

Ontario Soil and Crop Improvement Association Hosts Four Events Across Ontario to Share ONFARM Project Plans

November 20, 2020

Guelph, Ontario

OSCIA held four successful meet-and-greet events at ONFARM cooperator sites in September and October in eastern, central and southern Ontario. ONFARM cooperator farmers, project partners, government staff, and members of ONFARM's Technical Working Group (TWG) and Stakeholder Engagement Working Group (SEWG) attended. Events were held outdoors to allow for physical distancing. Staff from Guelph-based Soil Resource Group (SRG) provided demonstrations, which included soil core profiles, explanations of soil health measurements and cover crop mixes and benefits. There were excellent discussions, culminating in a lot of questions, answers and considerations on how to preserve and improve soil health and water quality on Ontario farms.

These events are an important and meaningful way to share project successes and challenges across Ontario and to connect farmers with scientists, academia and industry. Dr. Angela Straathof, soil scientist and Program Director at OSCIA remarked, "It was so rewarding to see people who have been contributing so much effort to getting the program off the ground come together. Especially hearing from the cooperator farmers themselves was so insightful. They are such knowledgeable, engaging ambassadors for the program". The four initial events were held at soil health best management practice (BMP) trial sites and future events are being planned for edge of field (EOF) cooperator sites and other soil health BMP trial sites as well.

The farmers involved in these events welcomed the opportunity to share their experiences, successes and challenges. Four farms with different BMP trials, soil types, farming practices, and field conditions were selected to host, which provided a wealth of information and comparisons for discussion. Guelph-based Soil Resource Group, who assisted in the selection of ONFARM sites at the inception of the program and are managing all the BMP field site investigations, provided information and demonstration at the events. Don King, Senior Agronomist with SRG, was glad to be part of the events and said, "Getting out to see some of the fields with the cooperator farmers, at a safe distance, has allowed for some valuable exchange of information. Being able to see the results of established BMP treatments, the differences in cover crop root growth and soil conditions within a field and talking with farmers about how they're making BMPs work has been a great start to the project."

Mike Belan is an ONFARM cooperator in Lambton County farming approximately 1000 acres. Mike hosted an ONFARM meet-and-greet in early October



Mike Belan explains how no-till has been used on his family's farms since 1991, and how cover crops are further improving soil health.

and stated, “Working with the OSCIA group has been a great experience. Setting up the field research test plots on farm was very easy and we were allowed the flexibility to make it work with our farm equipment so we were not inconvenienced at all. I feel that these collaborative efforts by farmers and researchers are what’s needed to help push soil health initiatives, and I am looking forward to the plot results.”

In Oxford County, ONFARM cooperator Gord Green hosted the fourth and final meet-and-greet. Gord was excited to host the event, saying, “The field day for the ONFARM field trial was a great networking experience. Everyone enjoyed the lively discussion.”

ONFARM is unique in its long-term, geographically differentiated, cross-commodity approach. By conducting BMP trials at 25 sites across the province, OSCIA and its partners want to identify soil health indicators and test the effectiveness of BMPs across a variety of soil types and parameters, in collaboration with livestock and crop farmers.



Attendees in Embro learn about the effects of organic amendments applied after planting an oat cover crop. Photo credit: Cameron Ogilvie

Eastern Ontario:

The BMP shown at this ONFARM site was a comparison of 3 different cover crop mixes with different termination management. The field site is rolling to flat with loam and silt loam soils and the soil health goals are to reduce tillage erosion, increase organic matter on hills and reduce compaction on flats.

2020: Spring wheat under no-till followed by cover crop mixes

2021: Corn under conventional tillage fall and spring followed by with and without cover crop

2022: Soybeans under no-till management

Central Ontario:

The BMP shown at this ONFARM site was a comparison of an 8-way cover crop mix after wheat to an organic amendment (horse manure) application and combination of both. The field site is a complex bottom slope area with soils varying from loam to fine sandy loam to clay loam and the soil health goals are to reduce water and tillage erosion and reduce compaction.

2020: Winter wheat under no-till followed by a cover crop and/or organic amendment

2021: Corn under no-till with and without interseeded cover crop

2022: Adzuki beans under no-till management

Lake Erie West:

The BMP shown at this ONFARM site was a comparison of 3 different cover crop mixes including a biostrip treatment and different termination management. The field site is flat on clay loam soils and the soil health goals are to improve nutrient availability and minimize compaction.

2020: Winter wheat under no-till followed by cover crop mixes

2021: Corn under no-till with interseeded cover crop

2022: Soybeans under no-till management



Lake Erie East:

The BMP shown at this ONFARM site was a comparison of organic amendment with liquid dairy manure and on-farm digestate without and with a cover crop. The field site is a rolling landscape with WASCoBs on a silt loam till soil and the soil health goals are to reduce water and tillage erosion and increase organic matter.

2020: Winter wheat under no-till followed by cover crop mixes

2021: Corn under strip tillage followed by 2 organic amendments without and with cover crop

2022: Soybeans under strip till management

Work is underway to verify and validate soil health indicators at cooperator sites, and data analysis will determine multi-year crop and economic effects of the selected BMPs. Furthermore, ONFARM will lay the groundwork for long-term demonstration farms to serve as outreach and education sites for Ontario's agricultural industry. For regular updates on the program, visit the ONFARM website at osciaresearch.org/Onfarm and follow @OntarioSoilCrop on Twitter.

The On-Farm Applied Research and Monitoring (ONFARM) program is a four-year, applied research initiative delivered by OSCIA on behalf of OMAFRA to support soil health and water quality research across farms in Ontario. This program is funded by the Canadian Agricultural Partnership, a federal-provincial-territorial initiative.

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