“Keeping in Real in Ag” — Mark and Sandi Brock

FarmSmart

What did you miss?

Huron Soil & Crop making big plans for Huronview site

+ OMAFRA Crop Talk | OSCIA News | County Updates
Upcoming events

March 27: Perth Production Meeting & Heartland Spring Meeting. Elma Memorial Community Centre, Atwood. 10 a.m. to 3 p.m. More information and RSVP at heartlandsoilcrop.org

March 27, 28: Drayton Farm Show, Drayton PMD Arena Complex www.draytonkinsmen.ca/

April 4: Huron Soil & Crop presents “Before the Plate” at the Cowbell Brewery, Blyth. See info on p. 4 or visit heartlandsoilcrop.org

April 3,4: Canadian Dairy XPO: Stratford Rotary Complex, http://dairyxpo.ca/

Soil test discount

Valid for current OSCIA members only until December 31, 2019

Discount applies to regular priced fees only, on applicable tests and services listed. Not available in conjunction with other discounts or programs, retailers/consultants may offer other discounts. Discount applicable to all samples received on a single submission. No cash value. This coupon must be submitted with samples and grower/field information. Contact heartland.scia@gmail.com or call 519-669-5608 to receive a personalized coupon

10% off soil analysis (not including non-soil samples such as manure, feed, tissue etc) producer submitted samples only

10% off complete soil analysis package, including basic plus micronutrient analyses (SIB + S7) producer submitted samples only

10% off all soil analysis packages

10% off all agricultural services
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From the editor

Well, it seems like winter will never end, but spring will be here before we know it and #plant19 will be in full swing. But, there are a few more events to participate in before then, including Perth’s production day, this year held in conjunction with the Heartland Spring Meeting, and Huron’s showing of the documentary “Before the Plate”. Visit our website, heartlandsoilcrop.org to find out more about these and other events happening in #OntAg.

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Heartland Region Update

The Heartland board of directors met for their AGM in January, and discussed the business of 2018 and made plans for 2019. Thank you to directors Horst Bohner (OMAFRA), Doug Walker and Gord Mitchell (Huron), Ed Siefried, Laurence Helmuth and Stuart Wright (Wellington), Darcy Weber and Jeff Strenske (Waterloo) and Kaye McLagan and John Poel (Perth) for representing their local associations at the regional level.

John Poel was elected as president of the Region, with Kaye McLagan as vice-president. Stuart Wright will continue to represent Heartland as director to Ontario Soil and Crop Improvement Association.

At the meeting, the board discussed the highlights from 2018 which included a successful spring meeting hosted by Huron Soil and Crop in Brodhagen in March and many outstanding county events. Heartland was awarded a 3-year Tier 2 grant from OSCIA, “Maximizing Cereal Rye Cover Crop Management for Multiple Benefits”. We are also cooperating with Northumberland on their project “Making Relay Cropping Pay” and the Thames Valley Region’s project “Roots Not Iron 2”.

Heartland Region is very proud to have Stuart Wright represent us on the OSCIA board as 1st vice-president for 2019. Stuart will be hosting the 2019 OSCIA Summer Meeting in Heartland Region August 18-20. Heartland Region was pleased to sponsor the Summer Meeting with a financial contribution.

News from the counties

Before the Plate at the Cowbell Brewery

Join us for an evening to celebrate and learn about one of the most important components of our daily home food. We are offering a screening of the new documentary, Before the Plate, and an opportunity to network with individuals involved in many areas of food production.

The documentary, featuring Jeff Horne, executive chef at Canoe restaurant in Toronto, aims to bridge the gap between the modern consumer and production agriculture. It features a farm to table account of where and how Ontario food is grown, the people who grow it, and how it reaches our plate.

Among attendees will be producers, food processors, restaurant owners, and consumers with an interest in food!

The event will be held in a private room at the Cowbell Brewing Co. in Brantford, Ontario on Thursday, April 4th from 6 pm – 9 pm. Appetizers will be served and each ticket will receive one complimentary alcoholic beverage.

Heartland provincial director Stuart Wright presented Wellington County past president Carl Israel with a certificate at the Wellington AGM in November to honour his long-standing commitment to Wellington SCIA.
Menacing Mollusks: Slugs and Integrated Pest Management by Mary Feldskov

While there are many benefits to planting no-till, one of the challenges that farmers may face is yield loss due to slugs, which can thrive in heavy residue and moist conditions.

Slugs can damage virtually any crop — soybeans, canola, corn, alfalfa — and can cause crop damage in the spring as juveniles, and again in the fall as adults. They lay their eggs in the fall and can survive over winter. One slug can lay 500 eggs, which means that the problem can intensify quickly.

“The problem can go from seemingly nothing, to something serious very quickly,” says John Tooker, associate professor of entomology at Penn State University, a speaker at the FarmSmart conference in Guelph in January.

Tooker says that there are few options to deal with slugs. The chemical application Metaldehyde is available in the US but banned in Canada — but it has limited effectiveness and is expensive. “It’s just another thing to swear at,” he jokes. “More people swear at it than by it.”

He says a beer and salt concoction may work in a back-yard garden, but isn’t feasible in large-scale agriculture and nitrogen applications will just burn your crop.

Some farmers in Pennsylvania, where slugs affect yields in 20 percent of no-till acreage, have resorted to tillage to combat the problem.

But the best way to manage slugs, according to Tooker, is an Integrated Pest Management (IPM) plan.

Tooker says that it’s important to know exactly what pests you’re dealing with on your farm, and to respond accordingly. “Not scouting your fields is like driving blind. You have to know what’s there.”

Slugs are a mollusk — not an insect — which means that traditional insecticides won’t kill them, and if used indiscriminately may, in fact, make the problem worse. That’s because insecticides kill predators that can help control a slug infestation naturally.

For example, “ground beetles are the lions of no-till fields,” says Tooker. In addition to eating slugs, they can help control black cutworm, true army worm, stalk borer and wireworm.

Tooker’s research has shown that as the predator population goes up, slug feeding damage goes down — and with higher insecticide application rates, more slugs are often the result.

“The more predation, the better.”

“Insecticides are a valuable tool,” he says, but advises using them only when necessary and when it makes economic sense rather than “using them blindly.”

Cover crops have also shown to be beneficial to controlling slugs. Lucas Criswell, a farmer from Union County, PA turned to interseeding cereal rye into his soybean and corn crops, with dramatic results.

“A clean field provides one food source — the crop,” says Tooker. In Criswell’s trial, the rolled rye cover crop was a preferred source of food for the slugs, and provided a habitat for predators.

“Where we had rye between the rows, we cut damage from slugs by half, and increased the ground beetle population by three times,” says Tooker, “while also providing the benefits of weed control, conserving moisture and decreasing input costs, without sacrificing yield.”

