Agriculture

Windbreaks a plus for area farmsteads

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"You can remember your grandfathers and grandmothers planting trees all over the farm. They made wonderful windbreaks to keep out the snow and wind," Chuck Hoelker, state soil conservation technician, said. "They knew what they were doing and that's why you see the trees you do on nearly every farmstead in the area."

Hoelker, a member of Plymouth County's Soil and Water Conservation District/Natural Resources Conservation Service staff, Le Mars, said he remains committed to the value of windbreaks on farmsteads and welcomes the opportunity to work with farmland owners, who like earlier generations, see the benefits of modern day windbreaks.

"We find today's land owners considering windbreaks for several reasons – energy conservation, beautification of their properties and for protecting building sites from snow," he said. "They are realizing that windbreaks give needed protection from the northwest winds in the winter. It doesn't take long when you're working outside and the windchill is 50 degrees below zero, to see their value.

"These farmers at the same time also are understanding the shade the windbreaks can provide for come summer when it's hot and shade can be important for efficient management in their livestock operations," Hoelker added.

Yet another possible advantage is now emerging into the windbreak benefit picture: can windbreaks also be successful carbon sequesters storing up carbon to help mitigate the effects of global warming?

A recent agroforestry study to develop a new model to accurately determine a windbreak's ability to store future amounts of carbon is currently underway by a team of researchers from the University of Nebraska – Lincoln, University of Florida, University of Kansas and the U.S. Department of Agriculture's National Agroforestry Center.

(Photo Contributed)

This wintry scene provides an example of a windbreak's ability to manage snow disposition as well as its value for energy conservation and farm beautification.

(Sentinel photo by Jolene Stevens)

Chuck Hoelker (left), state soil conservation technician, Le Mars, confers with Joe Schwartz (right), forester, Department of Natural Resources, Le Mars, on the benefits of windbreaks on local and area farmsteads. The two said, they'll be watching with interest the future development of studies on the windbreak's role in sequestering of carbon in the environment.

The study report carried in the Journal of Environmental Quality (Vol.11/2011) in) indicates that windbreaks, of the five main agroforestry practices used in the United States "are especially appealing" to the researchers as a carbon sequestering option on private lands.

This researchers said is as a result of the relative small portion — 2 to 5 percent — of an agricultural field normally dedicated to a windbreak, but is able at the same time to sequester greater amounts of carbon than "many" of the other agricultural options thereby "contributing significantly to overall greenhouse gas mitigation" in a farming operation.

The research team said it sees results of the model development aiding in determining the current and future amounts of biomass and carbon captured in agroforestry plantings and as a basis for directing conservation programs and policy development and future land management decisions by producers.

Hoelker and Joe Schwartz, forester, Department of Natural Resources, Le Mars, who will be joining him in reviewing a June 30 summarized account of the study on the internet source, ScienceDaily, said it "will be interesting" to follow future developments of the study.

Both agreed, however, the earlier cited generation of windbreak advocates would no doubt be surprised at today's focus on the possible new benefit of trees in the present carbon sequestering efforts.

Hoelker said, meanwhile, that while some present farmland owners may be reluctant, possibly he said due to current farmland prices, to give up land for a windbreak, incentive assistance is available through his office for such projects.

The funding through Iowa's Financial Incentive Program will, he said, provide for approximately 75 percent funding for a windbreak project and includes a maximum cost-share tree payment of $22.50 per tree.

Hoelker said farmland owners are encouraged in considering a windbreak project to first determine the tree species and size of tree desired for his or her windbreak with several species of "conifer-type," Norway and Black Hills Spruce or Concolor Fir among those available for the recommended initial three-row windbreak planting.

A variety of species within the windbreak is recommended to compensate for possible future damage losses from any one species in the project, Hoelker said.

Schwartz, who agreed with Hoelker in the value of windbreaks as protective and energy-saving projects for the farmsteads of today, also pointed out the farmer's relationship with trees is in fact a long standing one.

For many, Schwartz suggests the tree may well have made the original ownership of the farmland a reality.

This Schwartz suggests came about in the 1880s with what he terms the offering of "an incentive" by the U.S. government for individuals to settle in the Great Plains area of the country.

Ten acres of hardwood trees would at that time allow a new settler to obtain 160 acres of farmland.