

# Canada-Ontario Lake Erie Action Plan - Ontario Cover Crop Action Plan

## Healthy Soil Lowers Erosion and Keeps Lake Erie Clean

### 2019 and Beyond

The mainstream adoption of cover crops on farms in Ontario and farmer-knowledge of the value of planting cover crops has increased since the establishment of the Ontario Cover Crop Strategy. This document provides the details of the Cover Crop Action Plan to facilitate the adoption of cover crops on Ontario farms.

Facilitating the adoption of cover crops on farms in Ontario is an important part of the Canada-Ontario Lake Erie Action Plan; Partnering on Achieving Phosphorus Loading Reductions to Lake Erie from Canadian Sources. Cover crops can play an important role in stabilizing soil during the non-growing season and help to reduce the risk of erosion and nutrient loss.

In 2016, when farmers were looking for ways to address the issue of phosphorus in Lake Erie, a collaboration of farm stakeholders, under the name the Ontario Cover Crop Steering Committee, came together to figure out a strategy to facilitate the adoption of cover crops on farms in Ontario. The strategy was called the Ontario Cover Crops Strategy

and focused on four key areas: Research, Policy and Programs, Communication, and Champions.

This document outlines the work that has been completed to encourage and facilitate the adoption of cover crops on farms in Ontario. Cover crops have been a tool that farmers have used for more than a hundred years. Recently, there has been a resurgence of interest in the value of cover crops by early-adopters. The Cover Crop Action Plan has been built upon the momentum that was occurring in the countryside for planting cover crops. The Cover Crop Steering Committee has worked collaboratively to create action in the following areas outlined in the Ontario Cover Crop Strategy and put in place permanent processes for continuing the momentum. Protecting the environment is an important part of Grain Farmers of Ontario's strategic plan. Leading the implementation of the Cover Crop Strategy was an important initiative to address the issue of phosphorus in Lake Erie in addition to the commitment to implement the 4R Nutrient Management program.

#### Ontario Cover Crop Steering Committee Members

Certified Crop Advisor Association (CCA), Conservation Authorities, Conservation Ontario, Ecological Farmers Association of Ontario (EFAO), Grain Farmers of Ontario, Innovative Farmers Association of Ontario (IFAO), Ontario Agri-Business Association (OABA), Ontario Federation of Agriculture (OFA), Ontario Fruit and Vegetable Growers Association (OFVGA), Ontario Soil and Crop Improvement Association (OSCIA), Soils at Guelph

**Committee Resource:** Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)

#### An Action Plan with momentum

The Cover Crops Action Plan has built within it evergreen activities that will renew interest in cover crops within its Steering Committee membership. The Cover Crops Steering Committee will meet periodically to check in on the progress of these activities within the Action Plan until cover crops become the mainstay.



ONTARIO COVER CROPS STRATEGY

## Covered Land Clean Water

# 1 Research

## 2 Policy and Programs

### 3 Communication

#### 4 Champions

## 1 Research on how different cover crop species fair on Ontario farms and best agronomic practices for planting cover crops

Access to current research is essential for farmers as they plan out their annual cropping strategy. The Cover Crop Steering Committee's Research pillar focuses on making sure that current credible research is available in a format that farmers can use by implementing the following:

### Actions included

- A Prioritizing the farmer's applied research needs that address the common challenges faced in cover crop adoption
- B The development of a baseline measurement tool to gather data, advocate for cover crop research funding that supports partnerships

By leveraging and optimizing the research prioritization processes that already existed within the Grain Farmers of Ontario structure as well as committee member organizations, the Cover Crop Research Sub-Committee ensured there was emphasis by all committee members to prioritize cover crop research. This research will be shared with farmers via the Midwest Cover Crop Decision Tool. Going forward, current and newly published research will be reviewed by the Ontario Cover Crop Steering Committee Research Sub-Committee to ensure that it remains relevant to Ontario farmers.

## 2 Policy and Programs that encourage farmers to plant cover crops

Public policy can play a key role in promoting cover crop adoption as part of a systems approach. Funding for technical assistance and research are an important pillar of the Cover Crop Strategy in order to encourage the adoption of cover crops on farm.