The bottom line, says Tooker, is that there is value in knowing what is happening in your field and building an IPM plan to address the issues based on what you find. “You need boots on the ground, you can’t plant and forget about it.”
Innovative drainage project receives federal-provincial funding to move ahead

Funding from the Canadian Agricultural Partnership (the Partnership) will support an innovative project to demonstrate and monitor contoured drainage on a field at the Huron County demonstration farm near Clinton.

Technology is opening new opportunities for farm drainage that could improve both yields and water quality. Control gates manage water levels in field tiles, effectively ‘shutting off’ drainage systems when they aren’t needed and sub-irrigating a crop. While they’ve been tried on flat fields in Ontario, this Huron County field will be first in the province to try controlling drainage on a slope. The trick is to run tile laterals on precise contours with a 0.1% grade to allow the control gates to work.

“Through the Canadian Agricultural Partnership we are investing in on-farm solutions for soil and environmental sustainability,” said Lawrence MacAulay, Minister of Agriculture and Agri-Food. “This collaborative, in-field, innovative approach will enhance water management and environmental practices for farmers and help keep the sector on the cutting edge of sustainable growth.”

“We’re working with farmers and others in our agricultural sector to keep improving nutrient and water management and other practices to benefit both productivity and the environment,” said Ernie Hardeman, Ontario’s Minister of Agriculture, Food and Rural Affairs. “Not only will this project help agriculture become more competitive and sustainable, but it also supports our made-in-Ontario environmental plan.”

Huron County Soil and Crop Improvement Association (HSCIA), in partnership with Huron County, Ausable Bayfield Conservation Authority (ABCA), and two landowners are installing a side-by-side comparison of two contoured systems in June 2019. The contoured and controlled drainage system will be compared with a conventional pattern-tiled field with a contoured terrace to control surface erosion, and a third field area which will remain untiled. ABCA will be monitoring the surface and sub-surface flow and water quality, while Huron Soil and Crop will compare yields across the various systems.

“Traditionally, only gently sloped fields benefited from controlled drainage and sub-irrigation,” said Jeremy Meiners of AGREM, the Illinois-based drainage design company that made the plans for the site behind Huronview. “But our designs reduce erosion while improving yield on sloping ground, and that should work well in Huron County.”

“The Huron Soil and Crop Improvement Association would like to thank the Canadian Agricultural Partnership for supporting this innovative research and recognizing the yield and water quality benefits that are possible by studying and sharing methods of in-field water management,” said Doug Walker, President of the Huron Soil and Crop Improvement Association.

“Huron Soil and Crop is pleased to work with industry partners to introduce innovative approaches to managing water including controlled drainage on a slope.”

The combined resources and expertise of this group of partners will help to create new possibilities for new approaches, according to Walker. “The study of contoured drainage at the Huron County Demonstration Farm can help to demonstrate how contoured drainage strategies could work to better manage water on fields in this part of Ontario,” he said. This study can help producers know how to better manage water on the field to store water at the right times and the right places, Walker said. “We have the potential to learn a great deal about in-field water management and yields and water quality by comparing contoured and controlled systems with conventional pattern-tiled systems,” he said.

The field is located behind Huronview and the Huron County Health Unit and has long been owned by the County of Huron. It is currently being rented to Huron County Soil and Crop Improvement Association, a volunteer board of directors whose mandate is to develop and communicate innovative and environmental farming practices.

“The Huron County Demonstration Farm field at Huronview builds on Huron County’s efforts to support our vital agricultural industry while protecting water quality, wetlands and woodlands,” said Jim Ginn, Mayor of Central Huron and Huron County Warden. “Huron County Council is proud to partner with HSCIA, ABCA, the drainage industry and others to host this innovative project.”

The project is being funded by the Huron County Clean Water Project, Huron County Soil and Crop Improvement Association, the Land Improvement Contractors of Ontario and the Ausable Bayfield Conservation Authority. This project is also funded in part through the Partnership, a federal-provincial-territorial initiative. The Agricultural Adaptation Council assists in the delivery of the Partnership in Ontario. The project will receive up to $181,593 in funding through the Partnership.

Farmers, drainage contractors and the public are welcome to attend a demonstration day, which will be held during installation in June 2019.
Conservation Corner

Have a look at GRCA’s gully mapping tool

The Grand River Conservation Authority’s on-line mapping tool has some interesting information and mapping products for producers in the Nith, Conestogo and Canagagigue Creek watersheds in Waterloo, Wellington and Perth Counties. The SPI potential gully layer makes it easier to visualize the direction of surface water flow over several fields, and can help you calculate the acreage upstream of a certain point. This becomes useful in the design of erosion control structures. The lines were created by using a digital elevation model of the landscape.

To find the SPI layer, follow this link: https://www.grandriver.ca/en/Planning-Development/Map-Your-Property.aspx

Feel free to contact the Conservation Services team at GRCA for further assistance in using this mapping tool.

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Canadian Agricultural Program - Upcoming cost-share opportunities

The next application intake date has been announced for the Canadian Agricultural Partnership.

Applications will be accepted from March 22, 2019, until May 6, 2019, 5:00pm (EST). The program covers over 40 different project categories. In preparation for the upcoming intake, a listing of project categories, cost-share percentages and cost-share caps has been released and can be accessed on OSCIA’s website at www.ontariosoilcrop.org.

Full program details will be released on March 22, 2019, in the online program guide at www.ontarioprogramguides.net.

LEADS program

For those in the Lake Erie or Lake St. Claire watersheds, the LEADS program will also begin accepting applications on March 22, 2019. The LEADS program is a continuous intake and will remain open until funds are fully allocated. A listing of categories can also be found at www.ontariosoilcrop.org, and full program details will be released March 22, 2019, at www.ontarioprogramguides.net.

If you have questions about the Partnership program, email CAP@ontariosoilcrop.org. For questions on the LEADS program, email LEADS@ontariosoilcrop.org.
By Andy Bader.  
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Keeping it Real in Ag.  
That was the title of the topic for guest speakers Mark and Sandi Brock, of Shepherd Creek Farms Ltd. in West Perth, that concluded the annual meeting of the Perth County Soil & Crop Improvement Association Thursday, Jan. 17 at the Mitchell & District Community Centre.

However, the pair ignored the title and led the approximately 110 members in attendance on an interesting, informative and inspirational peek into their busy lives; lives that are deeply connected to agriculture.

“Like true farmers, we were given the topic but we’re not paying attention to it,” Mark said at the outset.

