar
4. Nannyberry	4. Rocky Mountain juniper
5. Serviceberry	
<b>Trees and shrubs for dry or sandy sites:</b>	
<b>Shrubs</b>	<b>Trees</b>
1. Rose	1. Honeylocust
2. Lilac	2. Hackberry
3. Plum	3. Bur oak
4. Buffaloberry	4. Green ash
5. Caragana	5. Hawthorn
6. Serviceberry	6. Amur maple
	7. Eastern redcedar
	8. Rocky Mountain juniper

The healthiest trees will not give you a good windbreak without a thick shrub row to stop the ground level wind. Attention to those shrub rows will restore the windbreak to its greatest potential.

For more information contact your nearest South Dakota Division of Resource Conservation and Forestry Office. Hot Springs 605-745-5820; Huron 605-353-7187; Lead 605-584-2300; Mitchell 605-995-8189; Pierre 605-773-3623; Rapid City 605-394-2395; Sioux Falls 605-362-2830; Watertown 605-882-5367. Web Site: <http://sdda.sd.gov/conservation-forestry>

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