### Actions included

- A Informing policy makers and program staff about on-farm challenges
- B Working with government and other funders to ensure the design, administration and delivery of programs encourages farm participation and uses communication methods to reach a large number of farmers
- C Recommending that funding programs support farmers who already plant cover crops
- D Linking funding programs to on-farm data collection from program participants

The activities of the Cover Crop Steering Committee (including research, farmer feedback and program feedback) promoted a dialogue between farmers, government, and program delivery organizations on the value of public policy and programs that

support adoption of cover crops by farmers. Indicators from programs that have been delivered, such as federally and provincially funded programs and conservation authority rural/clean water programs are that cover crops are a very important BMP to reduce phosphorous (and other nutrients) runoff in the Lake Erie Basin. Some CAs (eg. Grand River and Kettle Creek CAs) deliver cover crop incentives through rural water/clean water programs. The Grand River CA offers these incentives through 5 municipal rural water quality programs. Uptake remains consistently high and the Grand River CA staff work with about 60 new producers each year. Continuation of cost-share programming for the implementation and adoption of ongoing cover crops with Conservation Authorities and the Ontario Soil and Crop Improvement Association to deliver these programs to farmers should continue as demand dictates. Agricorp has made changes to the farmer paid new forage seeding insurance plan to include more species. This program should continue as demand dictates as well.

### The Midwest Cover Crop Decision Tool

This is seen as a credible source for applied research and is widely used by farmers in Ontario. Farmers can tailor their search by location of their farm, soil type, and objective for planting a cover crop and gain a wide variety of useful information for planting various cover crops. This web-based tool is accessible to all farmers in Ontario and helps to assist farmers in selecting cover crops to include in-field crop and vegetable rotations. In addition to the applied research, this tool includes literature, research results from North America, and on-farm experience and practical knowledge.

Here is a link to the tool  
<http://mccc.msu.edu/covercroptool/covercroptool.php>



### 3 Communicating the value of cover crops and tips for successful cover crops

Communication is a key element to the mainstream adoption of cover crops by farmers and an important pillar of the Cover Crop Strategy. Communication priorities include the promotion of research, the value of cover crops to farmers, and the need for farmers to do their part to protect the Great Lakes from the potential for off-farm phosphorus movement.

#### Actions included

- A Developing a communication strategy with consistent messaging, that involves all Steering Committee partners, with outreach to their farmer membership and beyond
- B Creating a web portal independent of any one organization as a one-stop place for good, reliable information on cover crops in Ontario
- C Creating a strategy for outreach activities

The Cover Crop Communications Strategy includes the creation and promotion of videos showing farmers talking to other farmers about the importance of planting cover crops to address the phosphorus issue in Lake Erie; an evergreen editorial schedule for communications to farmers was established putting an emphasis on March and August as key dates to communicate to farmers as they can be making key cropping decisions at those times of year; and cover crop information sharing by experts and peers was delivered through a variety of forums during the farm show season at farmer focused education events (such as the South West Ag Conference) and during on-farm demonstrations in the summer months at local farm meetings (including Ontario Soil and Crop workshops). Grain Farmers of Ontario

delivered a webinar on cover crops and the Certified Crop Advisor Association delivered a conference on soil and water.



Photo courtesy Xueming Yang, AAFC.

### 4 Farmer Champions to promote and share cover crop best practices peer-to-peer

There is strong evidence that the best way to get farmers to try new innovations is for them to get information from their peers. The Cover Crop Steering Committee put a special emphasis on peer-to-peer communications by establishing a Champions pillar.

#### Actions included

- A Source funding support for champions to cover expenses incurred in promoting cover crop adoption
- B Support funding for the Ontario Soil Network initiative to continue
- C Having downloadable presentation and event templates available on the web portal for use by speakers and champions

The Ontario Soil Network, a member of the Cover Crop Steering Committee, has an established Champions program that supports peer-to-peer sharing of best management practices and a historical commitment to education on the adoption of cover crops.

The Cover Crops Steering Committee members provided support for the Ontario Soil Network in Ontario by supporting an application to the Canadian Agriculture Partnership for the expansion of the services provided by the network. Partnership funding was granted, and the expansion of the network will mean a focused implementation of efforts on the key components already defined in the Ontario

Cover Crop Strategy and ultimately drive greater interest in cover crops in Ontario with all frontline stakeholders including: farmers, land owners, agronomists and extension staff, and agri-retailers.

Check out the network's website to see what peer-to-peer activities these Cover Crop Champions are delivering  
<https://www.ontariosoil.net/>