Mark and Sandi have been married 20 years and live, with their children Jack, 18, and Jessica, 16, on their 1700-acre cash crop and sheep farm outside Staffa. Mark just finished three years as chairman of the Grain Farmers of Ontario (GFO), a committee he served for nine years, travelling for meetings between 120-160 days a year, he guesses, wearing out three suits, three pairs of dress shoes and two suitcases in the process. Sandi, meanwhile, looks after the 500 commercial ewe flock (“when they’re not dying on me,” she joked repeatedly, usually from what Mark called SBI – Something Bad Inside); is active on social media and creates and produces “Sheepishly Me” vlogs on YouTube. She’s also a director with the Sheep Farmers of Ontario.

Both are fiercely independent yet equal partners on the farm and have, according to Mark, “created our own industry identity.

“At the end of the day we have the utmost respect for each other and trust each other,” he said.

“He likes to take care of the dirt and the plants,” she added, “I like to feed it.”

The Brocks are asked many times if their kids are interested in one day carrying on the farm, and they admitted they don’t know what the future holds. Jack currently attends Fanshawe College for electrical engineering and that in itself was a difficult decision as his parents wondered if he felt pressure to join the farm business in some capacity, while Jessica, a Grade 11 student at Mitchell District High School (MDHS), is still trying to decide what path to take once she graduates.

“Our kids might likely come back to the farm, we don’t know that, but I think farming is going to look different,” Sandi said. “We’ve learned that our dream can’t be their dream. Our dream has to end at us.”

Mark said he’s often asked, as other farmers are wont to do, about yield.

“It’s hard not to focus on yield…it’s such a large part of the economic equation,” he said, admitting they focus on return on investment and encourages a little experimentation and trying new things, saying it’s okay to fail – but on a small scale.

“As farmers we’re really good at growing stuff, or raising things, but I find we’re missing out on the business side of agriculture,” he added.

Sandi is active on YouTube with her video blogs, or vlogs, about the sheep merely to educate. Since YouTube is owned by Google, anytime anyone conducts a Google search, she hopes her fun, educational videos pop up “instead of those that want to put us out of business.

“The more authentic, the more we bring people along for the whole entire journey, the better,” she said.

His commitment with the GFO complete, Mark’s final meeting locally as a Perth director is Feb. 11.

“I wouldn’t have done it if I wasn’t asked,” he said, adding it’s important to get involved and to thank all those who do volunteer for anything because it makes a difference and so often goes underappreciated.

“Never underestimate the good that you’re doing in your own communities,” Sandi added.

Politically, Mark admits, things at the board level can be frustrating “but we’re pretty lucky to be in Canada.

“I absolutely love farming,” he continued. “I could not think of something else to do. We’re challenged by the grass is always greener, because there’s opportunities to do stuff elsewhere….but I’m always happy to be home and to drive up the laneway.”

Mark was recently awarded a Nuffield Canada scholarship, a two-year process which will allow him to travel around the world for 10 weeks, six weeks continuously, that he plans to use to open doors to other like-minded individuals in other countries.

“It’s going to be a great way to learn from other people,” he added, hoping that Sandi will be able to travel on occasion as well.

“The ability of not forcing your partner to not fall in love with what you love to do has been why we’re successful,” Sandi said. “Independence is still very important on a farm for that happiness and we’re both very happy in what we do.”
Message from the President – Les Nichols

I would like to thank the OSCIA membership for the honour to serve as your president for 2019. This is the 80th year of existence for OSCIA and the organization still remains very close to its original mandate – “Facilitate responsible economic management of soil, water, air and crops through development and communication of innovative farming practices”. Our membership continues to be leaders in development and adaptation of leading-edge soil health and cropping practices. I also believe that OSCIA is unique in that although it is usually perceived as a “crop” organization, in reality it is very much a “crop and livestock” organization that values the inter-relationship between the crop and livestock sectors especially in relation to crop production.

In response to member resolutions at past annual conferences, requesting the board to investigate alternate or more central/eastern locations for our annual conference, the 2019 OSCIA annual conference was held in early February in historic Kingston. The facility was very suitable and hotel staff were very friendly and accommodating. The attendance was strong, and feedback was positive. As well as a change in venue we elected to make some changes to our typical conference format. These changes included beginning the conference at 8:15AM on Tuesday and finishing in the early afternoon on Wednesday. This meant moving the ceremony portion to the Tuesday reception dinner rather than holding a Wednesday banquet. We hope those who were able to attend the 2019 annual conference found these changes to be positive.

Delegates of the annual conference also had a unique opportunity to take part in an engaging skills development workshop led by renowned mental health researcher Dr. Andria Jones-Bitton from the University of Guelph. Her presentation was titled Mental Health in Canadian Farmers: cultivating wellness for a stronger future. “Helplessness and hopelessness set the stage for mental health issues,” said Dr. Jones-Bitton. Overcoming these feelings requires resilience, and delegates were assured that resilience is a skill that can be learned. “It’s up to us, and it’s going to take some work.” Dr. Jones-Bitton’s presentation and a copy of the handout materials are now posted on our website:


The Lamplighter Inn in London is booked for the 2020 annual conference in early February of 2020. The Board will continue to investigate and assess suitable alternate venues.

OSCIA is very pleased with the recent announcement of a Canadian Agricultural Partnership (CAP) funding intake from March 22 to May 6 and for those in Lake Erie watershed a LEADS intake opens on March 22. I would encourage all members to check the OSCIA website on a regular basis for updates on these programs and other potential new opportunities.

As “Plant 2019” is quickly approaching I would like to wish you all a safe and productive planting season. I know the local and regional Soil and Crop groups from across the province are working on plans for numerous field days, demo plots, bus tours, and other events. I strongly encourage you to attend these events and take a neighbour with you. These are always great learning opportunities as well as providing a little social time with neighbours, friends and local ag-business personal.

Les Nichols, OSCIA 2019 President
OSCIA, founded in 1939, is a unique not-for-profit grassroots farm organization, comprised of more than 50 local associations and a membership of over 4,000 producers that reflects all major sectors. OSCIA is farmers actively seeking, testing and adopting optimal farm production and stewardship practices. Our number one applied research priority is soil health.

OSCIA Soil Health Graduate Scholarship

Established in 2014 in partnership with the University of Guelph, OSCIA is proud to present an annual Soil Health Graduate Scholarship to a deserving student.

This scholarship is in the amount of $10,000 and is to be used towards research focusing on soil health. The recipient is selected by the University of Guelph and is presented their scholarship at an evening awards ceremony. OSCIA has had the pleasure of sending a representative to these ceremonies, in order to present the scholarship to the various recipients over the last several years.

Each year we invite the previous year’s winner to present their initial findings at the OSCIA annual conference. As well, we invite the newly awarded recipient to the annual conference, to be introduced and welcomed to OSCIA.

