While tree windbreaks may last for 50 years or more, some older windbreaks may need renovation because of reduced effectiveness due to age, poor health or neglect, says Dennis Adams, forester with the Nebraska Forest Service.

There are some questions to answer before renovating a windbreak.

First, what is the condition of your windbreak? Are there dead or dying trees, insect problems or gaps in the windbreak or is it dense enough to provide the desired protection?

Next, what is the objective of your windbreak? Does your windbreak meet your primary purpose for snow management, wind erosion control, protecting a building or livestock?

Adams offers a brief list of options depending on the type of windbreak to be renovated. Renovations will vary with the type of situation to be addressed.

If the windbreak is a one or two row field windbreak:

• If 50 percent or more of the undergrowth is perennial grasses or broadleaved weeds, chemical control is recommended because cultivation may be difficult and injure tree roots;

• For gaps in young windbreaks, if less than 10 years old, replanting small trees will work, and if more than 10 years old, larger trees planted with a tree spade may be necessary. Weed control and mulching will help;

• Windbreaks with low density in the understory may need an interplanting of low growing shrubs to fill in and add to plant diversity and wildlife habitat; livestock grazing should never be allowed;

• Field windbreaks are often planted at close spacing for early wind protection. Some thinning without creating gaps may be in order to maintain tree health;

• For Cottonwood, Siberian Elm, and Osage orange trees in a windbreak, or other trees with spreading root systems, root pruning will reduce moisture competition between trees and cropland. Root pruning is not as effective with other tree species.

If the windbreak is multi-row for farmstead or livestock protection:

• Controlling sod forming grasses, filling gaps in windbreaks, and adding low growing shrubs to increase density all apply; some thinning techniques for better growth or root pruning may be in order;

• Multi-row windbreaks should have a mix of deciduous and coniferous species which adds wildlife values and reduces disease depending on space perhaps a row of shrubs can be added to either side of the windbreak but snow trapping locations should be considered;

• In some aging windbreaks where overcrowding could be a problem complete windbreak removal might be needed but results in the loss of a barrier for 10 to 15 years. Removing a row of trees or thinning of individual trees could help. Before removal of any trees, seek the advice of a forester.

Farmers or ranchers interested in planting a new windbreak, or replanting an older deteriorating windbreak, can contact their Natural Resources District or USDA Natural Resources Conservation Service offices for information.