

KEVIN EISSES



At A Glance

Farmer Name: Kevin Eisses

Location: Innisfil, Simcoe County

Type of Operation: Dairy

BMP: Comparison of using an organic amendment (compost) and multi-species cover crops.

Soil Health Goals: To improve soil productivity from reduced tillage and organic amendment additions.

ONFARM COOPERATOR PROFILE

OVERVIEW

Kevin Eisses, a dairy and cash crop farmer at Hewitt Creek Farms Ltd. in Innisfil, is building on a family tradition of dedication to soil health.

Kevin's grandfather Albert began the family farm, and Kevin's father John and uncle Harry expanded it through the 1970s and 1980s.

In the late 1980s and early 1990s, when progressive farmers were starting to talk about no-till practices and conservation agriculture, John and Harry Eisses began no-tilling wheat into old hay fields. They used a John Shearer drill, which was an Australian hoe drill.

In the 1990s, shortly after graduating from the University of Guelph with a degree in agricultural business and returning to the family farm, Kevin became involved in the Innovative Farmers Association of Ontario (IFAO). Through that organization, he had the opportunity to learn from other farmers who saw the benefits from reduced tillage practices and were making adjustments to their equipment, Kevin says.

In the 1990s, the Eisses family "dabbled" in no-till corn using a three-coulter system.

In addition to the soil health benefits of minimum tillage, Kevin points to the benefits of forages in his rotation and the composted dairy manure applications.

After participating in an Environmental Farm Plan Workshop, Kevin purchased a compost turner in 2004, with the support of cost-share funding, to help fine tune his aerobic composting process. He blends two types of manure into his compost. In one dairy barn, he has a bed pack that contains a lot of straw. In his free-stall barn, he has a stable cleaner for the raw manure that has some sawdust in it.

It is a "gratifying process to see the raw manure break down into a very useable and beneficial product," he says. Thanks to test strips, Kevin saw how the crops responded to this organic amendment as the microbial processes improved the soil.

As Kevin has grown his farm operation, he has realized the amount of on-farm compost is insufficient to cover all his acres. So, for four or five years, he has also sourced municipal compost.

"We're trying to put that into the system along with cover crops to improve the soil on our farm. I think it is working," Kevin says.

He farms in partnership with Jeff Wohlgemuth of Ridgeview Farms Ltd.

What Is ONFARM?

The On-Farm Applied Research and Monitoring (ONFARM) project involves 25 sites across Ontario testing the effects of best management practices (BMPs) on soil health and agronomic indicators over three field seasons.

ONFARM Data Collection

- Investigators led by Don King, Principal and Research Agronomist at the Soil Resource Group (SRG)
- Soil health indicator tests: physical, chemical and biological measurements
- Other baseline soil data: horizons, texture, drainage class, structure characterization, and soil type
- Field landscape and soil degradation assessments, agronomic monitoring and best management practice (BMP) costing

THE PROJECT

In his ONFARM BMP trial, Kevin compares the use of an organic amendment (solid municipal green bin compost) and multi-species cover crops. The field site is a gently sloping rolling landscape on a sandy loam till soil.



Kevin purchased the farm involved in the ONFARM trial in 2019 shortly before the initiative began, and the soil on this farm wasn't built up in the same way as soil on other farms in his operation. So, Kevin sees the ONFARM trial as an opportunity to get "some harder data behind the practices (he's) been using and seeing success with," he says.

On Sept. 1, 2019, Kevin disc harrowed his ONFARM trial field to incorporate the municipal compost he applied. Then, on Sept. 15, 2019, he planted his winter barley. After harvest of the crop in 2020, Kevin applied his treatments:

- An untreated check (i.e. he did not apply an organic amendment or plant cover crops)
- Solid municipal green bin compost at 7 tons/acre
- A five-species cover crop mix of oats, radish, millet, barley and peas at 60 pounds/acre
- Solid municipal green bin compost at 7 tons/acre + a five-species cover crop mix of oats, radish, millet, barley and peas at 60 pounds/acre

All other field management practices remained consistent across the trial.

Understanding Field Research Terms

- **Treatment:** Refers to the single management practice that changes across a trial. In this case, for example, a treatment is solid municipal green bin compost.

The Benefits Of Participation

Kevin is grateful for his involvement in ONFARM. “It’s kind of gotten me back into the focus of improving our soils,” he says.

He is also participating in the Ontario Soil Network (OSN) in 2021 and notes the two initiatives overlap nicely. He will use his ONFARM trial as part of his OSN project.

Initiatives like ONFARM provide great partnership opportunities between farmers and government, Kevin says. He is eager to help tell the story of how farmers are making their soils more resilient.

NEXT STEPS

In 2021, Kevin will plant soybeans in his ONFARM trial site. He looks forward to collaborating with the Soil Resource Group (SRG) team to finalize how he will incorporate cover crops into his 2021 plans. Kevin will also collaborate with the SRG team to decide whether to apply more compost “to see if we can accelerate some of that soil improvement and get the microbial systems going again,” he says.