The 2018 OSCIA Soil Health Graduate Scholarship was awarded to Hannagala Jeewan Kumara.

Jeewan’s research will focus on the formation of recalcitrant soil organic matter which is the largest terrestrial carbon pool. In the coming three years he will be looking specifically at the role of soil microorganisms in forming recalcitrant soil organic matter. The knowledge he hopes to gain will be very important in planning sustainable agricultural production strategies.

Previous scholarship winners include:

2015 – Jaclyn Clark
2016 – Jordan Graham
2017 – Pedro Ferrari MacHado

Written by Amber Van De Peer, Executive Assistant
The Soil Champion is an annual award that recognizes strong advocates of sustainable soil management. Individuals from one of two general groups can be nominated:

1) Those engaged in practical agriculture in developing, using and promoting management that contributes to the sustainable productivity of the soil; or,

2) Research or extension professionals whose work demonstrates a commitment to advancing soil health and productive sustainability.

This year OSCIA is proud to announce two very worthy Soil Champions, a Middlesex County farmer and a long-time provincial government soil specialist. This is the first year a winner has been selected in both eligible categories.

Jim Denys farms in Middlesex County, producing pork in a farrow to finish system and cash cropping mainly corn, wheat and soybeans. Today, the Denys family is focused on building soil structure and organic matter through the use of cover crops and strip tilling.

Anne Verhallen, Soil Management Specialist for Horticulture Crops, OMAFRA, first joined the ministry in the late 1980s and is a long-time advocate for soil health. She played a key role in launching the popular Southwest Ag Conference (SWAC) and more recently helped get the “Soil Your Undies” campaign off the ground as part of her extension work and ongoing efforts to help people visualize soil.

You can find the full story, along with others on the OSCIA website: https://www.ontariosoilcrop.org/news/

Written by Amber Van De Peer along with excerpts from Press Release ‘Ontario Farmer and Soil Extension Specialist Honoured as 2019 Soil Champions’

If we consider a cover crop as anything that covers the soil to make it green versus bare dirt, we can almost consider all plants as having the capability of being utilized as a cover crop. Cover crops are being utilized deliberately and proactively as a mainstream better management practice across Ontario by farmers who recognize the agronomic benefits and the province supports this. Even with cost-sharing opportunities, many producers still find themselves at odds with one common concern: how do you quantify and capture a return on investment from investing in cover crops? After listening to Chris Martin from Marhaven Agri Inc. speak recently at the 2019 OSCIA annual conference in Kingston, it really laid some considerations on the table on what we consider a cover crop and avenues of revenue for innovative integration of cover crops into a cash crop rotation.

Martin is a member of the Ontario Forage Council (OFC) and has been farming with his family in Alma for several generations. What sparked my own interest in his presentation was the idea that a cover crop could produce a direct revenue stream, not just an anecdotal agronomic benefit or observation of an enhanced return on the “cash” crop that follows. The cover crop species of choice for Martin is…timothy (Phleum pratense). Why timothy you ask? I wondered the same. The answer, according to Martin, is marketability. He suggests we consider the difference between swamp forage and high-quality forage and the opportunities for each as livestock feed. Readily available nutritionally complete baled timothy forage has very hungry markets in the southern US and among the United Arab Emirates who seek the highest quality grass forages for their horses, camels, and other livestock, but due to desert like growing conditions are unable to produce the high-quality feed themselves.

Martin agrees that wheat after soybeans suits fine in a rotation and is also an excellent cover crop option; however, his recent field trial showed that when timothy replaced wheat in rotation followed by soybeans in a double crop placement, timothy beat out wheat. This slender grass noticeably fattened up Martin’s revenue stream on June 11, 2018 when he harvested 5,700 lb. of solid stand dry timothy hay. As soon as the bales were removed from the field he no-tilled solid stand soybeans into the stubble and on October 12 harvested 55-bushel soybeans. Let’s look at the math. I encourage everyone to do their own fertility analysis and ROI on crop, assuming market value during this time period and according to Martin’s presentation, there was $684 per acre of premium high-quality timothy hay produced and $660 per acre of soybean production from one field. Why is this important? Many farmers in Ontario still...
stick with continuous soybean production because the ground conditions are not suitable early enough to plant corn, therefore, including timothy in this rotation not only adds winter vegetation to the system which keeps the soil covered but it also appears to offer a financial return that can be achieved right before you plant your spring cash crop. I don’t know about you, but cash on hand leading into planting a cash crop is an attractive feature for a cover crop in a rotation.

Martin admits there are challenges to producing a hay crop that brings $12 per ton, and intensive management and fertility is still important. Getting the soybeans into the ground can be challenging even in a dry spring within the critical window of time, and you will require good storage with a market that is willing to pay a premium for forage. Martin’s operation goes as far as to store all quality forage bales out of direct sunlight to avoid bleaching and possible loss of quality. Even with these challenges Martin’s slender timothy grass seems to be making it in a big way abroad, suggesting that the right kind of savvy grower who identifies and knows his target market and manages his operation intensively and proactively can reach premium returns on investment for their efforts to provide for these diverse niche markets. The suggestion I have is that growers try something new every year and perhaps this is it. Think outside of the box. What is a cover crop? What is a cash crop? Have you considered timothy lately?

Written by Matt Porter, East Central Region

Don Hill Legacy Award Announcement

Ruth and Marilee Hill introduced the Don Hill Legacy Award last month at the OSCIA annual conference. This annual award will recognize an individual farm business who demonstrates innovation and ingenuity to effectively address an environmental risk associated with soil, water, air or biodiversity on their farm. On-line entries will be received throughout the year up to December 1, when the winning entry will be selected. The winner will receive their $1,000 prize at the annual conference in February.

More details on the award as well as the entry form has been added to our website and is available at: https://www.ontariosoilcrop.org/association/don-hill-legacy-award/

This is an initiative coordinated by OSCIA and generously funded by Ruth Hill and family. We wish to thank the Community Foundation Grey Bruce and the Rural Institute of Ontario for their expert guidance and assistance which was essential in establishing the Legacy Award.

Don’s passion towards the EFP was widely known and admired. To him, the process was all about farmers sharing their experiences in support of continuous learning and discovering best management practices. He took real satisfaction in finding simple and creative solutions to environmental challenges faced on the farm. Don’s passion lives on through the Legacy Award that bears his name.

