

Minnesota NewsWatch

Standing corn rows needed to help reduce drifting snow

By PAULA MOHR

THE Minnesota Department of Transportation is looking for more farmers to participate in its standing corn row program to help reduce blowing snow on roads that are prone to drifting and closure.

The MnDOT program started about 15 years ago and pays farmers to leave cornstalks up throughout the winter. Farmers are reimbursed for standing corn based on a blowing and drifting snow-control calculator developed by the University of Minnesota, which factors in yield, production costs, inconvenience factors for the farmer and traveling public, the price of corn and anticipated snow removal costs.

The corn rows break the wind's force, causing the snow to collect around the corn rows instead of drifting onto the roads. The rows improve driver visibility and road surface conditions, and lower costs of road maintenance. Research conducted by MnDOT, the University of Minnesota Extension and the Center for Transportation Studies shows standing corn rows reduced the severity of injuries on curves by 40%. Plus, MnDOT estimates the program returns \$14 in savings for plowing, equipment use and labor for every dollar invested.

Last winter, there were 17 sites with more than six miles of standing corn rows enrolled

Key Points

- Corn rows serve as snow fences in wind-blown areas.
- MnDOT wants more fields enrolled in corn row program.
- FFA and 4-H club members volunteer to hand-pick corn.

in the program. It took a team effort to get those sites lined up and harvested in the fall, too. MnDOT snowplow driver Gene Munsterman, St. Peter, knocked on farmhouse doors last summer to see if farmers along sections of Highway 111 and Highway 19 would participate. They were hesitant about running combines in the spring to harvest a few rows of corn, and hand-picking those standing rows did not appeal to them.

That's when Gary Wyatt, University of Minnesota Extension educator, Mankato, got involved. He talked with FFA and 4-H clubs in the Gibbon-Fairfax-Winthrop and Nicollet school districts to see if students would be interested in hand-picking the corn that fall as community service projects. A few clubs agreed, and in turn, received donations of the harvest proceeds from the participating farmers.

"Our No. 1 goal is to have farmers plant shrub rows and leave them in for 10 to 15 years under CRP [Conservation Reserve Program]," Wyatt says.

"But with high land values and corn and soybean prices, not a lot of farmers are interested in doing that. So we talk about leaving corn rows."

Munsterman's efforts paid off, and three new farmers signed up for the program last year. One of the farmers donated all the proceeds from the standing corn rows to the GFW FFA Chapter. Four 4-H clubs also picked corn for farmers. Youth ended up picking 413 bushels at three different sites last fall.

"This is a great example of the rural community coming together and making a difference during the winter driving season," said Dan Gullickson, MnDOT living snow fence coordinator. "If those standing corn rows are not there, we would have had to remove 4- to 5-foot snow banks on roads with larger equipment such as blowers and dozers." To push back drifts along one drift-prone road without standing corn rows costs more than \$3,700, he adds.

Members of the Nicollet 4-H Club also picked corn and enjoyed the experience.

"We were looking for a community service project. Gary called and told us about the program, and we said yes," says Melody Weber, 4-H Club leader. The challenge was coordinating 4-H'er schedules to actually pick corn since most of the youth were busy working on their own family farms. They hand-picked corn a



PICKING CORN: Nicollet 4-H'er Angie Weber and other club members spent a few October days picking corn in a farmer's field that was enrolled in MnDOT's standing corn row program.



STURDY 'FENCE': MnDOT likes to see at least six rows of standing corn to provide a snow break at the edge of the field. However, depending on the area, a dozen rows are better.

half-mile long and six rows deep from a field on three different occasions last October. Each 4-H'er carried a 5-gallon pail and emptied it into the farmer's truck or wagon parked along the rows.

"The kids had fun and said they'd like to do it again," she says. "If someone in the county calls us, we'd like to help."

That stretch of standing corn did help hold back a lot of snow near the State Highway 111-County Road 5 intersection during most of the bitter winter. The last few storms in late season winter caused 6-foot drifts, she notes.

"It was pretty impressive," she says. "But the cornstalks were standing when the snow melted."

An added bonus for the Nicollet 4-H Club arrived in the spring, when the farmer donated money to the club for the members' harvesting work.

"We weren't doing this for the money," Weber adds. "We did it as a community service project."

Gullickson hopes more farmers participate.

"When they do, we get the benefit of snow control, FFA and 4-H members make a big difference in reducing our costs, and ultimately, everyone is helping people get safely to their destinations."

MnDOT has identified 3,700 sites of concern for drifting, so

there is a definite need for more farmer involvement. In a nutshell, MnDOT requires at least six rows of standing corn, which, with 30-inch-row corn planter spacing, figures to be 15 feet wide, Gullickson says.

"A typical standing corn row snow fence is about a quarter-mile long, or 1,320 feet. Based on the 1,320-foot length and 15-foot width, that figures out to be 0.45 acres, or just under a half-acre of standing corn rows to protect a quarter-mile of highway from blowing snow," he says.

In areas that are more wind-swept, leaving 12 rows of standing corn works better than six rows, because they do not fill up as readily with snow after repeated blowing snow events over the winter. They also do a better job of holding back the snowdrifts later in the winter season.

"When MnDOT purchases an acre of standing corn rows, we can provide a greater value of blowing and drifting snow control," Gullickson says.

To learn more about the standing corn row program, contact Gullickson at 651-366-3610. Or call your local MnDOT district office. Additional information about the program is at www.mndot.gov/environment/living_snowfence.



SERVING THE COMMUNITY: The Nicollet 4-H Club volunteered time to hand-pick corn and enjoyed the experience. Working in the field this day were, front row, Angie Weber (left), Clarissa Giefer, Clara Drummer, Heather Giefer and Eli Drummer. In the second row were Gene Munsterman with MnDOT (left), Melody Weber, Lorie Giefer, Karen Drummer and Diane Braun. Volunteers not pictured were Lynn Braun and Kendra Allen.