

## **Shelterbelt: A Living Barn**

Many livestock producers realize the importance of shelterbelts. As reference, German immigrants brought the idea of planting shelterbelts to protect farmsteads from drying winds and provide shelter for livestock, crops and homes. In the early 1930s, a severe drought triggered the dust bowl on the Great Plains, devastating over 100 million acres of farmland, which impacted farms, families and communities.

This prompted Franklin D. Roosevelt, in 1935, to institute a massive shelterbelt project to promote large-scale planting of trees across the Great Plains to minimize wind erosion. Today, shelterbelts are still an important landscape feature. They provide living snow fences, wildlife habitat, noise barriers, help conserve energy for adjacent dwellings, protect livestock, beautify property and increase privacy.

If you are considering planting windbreaks on your farm, here are a few tips to keep in mind:

- Planted windbreaks/shelterbelts can be very effective in reducing weather effects on livestock. The numbers vary, but a figure of 20 percent or more reduction in energy costs is often noted with proper windbreaks around farmsteads.
- You need space for at least two rows of trees, shrubs or a combination of the two. These should be staggered. Three rows is better, and four or five are excellent if you have the needed space.
- At least one or two of the rows needs to be coniferous. These plants retain their needles during the winter and are more effective.
- More rows allow planting various trees and/or shrubs to take advantage of differences in height and growth habit.
- Survival the first year after planting is critical. Many times, watering is necessary. After the initial establishment year, mortality should lower dramatically.
- Professional help from a MDC, NRCS, or professional forester or arborist is available and is strongly recommended. There is so much variability in soils, slope, etc. – a site specific plan is a great help.

A terrific web site to help walk you through site evaluation is located at [agebb.missouri.edu/commag/shelterbelt/](http://agebb.missouri.edu/commag/shelterbelt/). The University of Missouri Center for Agroforestry also has some good educational materials on shelterbelts. This organization's website can be found at [centerforagroforestry.org/moagforest.asp](http://centerforagroforestry.org/moagforest.asp).

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