Written by Andrew Graham, OSCIA Executive Director

Crop Advances – On-going Research Resources

Looking for applied research reports? Go straight to Crop Advances on the OSCIA website. Crop Advances is compiled annually by OMAFRA field crop specialists in partnership with OSCIA, industry and academics to inform readers of new technologies, results of field trials and research. It’s only available on our website and it’s the best place to find information on field crop agriculture. The reports are categorized into one of six categories (canola, cereal, corn, forage, soybeans and soil) and are presented in pdf format. All reports are conveniently organized by year, some going back to 2003. There is also a section on events that gives readers an overview of accomplishments achieved at FarmSmart, SWAC and similar activities.

Find Crop Advances under “Research and Resources” at: https://www.ontariosoilcrop.org/research-resources/crop-advances/
To Clean or Not to Clean? Managing DON in Grain Corn

Ben Rosser, Corn Specialist and James Dyck, Engineer-Field Crop Conditioning & Environment, OMAFRA

A number of growers cleaned harvested corn this fall in efforts to reduce DON. Whether it is on the combine or at the bins, the general message is to remove as much fines or cob as possible as these harbor the highest levels of DON. Cleaning reports were variable however; some reported good luck in reducing DON, while others reported little or no change.

What Has Past Research Demonstrated for Grain Cleaning?

Some corn cleaning research was conducted by Dr. Art Schaafsma, Field Crop Pest Management Professor at University of Guelph, Ridgetown Campus in the early 2000’s. Using a gravity table cleaner, which separates grain by density, Dr. Schaafsma investigated how DON levels change for various corn density fractions (Figure 1).

**Figure 1.** Percentage of precleaned grain mass (Mass (%)), percentage of total DON (DON (%)) in precleaned grain mass and DON concentration (DON (ppm)) in five density fractions from gravity table cleaner, where C represents original precleaned grain mass and F represents fines and broken materials (figure and description from Schaafsma et al, 2004)
DON concentrations increased as density decreased. The highest levels were in the fines and broken materials at over 15 ppm (F) compared to 2.7 ppm for the precleaned corn (C) (Figure 1). The heaviest corn fraction (79.2 kg/hL) had about 40% of the DON concentration, but 70% of the weight of the precleaned grain. This supports the notion that removing fines or lighter corn should also remove higher DON portions of the grain.

2018 On-Farm Grain Cleaning Trials
Dr. Schaafsma's research separated corn by density, but most on-farm grain cleaning is separating corn by size. In 2018 we conducted a couple trials to see what on-farm cleaning does for reducing DON.

We investigated both a rotary screen with aspirator (Figure 2) and a perforated auger type cleaner (Figure 3). We replicated four one-tonne lots of corn for each cleaner. To ensure our grain samples are representative of each lot, we sampled the precleaned corn, cleaned corn and screenings streams every 10 seconds as they entered or exited the cleaner. To ensure lab analysis subsamples are representative of the grain samples, each grain sample was fully ground and well mixed (in some occasions split once before grinding).

![Figure 2. Rotary screen with aspirator.](image)

![Figure 3. Perforated auger grain cleaner (perforations in inset image).](image)

Cleaning Trial Results
Both trials involved corn that was relatively high testing for DON (Table 1), with screenings testing much higher than precleaned corn. Weight of screenings removed varied. While this may have been influenced by differences in cleaners, the precleaned corn used in the rotary screen trial was from the core of a grain bin and much higher than normal for fines. Reductions in DON ranged 0.5 to 2.0 ppm, which for these samples was not enough to improve marketability.

<table>
<thead>
<tr>
<th>Trial</th>
<th>Precleaned DON (ppm)</th>
<th>Screenings DON (ppm)</th>
<th>Screenings (% of precleaned weight)</th>
<th>Clean DON (ppm)</th>
<th>Expected* Clean DON (ppm)</th>
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<tr>
<td>Rotary Screen</td>
<td>9.7</td>
<td>18</td>
<td>7.5%</td>
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<td>Perforated Auger</td>
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<td>55</td>
<td>2.5%</td>
<td>21.9</td>
<td>23.4</td>
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</table>

* expected calculated by mass balance from DON in precleaned and screenings

Table 1. DON levels for precleaned, screenings and clean corn streams, as well as screening weights, and expected DON levels for rotary screen and perforated auger cleaning trials.

Why Didn't We See Greater DON Reductions for Cleaning?
In these trials, cleaning by size did a good job of removing fines, broken and very small kernels and cob. While these screenings have much greater DON concentrations than the grain, they were generally a small percentage of the total mass so overall reductions tended to be small. This was evident in Dr. Schaafsma’s earlier work as well (Figure 1).

There were also visibly infected kernels that were too large to be screened out that remained in the clean stream. These appear as what otherwise would have been normal sized kernels, but were off-colour, visibly infected, under-filled and lighter weight.
How Much DON Reduction Should We Expect?
We were disappointed DON levels did not drop more, but these results align with the laws of mass balance where the amount of DON remaining in the clean corn is the difference of the initial amount of DON less DON removed in the screenings. We can estimate our expected clean DON concentrations by removing the amount of DON removed in screenings (screenings weight and DON concentrations) from the initial quantity of DON (precleaned weight and DON concentration), and dividing this by our clean weight (“Expected Clean DON (ppm)” in Table 1). Our results were in the realm of these expectations.

To reduce DON more, we would have to remove screenings with higher DON concentrations, or remove a greater quantity of higher testing material. Perhaps more aggressive cleaning could have further reduced DON in cleaned grain by removing more higher-testing material, but this also would have come at the cost of greater screening losses. Any loss in weight would need to be made up for by improvement in grain value or marketability.

This testing only represents a couple of grain cleaning scenarios, and does not consider the impact of hybrid choice, DON infection levels or different screen sizes or types. It is possible type or severity of infection may impact response to cleaning. If the majority of infection is in fines and cob, or if most infected kernels are very small (ie. ear-tip only infections) perhaps there may be greater responses to cleaning by size.

Acknowledgements
Thanks to the producers and industry personnel who took the time to help us conduct these cleaning trials. Thanks to Grain Farmers of Ontario and SGS Labs for supporting analysis costs.

References

Ontario Corn Committee Hybrid DON Testing in 2018
Dave Hooker and Albert Tenuta, on behalf of the Ontario Corn Committee

Purpose
Although 2018 was very challenging to growers and the rest of the corn industry, it presented an opportunity to compare hybrids for DON accumulation across several locations of the Ontario Corn Performance Trials. The main purpose of the OCC study was to provide growers with an indication of a hybrid’s relative risk for accumulating the mycotoxin DON, and to provide a framework for future performance testing.

