

Faribault County cover crop trials spark some permanent conversion



The Faribault County SWCD used a Clean Water Fund Cover Crop Demonstration Grants Initiative award to offer incentives for trying soil health practices. Cover crops emerged in one of the enrolled fields.
Photo Credit: Ann Wessel, BWSR

In Faribault County, 13 farmers incorporated 800 acres of cover crops into their corn-and-soybean operations for the first time with an incentive from a demonstration grant and technical support from soil and water conservation district staff.

A \$55-an-acre payment — available through a cover crop demonstration grant the Minnesota Board of Water and Soil Resources (BWSR) awarded to the Faribault County Soil & Water Conservation District (SWCD) — offset the risk of trying something new. The incentive targeted hilly, erosion-prone fields — mostly in the southeastern part of the county. Tim Perrizo used the incentive to pay for custom aerial cover crop seeding on the 70-acre field he enrolled.

In 2022, he planted cover crops on the entire 750 acres he farms — some of it on his own; 550 acres with assistance

from a three-year Environmental Quality Incentives Program (EQIP) sign-up through the USDA's Natural Resources Conservation Service (NRCS).

VIDEO: [Faribault County SWCD's work with farmers trying cover crops](#)

“ In the end, it’s about the soil and the profitability. I don’t have millions of dollars tied up in equipment and fuel to till the ground. ”

— Tim Perrizo, Faribault County farmer, on the benefits of cover crops



Increasing cover crop establishment and related tillage practices to encourage first-time experimenters and benefit water quality was the goal of BWSR's \$1 million, Clean Water Fund-backed 2020 Cover Crop Demonstration Grants Initiative. The Faribault County SWCD was one of five SWCDs to receive part of that grant.



Other recipients were the East Otter Tail, Stearns County, Root River and Traverse SWCDs. The SWCDs offered financial incentives, technical assistance and education.

“We’ve seen a lot of erosion in the springtime after snowmelt where there’s no living residue. We’re a corn-and-soybean county, and when the corn and soybeans aren’t growing, we do see a lot of erosion. Cover crops would be able to fix that issue,” said Faribault County SWCD Co-program Administrator Nathan Carr. “The clean water benefit of cover crops would be holding back phosphorus and nitrogen, stopping erosion from flowing into the water bodies.”



Carr

Because the COVID-19 pandemic suppressed its education and outreach efforts, the Faribault County SWCD received a one-year extension on the three-year grant that expired Dec. 31, 2022. From its own budget, the SWCD offered the additional year of incentive payments to producers who had signed on to the three-year trial. Nine agreed, enrolling 450 acres.

“We were asking for them to do multiple species of cover crops, and we were also asking for a change in practice. Most likely that’s a tillage practice — \$55 an acre should be (enough) to pay for someone to do custom strip-till,” Carr said of work related to the initial and extended incentive payments.

Perrizo was among those who signed on for a fourth year.

“I just liked what I was seeing,

and I was able to manage the planting. The yield of the crops remained the same. I can cut back on some herbicide in the spring by using the cover crop on my soybeans,” Perrizo said. “I was able to save money on herbicide.”

A third-generation farmer, Perrizo, 64, raises corn, soybeans and sweetcorn in Prescott Township with his son, Jaydan, and wife, Sue. He’d planted no-till soybeans for 20-plus years before trying cover crops. For the first couple of years, he fine-tuned cover-crop planting methods and chemical application.

Perrizo recalled standing in a waist-high winter rye cover crop that first year and wondering how the soybeans could grow through the mass. Three weeks after chemical termination, he said the beans were 8 inches tall and the field was weed-free.

“That’s just fantastic weed control, and the beans don’t mind coming up through green matter and the dying rye. They seem to thrive with that kind of a ground cover,” Perrizo said.

He expanded the practice to another 80 acres with support in 2020 and 2022 from a Minnesota Pollution Control Agency (MPCA) Environmental Protection Agency grant available through the Greater Blue Earth River Basin Alliance.

“I will continue to plant cover crops after the government money (ends). I’ve had enough years now, it’s showed me it does work and it’s worth every penny,” Perrizo said. “It’s proved to me that it’s economically feasible.”

On lighter soils, Perrizo said cover crops’ organic matter will help to improve soil health. On heavier ground where cover crops take up

excess moisture in the spring, he aims to improve drainage through less tillage.

In 2021, about 8,500 of the county’s roughly 400,000 acres of ag land were planted in cover crops. The SWCD supported about 5,000 acres of cover crop plantings through the BWSR grant, and through a series of grants available via the MPCA. NRCS assistance supported about 3,500 acres of cover crops.

Lee Nachreiner, a Waseca-based NRCS soil conservationist whose territory includes Faribault County, said EQIP assistance provides a bit of a safety net for farmers who consider the upfront costs of seed, custom planting and chemical termination — but can’t immediately quantify the soil-health benefits.



Nachreiner

“When cover crops improve yields, you don’t know how much your yields are going to be. You don’t know how long (soil health improvements) are going to take. There are enough benefits that you can’t put a dollar amount on. On the face of it, it’s a leap of faith, almost,” Nachreiner said. “But science and research does support cover crops’ long-term benefits.”

Producers who commit to a change in practice face additional considerations.

“Some of the obstacles of adopting soil health practices in Faribault County include the cost. A lot of producers already have their equipment, already have their equipment paid for. With soil health, changing of that tillage practice, buying something

to apply your own cover crops — the cost of that could be upwards of \$200,000,” Carr said. “To a farmer who is towards the end of their career, five to 10 years left, that is a hard investment to make.”

The Clean Water Fund grant’s incentive-based payment offset the cost of custom cover crop seeding or tillage so farmers could test the practice over three years on a smaller field before making that investment.

By extending the incentive for one more year, the SWCD achieved its goal of continuing cover crops on at least 50% of the land enrolled in the initial demonstration. The aim is to expand cover crops’ adoption — independently, with technical assistance from the SWCD, and with financial incentives.

Carr elaborated on the potential benefits to farmers.

“One is time. Some of the tillage practices take a lot of time, whereas if you’re going to no-till, you can harvest it and be done. That also saves fuel. Another benefit would be eventually inputs being able to go down,” Carr said. “If you’re recycling those nutrients with the cover crops, hopefully you wouldn’t have to put as much nitrogen, phosphorus, (and) potassium down.”

And, Nachreiner said, the applied fertilizer will be less likely to blow or wash away.

“Keeping your soil more protected from wind and water erosion is huge. Preventing soil erosion is not only keeping sediment out of our water bodies — (along with) the nutrients that are attached to those soil particles; it’s also helping you save on fertilizer,” Nachreiner said.