OCC Locations and Data Collection
A total of 1,225 grain corn samples were collected while machine harvesting plots for OCC Tables 4 (82 hybrids at Belmont, Exeter, Ilderton) and Table 5 (54 hybrids at Ridgetown and Tilbury) locations. There were 30 hybrids common across both Tables. Each hybrid was replicated 3 times at each location; therefore, each hybrid was represented by 9 samples across locations in OCC Table 4, and 6 samples across OCC Table 5 locations. Samples were dried and then analyzed for DON by SGS Laboratories (Guelph) using the ELISA method. Tables of results from the OCC Hybrid Corn Performance Testing, and the agronomic practices used at each location can be found in the trial management section of the 2018 OCC Corn Performance Report at www.gocorn.net.

Hybrids silked between late July and the first week of August at all locations. Frequent rains and high humidity during silking and grainfill of all hybrids across all locations resulted in favorable environmental conditions for natural Gibberella ear rot infection and DON accumulation.

Interpretation of the Rating Table
Hybrid differences for DON were statistically highly different (P<0.0001) within Table 4, Table 5 and across hybrids common to both Tables 4 and 5. The OCC decided to simplify the presentation of results by using a colour-coded (available on www.gocorn.net) or gray-scale rating for hybrids within OCC Table 4, OCC Table 5, and with those hybrids common across both Tables. The hybrids in the Rating Table were sorted based on their CHU rating.

As expected, there were no hybrids resistant to DON accumulation (i.e., zero ppm). In this gray-scale version of the Rating Table, zero ppm is illustrated in white. Hybrids were coded in light gray (lower than average DON) to dark gray (higher than average DON) to black (highest DON) based on the range of DON concentrations in the Rating Table columns (OCC Table 4, OCC Table 5 or 30 hybrids common to Tables 4 and 5), with a Hybrids with no rating indicates that the hybrid was not tested at the locations represented in each column or OCC Table.
Some statistics of the DON concentrations within each Table are presented in the footnote of the Rating Table. A hybrid shaded with a different shading across columns in the Rating Table may simply indicate variability in hybrid across locations, samples and/or analysis.

Acknowledgements
The OCC is grateful to Grain Farmers of Ontario (GFO) for their leadership, GFO and OMAFRA for the financial support to analyze the grain samples for DON, and to University of Guelph/OMAFRA research technicians for collecting the samples (Jonathan Brinkman, Ken VanRaay, Cheryl Van Herk, Brooke Jones and a very big thanks to Scott Jay for coming out of retirement to assist).

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David Morris, OCC Secretary, Email: dtmorris@rogers.com

### OCC Hybrid DON Ratings

#### Legend: Relatively low DON

<table>
<thead>
<tr>
<th>CHU</th>
<th>Hybrid</th>
<th>OCC Table 4 only</th>
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#### Legend: Relatively high DON

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1IMPORTANT: Hybrid ratings are of no guarantee for 2019. No hybrid is resistant.
2Ratings for OCC Table 4 is relative across hybrids at Belmont, Exeter and 8derton (Hybrid range 1.9-21.3 ppm; average 7.1 ppm)
3Ratings for OCC Table 5 is relative across hybrids at Ridgeway and Tillbury (Hybrid range 1.7-8.3; average 4.3 ppm)
4Ratings OCC Tables 4 and 5 combined (average of 5 locations, if available) (Hybrid range 1.7-11.8; average 5.4 ppm)
Looking for Tillers? Consider Early Season Nitrogen Management!
Joanna Follings, Cereals Specialist, OMAFRA

This past fall brought challenges for many growers. Prolonged wet weather delayed soybean harvest and pushed winter wheat seeding into late October and early November for some. Before the snow fell, many fields had not yet emerged. While the seed did germinate and vernalize, the late planting meant no tiller development. As a result, nitrogen management will be important in order to maximize the yield potential of those late planted fields.

If you are dealing with a field that was planted late and did not tiller before going into winter, split nitrogen applications should be considered to stimulate tillering while minimizing nitrogen losses. The first application of nitrogen can be made in mid to late March, if the weather permits. The second application of nitrogen should then be made when the wheat reaches first to second node (GS 31-32) which is usually the first or second week of May. If you wish to apply all your nitrogen in one application, then that application should be made in late April to avoid significant nitrogen losses that may occur from wet soils earlier in the growing season.

The amount of nitrogen that should be applied to your wheat crop can vary depending on crop rotation, history of manure applications, soil type, variety being grown, etc. However, when looking at general recommendations for winter wheat in Ontario, rates can be pushed to 120-150 lbs/ac total for soft red winter wheat when using a fungicide application. If you are not planning to use a fungicide, rates should not be pushed beyond 90-100 lbs/ac in order to manage disease and lodging risk (Figure 1).

When using split nitrogen applications 50-60% of your total nitrogen should be applied in the first application (mid to late March) with the remainder being applied in the second application (first to second node). This amount stimulates tiller development while avoiding significant nitrogen losses. Additionally, it is beneficial to use a nitrogen source, such as UAN, that provides some ammonium or nitrate in that first application so that when the wheat crop breaks dormancy, nitrogen is immediately available for the plants to take up.

Although early season nitrogen applications can be effective in boosting yields in later planted winter wheat, they are often applied at a time when more frequent rainfall occurs and soils are saturated. Therefore, the risk of nitrogen loss should also be considered when making these applications. Urease inhibitors can be utilized to effectively minimize nitrogen losses.

It can be difficult to determine early on whether or not a winter wheat stand should be kept. Therefore, it is important to get out and walk your fields early in the spring to assess stands for winter survival and tiller growth. After a week or two of consistent warm weather, fields should begin to green up and stand assessments can more easily be made. More information on assessing winter wheat stands for survival can be found at www.FieldCropNews.com. While you may want to delay your nitrogen applications until you are sure you are going to keep your field of wheat, delayed tiller development will have an impact on yield. Consider that a portion of the nitrogen that is applied to your wheat crop will be available to your corn crop if you chose to switch. The amount that will be available will vary; however, it is important to remember that not all is lost and to take this into consideration when making management decisions.

Common Questions Related to Dealing With Sulphur Deficiency Symptoms in Winter Wheat
Joanna Follings, Cereals Specialist and Mike Cowbrough, Weed Specialist - Field Crops, OMAFRA

Q: Can I mix ammonium thiosulphate (ATS) with herbicides and fungicides to address sulphur deficiency symptoms or should I apply it separately with streamer nozzles?

A: With reductions in atmospheric sulphur deposits, Ontario research has found significant sulphur responses (10–14 bu/acre) on some fields, while others have shown little or no response, especially where manure had been applied. Of all the Ontario trial sites, 59% were responsive and had an average response of 3.8 bu/acre, while across all sites the average response was 2 bu/acre (Figure 1).

Ideally sulphur is applied as ATS with 28% urea ammonium nitrate (UAN) at the tillering stages in the early part of spring. However, this particular question deals with a farmer who is seeing deficiency symptoms and would like to address them at the same time that they plan to apply a herbicide or fungicide (or perhaps both). Under this circumstance there are usually 4 questions:
1. Does ATS when applied with nozzles that are used for pesticide applications (and therefore finer droplets) result in increased visual crop injury?
1. Answer: Yes, streamer nozzles would dramatically decrease the amount of foliar burn that is caused when ATS is applied with a nozzle used for applying pesticides.

2. Does mixing ATS with a herbicide and/or a fungicide increase the risk of crop injury?  
   Answer: Yes, a recent paper by Dr. Dave Hooker and his colleagues showed that the addition of ATS increased visual injury in wheat and was greatest in a 3-way herbicide + fungicide + ATS tank-mix (Table 1).

3. Would increasing water volumes decrease the risk of crop injury with ATS because you are diluting the concentration of ATS in the carrier volume?  
   Answer: During the 2018 field seasons we evaluated ATS tank-mixes with herbicides at two different carrier volumes. The first carrier volume was a 1:1 ratio of ATS to water (100 L/ha or 10 gal/acre total carrier volume) while the second was a 1:3 ratio of ATS to water (200 L/ha or 20 gal/acre total carrier volume). We observed a similar increase in crop injury when ATS was tank-mixed with herbicide as the Hooker paper did. However, we did not observe any visual differences in foliar injury when using different carrier volumes. We would speculate that even though we were diluting the amount of ATS with a higher carrier volume when the ATS to water ratio was 1:3, we were also increasing the foliar coverage on the cereal leaves with the higher carrier volume, perhaps negating any benefit of dilution. It is important to keep in mind that this was only one trial conducted in one year, so the sample size is very small, but there was no evidence in this trial that increased carrier volume decreased foliar leaf burn.

4. Does injury from ATS cause yield loss?  
   Answer: It does not appear to. In our study from 2018, there was no difference in winter wheat yield across all treatments, regardless of amount of foliar injury (which in some instances reached 15% visual injury see figure 3 and 4). It should be noted that injury from ATS seems to be most apparent in the first 3-5 days after application but after 14 days it had virtually disappeared. The Hooker study also found that despite significant crop injury, the injury was transient and there was no evidence that grain yield was adversely affected.

Table 1. Visual leaf injury (%) 1 week after application as affected by tank-mix combinations of ATS with herbicides and fungicides at six field sites from 2014-16.

<table>
<thead>
<tr>
<th>Mixture</th>
<th>Most injurious sites</th>
<th>Least injurious sites</th>
<th>All sites</th>
</tr>
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<tr>
<td>ATS alone</td>
<td>0.5</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>ATS + Herbicide</td>
<td>4.3</td>
<td>0.8</td>
<td>2.1</td>
</tr>
<tr>
<td>ATS + Fungicide</td>
<td>4.5</td>
<td>1.1</td>
<td>2.5</td>
</tr>
<tr>
<td>ATS + Herb + Fung</td>
<td>7.1</td>
<td>2.4</td>
<td>4.4</td>
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</tbody>
</table>

Adapted from: Hooker et al., 2018

Figure 1. Sulphur response in wheat (From OMAFRA Publication 811, Agronomy Guide for Field Crops)

Figure 2. Sulphur deficiency in winter wheat, May 2016. Photo courtesy of Marieke Patton.

Figure 3. Foliar leaf burn in winter wheat caused by an application of ATS with a

Figure 4. A close up of foliar leaf burn from ATS and herbicide applications in 2018.

Citations:
What's Working on the Farm? Practical Solutions for Problem Weeds
Mike Cowbrough, Weed Specialist – Field Crops, OMAFRA

“Do not be cheap. Weed control is an investment into the current and future crops on every field.” That was parting advice from Norfolk and Oxford County farmer Ann Vermeersch at the 2019 FarmSmart Conference in Guelph. In front of 80 farmers and agronomists, I moderated a session with Vermeersch and Steph Kowalski, a Certified Crop Advisor and Lead Agronomist with the Agronomy Company of Canada. Both shared their thoughts on minimizing the impact of weeds on crop production. Here is a recap of their key points.

1. Use a soil applied herbicide in corn and soybeans, even if growing Roundup Ready cultivars. The soil applied herbicide pass eliminates early season weed competition (which affects crop yield loss the most), and is particularly impactful during dry years (Figure 1). Soil applied herbicide will improve control of any post-emergence herbicides because if there are weed escapes, you’re typically targeting fewer weeds and they are all usually at a similar stage of growth (Figure 2, 3).

2. Make fall weed control a priority. On this point, Vermeersch shares with the audience that they are not afraid to do this job in December provided the target weeds are still green and they can get a couple of days after application with temperatures above 0°C. Although, you won’t see much benefit that fall. The benefits become obvious next spring, especially with perennial weeds. Although glyphosate is typically used for fall weed control, both Kowalski and Vermeersch like tank-mixing other modes of action, like 2,4-D ester.

3. Explore the use of cover crops. Both presenters have seen benefits with cover crops suppressing weeds. Vermeersch shared photos of a corn field where Canada fleabane was almost non-existent in the area that had cereal rye cover the previous fall compared to a considerable amount of Canada fleabane where no cereal rye cover existed (Figure 4).

This interactive session provided an opportunity for the audience to ask many questions and share their experiences. A comment from this session stood out as an item that needs to be explored more through applied research and farmer innovation; late emerging weeds are a significant challenge. Whether it was eastern black nightshade, pigweed species or crab grass, several producers expressed frustration with species that emerge well past any reasonable window for herbicide control. Although unlikely to affect crop yield in that season, there was a sentiment that it increases weed populations in the following season.

Figure 1. Drought stress symptoms on corn leaves where there were no soil applied herbicides and weed control was done with a late post-emergence application (Photo courtesy of Steph Kowalski).

Figure 2. Lamb's-quarters escapes after a soil applied herbicide treatment. Note that there are fewer and smaller (< 5 cm) weed escapes in comparison to where no soil applied herbicide was used (Figure 3).

Figure 3. Lamb's-quarters in a soybean crop where no soil applied herbicide had been used. The population is high and weed size varies from 5 to 15 cm in height.

Figure 4. Canada fleabane pressure found in corn where no cereal rye cover existed the previous fall (right) compared to where cereal rye was present the previous fall (left). (Photo courtesy of Ann Vermeersch).
The nitrogen (N) fertility algorithm proposed at the recent Eastern Ontario Crop Conference by Dr. Dave Hooker, University of Guelph-Ridgetown Campus, was “80% of the recommended N applied pre-plant, then 1 lb/ac of additional N for each millimetre (mm) of rain from the V7 to VT corn growth stage.”

Drs. B. Deen, D. Hooker and J. Nasielski of the University of Guelph reviewed several of the long-term nitrogen corn trials from the Elora and Ridgetown Research Stations to look at what factors most influenced the most economical rate of nitrogen (MERN) in Ontario grain corn. Rainfall between V7 – VT corn stages (see Table 1), had the greatest correlation to the actual MERN each year. This timing is usually between mid-June and mid-July.

Table 1. Vegetative growth stages in corn

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<th>V8</th>
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<td>(varies)</td>
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<tr>
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<td>6</td>
<td>8</td>
<td>10</td>
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<td>June 11</td>
<td>June 18</td>
<td>June 31</td>
<td>July 18</td>
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With the availability of high clearance fertilizer applicators (Figure 1), growers can apply nitrogen later in season than the traditional sidedress N timing in early to mid-June. The ability to apply N later allows growers to manage the timing and rates of nitrogen applied each year. By applying most of the corn crop nitrogen needs earlier and using the algorithm, growers can fine-tune the balance of the N based on the rainfall mid-June to mid-July to optimize the grain yield in a given year.

In Figure 2, the MERN is starred on each year’s yield curve. This shows that in continuous corn, the MERN ranged from 140 to 260 kg/ha depending on the year (same soil, same management, and same hybrid). Further analysis of the data showed that in most years applying up to 30 kg/ha more than the MERN or 30 kg N/ha less than the MERN is within about $10.00 of the maximum net returns per acre from nitrogen. Figure 3 shows the relative net returns per acre in green on the corn grain yield curve for each year.

So what is the recommended pre-plant rate of nitrogen? Total pre-plant N recommended rates can be based on the Ontario Corn N Calculator, "normal practice", or field MERN from previous experience. From several trials in Eastern Ontario, the average MERN in a corn-soybean rotation for most fields is about 130 lbs/ac of N but has varied +/- 30 lbs/ac in a given year. This was demonstrated in 2017 when there was above normal rainfall in June and July, and the MERN was about 160 lbs/ac. In determining the pre-plant N rate, other factors such as crop rotation, organic matter, applied manure, soil type, price ratio of corn grain price to N and of course, rainfall, need to be incorporated. For example, Table 2 shows the amount of N reduction based on the previous crop as compared to continuous corn.
The MERN or most economical N rate is highly variable from year to year. There are several factors such as crop rotation, organic matter, manure and soil type, but most importantly is rainfall, particularly between mid-June and mid-July. With the use of high clearance fertilizer applicators, growers can split apply N in season up to the V13 corn growth stage (usually mid-July). The split application gives growers the opportunity to optimize N use and maximize net returns.

**Be Aware – Light Right**

Ian McDonald, OMAFRA Crop Innovation Specialist  
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Farm equipment today is larger and can travel faster than ever before. Farms have also grown bigger, spread across fields that can be many miles from home base. Farm implements are traveling further from home to reach these fields. Farm equipment shares the road with cars and trucks, driven by members of the public who are increasingly less connected to farms. Drivers approaching a farm vehicle on the road may never have seen a tractor or farm implement before, let alone driven on the same road.

The movement of farm vehicles on public roads is one of those issues where the old standards remain in place, but the situation has changed. Farmers like to complain about “impatient urban drivers”, but the agricultural industry needs to recognize the safety risks of road travel. Larger, faster equipment traveling longer distances, often at night or in bad weather, creates significant risks for the equipment operator, and other drivers on the road.
Lights allow us to see and be seen at night and in bad weather. Modern LED and HID technology mean that night lighting can be incredibly bright. As equipment size has increased, so have the number of lights as well as the operating modes. Field lights provide incredible night vision in the field, but can be blinding on the road to approaching vehicles. A few simple steps can improve lighting safety on the road.

When turning, many modern tractors override the four-way flashers and “hold” the opposite light on – for example, in a left turn, the left signal flashes while the right signal stays lit. Does your tractor operate this way? Does equipment connected to the tractor also operate this way? If not, talk to your equipment supplier to find out how to modify the lighting to communicate turns clearly.

You may know how large and long your equipment is, but other drivers don’t. Proper lighting helps other drivers understand what they are approaching, and warns them of the hazard. And although farm implements are exempt from height, width, length and weight restrictions, the Highway Traffic Act requires you to yield a full one half of the road width. Approaching drivers expect their lane to be clear. No matter how big or wide your equipment is, you must yield half the ROAD (not half a lane) to oncoming or overtaking traffic. This applies on straight roads AND when approaching curves, bridges, hills, etc. when your view ahead is restricted.

Don’t use too many lights on the road. On the road, only 4 forward-facing headlights can be used at once. Yet some equipment may use up to a dozen field lights. Many bright lights create confusion for approaching drivers, and make it very hard to see the true width of the farm vehicle. Rear facing field lighting can blind vehicles approaching from behind, preventing them from seeing oncoming traffic. This could lead to head-on collisions.

Use the correct lighting mode for road travel. Tractors and farm implements come equipped with a wide range of light types for different purposes, including working, driving and cautioning others to the fact that you are different. Road travel mode uses the correct lights to warn approaching drivers about your equipment. More lights are not always better! Too many lights create confusion, especially for drivers unfamiliar with farm equipment.

Finally, make sure lighting is clear and working properly. Many newer tractors are equipped with rotating beacons. They also have turn signals built into the cab, fenders or installed on extensions over the tires. Wide equipment may also have flashing lights on either side to highlight its dimensions. But when the tractor driver signals a turn, it can be hard to tell which lights are the turn signals. Too many flashing lights with no clear turn signal can be very confusing to other drivers.

No one wants to be involved in an accident. Everyone has a responsibility to drive safely. And the agricultural industry can step up to show professionalism by using correct lighting and operating equipment appropriately.

When it comes to lighting on the road, don’t light more – light right.
GROWING YOUR FARM PROFITS (GYFP)

Identify the steps to reach your farm business goals
- Learn about current farm business management practices and resources
- Prioritize your farm business goals
- Develop an action plan to improve your profitability and success

ENVIRONMENTAL FARM PLAN WORKSHOP (EFP)

Improve the sustainability of your farm business
- Identify potential environmental risks
- Learn about legislation and Best Management Practices
- Develop an action plan

BIOSECURITY WORKSHOP

Protect your animal and plant health
- Understand the benefits of an on-farm biosecurity program
- Identify current practices that could be putting your farm at risk
- Work with a vet or certified crop advisor to enhance biosecurity protocols on your farm

GYFP Workshop Schedule

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EFP Workshop Schedule

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Biosecurity Workshop Schedule

For information, contact 519.955.3139

Check out the website - workshops and webinars for commodity specific workshops and available dates.

Register online at www.ontariosoilcrop.org
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